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

version 1.8

(Submission #: 2QR-YBRZ-YCB7, version 7)

## Details

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**Submission ID** 2QR-YBRZ-YCB7

**Submission Reason** Renewal

**Status** Submitted

## Form Input

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### Existing Permit Details

**Existing Permit ID (Read Only)**

-8429261834464361894

**Existing Permit Number (Read Only)**

MIG610352

### Section 1. Applicant Information

#### Applicant Information

**Prefix**

*Mr.*

**First Name**      **Last Name**

Tim                      *Sadowski*

**Title**

*City Controller*

**Organization Name**

*City of Ecorse*

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

Business              3132943740

**Email**

tsadowski@ecorsemi.gov

**Fax**

3133864316

**Address**

3869 West Jefferson Avenue

Ecorse, MI 48229

USA

### Section 2. MS4 Location Information

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

Ecorse MS4-Wayne

**Identify the Primary Municipal Facility or the Mailing Address Location**

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

**Facility Location**

42.254551686993246,-83.13887178897858

**Section 3. MS4 Contacts (1 of 5)**

---

**CONTACTS**

---

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

**Contact**

Storm Water Billing Contact

**Contact**

**Prefix**

*Mr.*

**First Name**

Tim

**Last Name**

*Sadowski*

**Title**

*City Controller*

**Organization Name**

*City of Ecorse*

**Phone Type**

Business

**Number**

3132943740

**Extension**

**Email**

tsadowski@ecorsemi.org

**Fax**

3133864316

**Address**

3869 West Jefferson Avenue

Ecorse, MI 48229

USA

**Section 3. MS4 Contacts (2 of 5)**

---

**CONTACTS**

---

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

**Contact**

Storm Water Program Manager

## Contact

**Prefix**

Mr.

**First Name      Last Name**

Tim                      Sadowski

**Title**

City Controller / City Administrator

**Organization Name**

City of Ecorse

**Phone Type      Number              Extension**

Business            313-294-3740

**Email**

tsadowski@ecorsemi.org

**Fax**

313-386-4316

**Address**

3869 West Jefferson Avenue

Ecorse, MI 48229

USA

## Section 3. MS4 Contacts (3 of 5)

### CONTACTS

---

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

**Contact**

Application Contact

**Contact****Prefix**

Mr.

**First Name      Last Name**

Kyle                      Seidel

**Title**

Senior Project Engineer

**Organization Name**

Anderson, Eckstein & Westrick, Inc.

**Phone Type      Number              Extension**

Business            5867261234

**Email**

kseidel@aewinc.com

**Fax**

5867268780

**Address**

51301 SCHOENHERR RD

SHELBY TWP, MI 48315

USA

## Section 3. MS4 Contacts (4 of 5)

### CONTACTS

---



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

**Contact**

Application Contact

**Contact**

**Prefix**

*Ms.*

**First Name**

Ashley

**Last Name**

*Casey*

**Title**

*Graduate Engineer*

**Organization Name**

*Anderson, Eckstein & Westrick, Inc.*

**Phone Type**

Business

**Number**

5867261234

**Extension**

**Email**

acasey@aewinc.com

**Fax**

586-726-8780

**Address**

51301 SCHOENHERR RD

SHELBY TWP, MI 48315

United States

**Section 3. MS4 Contacts (5 of 5)**

**CONTACTS**

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

**Contact**

Application Contact

## Contact

### Prefix

Mr.

### First Name

Kevin

### Last Name

Lawrence

### Title

Superintendent, DPW/Water & Sewer

### Organization Name

City of Ecorse

### Phone Type

Business

### Number

3134364010

### Extension

### Email

klawrence@ecorsemi.gov

### Fax

NONE PROVIDED

### Address

3869 W JEFFERSON AVE

ECORSE, MI 48229

[NO COUNTRY SPECIFIED]

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

### Regulated Area

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

[Urbanized Area Link](#)

### Select an Urbanized Area

Detroit

### Outfall and Point of Discharge Information

Provide the following information for each of the applicant's MS4 outfalls and points of discharge within the regulated area: identification number, description of whether the discharge is from an outfall or point of discharge, and the surface water of the state that receives the discharge.

An outfall means a discharge point from an MS4 directly to surface waters of the state.

A point of discharge means a discharge from an MS4 to an MS4 owned or operated by another public body. In the case of a point of discharge, the surface water of the state is the ultimate receiving water from the final outfall.

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

An example table is available at the link below.

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

### OUTFALL AND POINT OF DISCHARGE INFORMATION

[City\\_Ecorse\\_CMI\\_EC\\_Final05.pdf - 09/03/2019 03:43 PM](#)

[City of Ecorse Outfall Data - AEW.pdf - 09/27/2019 10:49 AM](#)

[Outfall Map Panels.pdf - 09/27/2019 10:49 AM](#)

[Outfall\\_Survey\\_Ecorse\\_Crk\\_Ecorsev3 - Rev 2.pdf - 10/04/2019 11:22 AM](#)

[City Hall Aerial.pdf - 11/08/2019 09:56 AM](#)

### Comment

Currently only outfalls are identified. With the data from Hennessy no points of discharge were identified. Hennessy's map was left as it shows extra outfalls not on map panels.

**CORRECTION REQUEST (APPROVED)**

**Specify whether Outfall or Point of Discharge**

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.

Created on 7/2/2019 11:54 AM by **Erica Volansky**

**1 COMMENT**

**Erica Volansky (VolanskyE@michigan.gov) (8/13/2019 5:02 PM)**

Please provide a description of whether the discharge is from an outfall or point of discharge, and the surface water of the state that receives the discharge.

**NOTE (CREATED)**

**APPROVED**

Created on 3/10/2020 12:29 PM by **Erica Volansky**

**Nested Jurisdictions**

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

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

**Nested Jurisdiction**

**Prefix**

NONE PROVIDED

**First Name**

NONE PROVIDED

**Last Name**

NONE PROVIDED

**Title**

NONE PROVIDED

**Organization Name**

NONE PROVIDED

**Phone Type**

NONE PROVIDED

**Number**

**Extension**

**Email**

NONE PROVIDED

**Fax**

NONE PROVIDED

**Address**

[NO STREET ADDRESS SPECIFIED]

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

USA

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

**NOTE (CREATED)**

**APPROVED**

Created on 3/10/2020 1:07 PM by **Erica Volansky**

## STORM WATER MANAGEMENT PROGRAM (SWMP)

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

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

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

For purposes of this Application, a procedure means a written process, policy or other mechanism describing how the applicant will implement minimum requirements.

When answering the questions in this section of the Application, the applicant's MS4 encompasses what the applicant identified in Sections 4. The applicant shall include a measurable goal for each BMP. Each measurable goal shall include, as appropriate, a schedule for BMP implementation (months and years), including interim milestones and the frequency of the action. Each measurable goal shall have a measure of assessment to measure progress towards achieving the measurable goal. A United States Environmental Protection Agency (USEPA) guidance document on measurable goals is available at the link below.

[USEPA measurable goals guidance document link](#)

## Enforcement Response Procedure (ERP)

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

### ERP

[ADW ERP - Ecorse - AEW.docx - 09/27/2019 11:21 AM](#)

#### Comment

Appendix C that is referenced in ADW ERP is being reviewed by the City for approval.

#### CORRECTION REQUEST (APPROVED)

**The ordinance referenced in Section B of the ERP does not meet permit requirements.**

First, Sec. 1.1 - 1.8 are not applicable and can be removed. Sec. 1.9 is a good start but needs to be supplemented with other information such as how soon after a violation is identified will the responsible party be notified, how long they have to correct the illicit discharge, and any further enforcement action the City will take after non-compliance. I have attached an ERP example that the City may be able to use as an example. Multiple ordinances are listed and include the SPECIFIC sections that enforcement response procedures can be found.

Created on 8/15/2019 11:22 AM by **Erica Volansky**

## Public Participation/Involvement Program (PPP)

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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**

ADW Public Participation Program - Ecorse.docx - 05/10/2017 10:22 AM

**Comment**

NONE PROVIDED

**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.**

The public will be notified via the City Council meetings and via the local newspaper. All posted notices will be handled by the City Clerk.

**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):**

Refer to Section III> Procedures For Public Inspection, Comment And Participation In Implementation And Review

**Section 6. Public Education Program**

NOTE (CREATED)

**APPROVED**

Created on 3/10/2020 1:04 PM by **Erica Volansky**

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

Yes

**PEP Procedures**

adw\_public\_education\_plan\_pep\_table\_0419.pdf - 07/25/2019 10:09 AM

**Comment**

The ADW approved PEP is a pdf which cannot be updated to refer to the City of Ecorse

CORRECTION REQUEST (APPROVED)

**Upload Approved ADW PEP**

The ADW's final PEP was approved in April 2019. This document needs to be uploaded before a permit can be issued. Please also make sure that any application references are updated, if necessary.

Created on 7/2/2019 12:02 PM by **Erica Volansky**

**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).**

Refer to the chart found on Page 7 of 15 of the attached document.

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.**

Refer to Activity #1 on Page 8 of the attached document.

**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.**

Refer to Activity #2 on Page 8 and 9 of the attached document.

**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.**

Refer to Activity #8 on Page 11 and 12 of the attached document.

**D. Promote preferred cleaning materials and procedures for car, pavement, and power washing. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.**

Refer to Activity #1, Activity #2 and Activity #3 on Page 8 and Page 9 of the attached document.

**E. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.**

Refer to Activity #1, Activity #2, Activity #3, Activity #9, Activity #10 and Activity #11 of the attached document.

**F. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.**

Refer to Activity #1, Activity #2, Activity #3 and Activity #11 on Page 8, Page 9 and Page 13 of the attached document.

**G. Identify and promote the availability, location, and requirement of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, and motor vehicle fluids. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.**

Refer to Activity #10 on Page 13 of the attached document.

**H. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.**

The City of Ecorse does not have any septic systems in the city. All sanitary sewer is municipal owned gravity sewer.

**I. Educate the public on, and promote the benefits of, green infrastructure and low impact development. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.**

Refer to Activity #1 and Activity #2 on Page 8 and Page 9 of the attached document.

**J. Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to storm water runoff. Provide the reference to the procedure submitted above or explanation as to why the topic is not applicable.**

Provide the entities that may contribute pollutants with informational material with ways to reduce pollutants from entering the MS4 system.

**6. Provide the reference to the procedure submitted above for evaluating and determining the effectiveness of the overall PEP. The procedure shall include a method for assessing changes in public awareness and behavior resulting from the implementation of the PEP and the process for modifying the PEP to address ineffective implementation. e.g., Attachment A, Page 3, Section b.**

Each activity has its own way of determining the effectiveness of the given PEP. Refer to the assessment section of the given activity.

## **Section 7. Illicit Discharge Elimination Program**

NOTE (CREATED)

**APPROVED**

Created on 3/10/2020 12:57 PM by Erica Volansky

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

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

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

Yes

## Illicit Discharge Elimination Program Procedures

[adw\\_collaborative\\_idep\\_approved.pdf - 09/03/2019 03:56 PM](#)

[2019\\_09\\_16\\_Appendix\\_C\\_Flow\\_Chart.docx - 09/24/2019 01:32 PM](#)

[2019\\_09\\_16\\_Ecorse\\_Appendix\\_C\\_DRAFT.docx - 09/27/2019 11:23 AM](#)

### Comment

NONE PROVIDED

#### CORRECTION REQUEST (APPROVED)

#### Upload Approved ADW IDEP

The ADW's final IDEP was approved in February 2019. This document needs to be uploaded before a permit can be issued. Please also make sure that any application references are updated, if necessary

Created on 7/2/2019 12:05 PM by **Erica Volansky**

#### 1 COMMENT

**Erica Volansky (VolanskyE@michigan.gov) (8/13/2019 5:27 PM)**

This is not the February 2019 IDEP. Please replace with the most recent ADW IDEP. Please make sure that any application references are updated, if necessary.

## Storm Sewer System Map

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

Maps of the existing storm sewer system within the City of Ecorse are available at the Department of Public Works office located in City Hall. In addition the maps are available for review at Hennessey Engineers, Inc. located in Southgate, Michigan. These maps also include that outfall map.

## Illicit Discharge Identification and Investigation

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

- Areas with older infrastructure
- Industrial, commercial, or mixed use areas
- Areas with a history of past illicit discharges
- Areas with a history of illegal dumping
- Areas with septic systems
- Areas with older sewer lines or with a history of sewer overflows or cross-connections
- Areas with sewer conversions or historic combined sewer systems
- Areas with poor dry-weather water quality
- Areas with water quality impacts, including waterbodies identified in a Total Maximum Daily Load
- Priority areas applicable to the applicant not identified above

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

Refer to II. Priority Areas and Figure 1 on Page 3, Page 4 and Page 5 of the IDEP showing the areas of priority IDEP Work Areas.

**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.**

Refer to Figure 1 on Page 5 of the IDEP showing the priority areas.

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.**

Refer to III. Collaborative IDEP Activities as found on Page 5 through Page 14 of the IDEP.

**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.**

Refer to III. Collaborative IDEP Activities as found on Page 5 through Page 14 of the IDEP.

**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.**

Refer to III. Collaborative IDEP Activities as found on Page 5 through Page 14 of the IDEP.

**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.**

Refer to III. Collaborative IDEP Activities as found on Page 5 through Page 14 of the IDEP.

**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 .**

Refer to III. Collaborative IDEP Activities as found on Page 5 through Page 14 of the IDEP.

**15. Provide the reference to the procedure submitted above which includes a requirement to immediately report any release of any polluting materials from the MS4 to the surface waters or groundwaters of the state, unless a determination is made that the release is not in excess of the threshold reporting quantities in the Part 5 Rules, by calling the appropriate MDEQ District Office, or if the notice is provided after regular working hours call the MDEQ's 24-Hour Pollution Emergency Alerting System telephone number: 800-292-4706. (Example threshold reporting quantities: a release of 50 pounds of salt in solid form or 50 gallons in liquid form to waters of the state unless authorized by the MDEQ for deicing or dust suppressant.)**

Refer to III. Collaborative IDEP Activities as found on Page 5 through Page 14 of the IDEP.

**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.**

Refer to III. Collaborative IDEP Activities as found on Page 5 through Page 14 of the IDEP.

**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.**

Refer to III. Collaborative IDEP Activities as found on Page 5 through Page 14 of the IDEP.

## **IDEP Training and Evaluation**

---

18. Provide the reference to the program submitted above to train staff employed by the applicant, who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge to the regulated MS4, on the following topics. The program shall include a training schedule for this permit cycle. It is recommended that staff be trained more than once per permit cycle.



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

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

Refer to IDEP #4 - Staff Training on Page 8 and Page 9 of the attached document.

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

Refer to Section III. Collaborative IDEP Activities. Each Activity has a measure of assessment associated with each IDEP.

### **Illicit Discharge Ordinance or Other Regulatory Mechanism**

---

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

Refer to Appendix C - Storm Water Standards, Article VI, Section 1 - Discharge Prohibitions.

**CORRECTION REQUEST (APPROVED)**

**Missing ordinance or regulatory mechanism that prohibits illicit discharges and connections to the City's MS4.**

Ch. 23 only pertains to water supply. There is nothing that prohibits non-storm water discharges to the City's MS4. I have attached an example of an acceptable IDEP ordinance that Port Huron Charter Township developed. This may be one option to pursue. I have also attached the IDEP guidance document.

Created on 8/15/2019 11:49 AM by **Erica Volansky**

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

Refer to Appendix C - Storm Water Standards, Article VI, Section 1, Paragraph a, Part 1.

**CORRECTION REQUEST (APPROVED)**

**Will City be allowing firefighting water in the MS4?**

If the City is allowing these discharges then please provide the ordinance or regulatory mechanism stating this.

Created on 7/3/2019 2:00 PM by **Erica Volansky**

**1 COMMENT**

**Erica Volansky (VolanskyE@michigan.gov) (8/13/2019 6:02 PM)**

If the City is allowing fire fighting discharges into its MS4, then this needs to be stated in an ordinance or regulatory mechanism.

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

- Water line flushing and discharges from potable water sources
- Landscape irrigation runoff, lawn watering runoff, and irrigation waters
- Diverted stream flows and flows from riparian habitats and wetlands

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

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

Refer to Appendix C - Storm Water Standards, Article VI, Section 1, Paragraph a, Part 1.

**CORRECTION REQUEST (APPROVED)**

**Confirm if City is or is not allowing these discharges**

If the City is allowing these discharges then please provide the ordinance or regulatory mechanism stating this.

Created on 7/3/2019 1:58 PM by **Erica Volansky**

**1 COMMENT**

**Erica Volansky (VolanskyE@michigan.gov) (8/13/2019 6:03 PM)**

It was already stated that fire fighting discharges will be permitted. Will the City be allowing the other discharges listed in Q. 22? If so, this needs to be stated in an ordinance or regulatory mechanism. Also, discharges that are allowed still need to include the caveat that if it is found to be a significant source of pollution, then it can not enter the MS4.

**23. Provide the reference to the ordinance or regulatory mechanism submitted above that regulates the contribution of pollutants to the applicant's MS4 in the attachment above.**

Refer to Appendix C - Storm Water Standards, Article V, Section 2 & Article VI, Section 1.

**CORRECTION REQUEST (APPROVED)**

**Q. 23 -26 are not answered by Chapter 23 ordinance**

This ordinance covers treated water supply.

Created on 7/3/2019 5:26 PM by **Erica Volansky**

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

Refer to ADW IDEP document

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

Refer to ADW IDEP document

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

Refer to ADW IDEP document

## **Section 8. Construction Storm Water Runoff Control Program**

**NOTE (CREATED)**

**APPROVED**

Created on 3/10/2020 12:55 PM by **Erica Volansky**

**Proposing to work collaboratively on any or all requirements of the Construction Storm Water Runoff Control Program during the permit cycle?**

No

## Qualifying Local Soil Erosion and Sedimentation Control Programs

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

### 27. Is the applicant a Part 91 Agency?

No

#### If yes, choose type

NONE PROVIDED

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

Wayne County

## Construction Storm Water Runoff Control

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### Construction Storm Water Runoff Control Program Procedure Attachment

[ADW CSWRCP County - Part 91 - Ecorse AEW.docx - 09/27/2019 11:23 AM](#)

#### Comment

The current ADW CSWRCP for Ecorse has been updated to reflect the information requested in question 29.

**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.**

DPW Superintendent and/or City Engineer's staff will contact enforcement agency only when the developer or contractor fails to make the necessary corrections to the SESC measures on the site. Refer to Section B - Notification Procedure on Page 2 of the attached document.

**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.**

Refer to Section D - Reportable Discharges on Page 3 of the ADW CSWRCP County-Part 91.

#### CORRECTION REQUEST (APPROVED)

#### Please provide schedule for contacting EGLE

Please state that reportable discharges will be reported to EGLE immediately, no more than 24 hours of the City becoming aware of the discharge.

Created on 7/3/2019 2:09 PM by **Erica Volansky**

#### 1 COMMENT

**Erica Volansky (VolanskyE@michigan.gov) (8/14/2019 5:49 PM)**

This timeframe is good but I still don't see it in Section D. This needs to be stated in the document.

**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.**

Refer to Section B - Notification Procedure on Page 2 of the attached document.

**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).**

Refer to Section E - State of Michigan Permit By Rule found on Page 3 of the attached document.

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

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

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

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

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

[Section 12 - Ecorse Zoning Ordinance.pdf - 07/25/2019 10:47 AM](#)

[2019\\_09\\_16 Appendix C Flow Chart.docx - 09/24/2019 02:14 PM](#)

[2019\\_09\\_16 Ecorse Appendix C DRAFT.docx - 09/27/2019 11:24 AM](#)

#### Comment

NONE PROVIDED

### Ordinance or Other Regulatory Mechanism

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

Refer to Appendix C.

**33. Provide the reference to the ordinance or other regulatory mechanism submitted above that applies to projects that disturb at least one or more acres, including projects less than an acre that are part of a larger common plan of development or sale and discharge into the applicant's MS4. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.**

Refer to Appendix C.

#### Federal Facilities

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

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

No, skip to Question 36

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

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

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

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

NONE PROVIDED

#### Water Quality Treatment Performance Standard

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

**Treat the first one inch of runoff from the entire project site. Provide the ordinance or regulatory mechanism reference in the attachment above (page and paragraph of attachments): e.g., Attachment A, Pages 1-15**

Refer to Appendix C Article V Section 2.

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

Refer to Appendix C Article V Section 2.

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

NONE PROVIDED

37. If the applicant has chosen the water quality treatment standard of requiring treatment of the runoff generated from 90 percent

of all runoff-producing storms, what is the source of the rainfall data?

The MDEQ memo included in the sources below is available at the following link.

[March 24, 2006 MDEQ memo providing the 90 percent annual non-exceedance storm statistics](#)

### Sources

The MDEQ's memo dated March 24, 2006 providing the 90 percent annual non-exceedance storm statistics.

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

NONE PROVIDED

**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.**

Refer to Appendix C Article V Section 6.

### 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.**

Refer to Appendix C Article V Section 2.

**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.**

Not applicable.

### Site-Specific Requirements

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**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.**

Refer to Appendix C Article V Section 2 & 5.

**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.**

Refer to Appendix C Article V Section 2 & 6.

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

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43. An applicant may choose to allow for the approval of off-site mitigation for redevelopment projects that cannot meet 100 percent of the performance standards on-site after maximizing storm water retention. Off-site mitigation refers to BMPs implemented at another location within the same jurisdiction and watershed/sewershed as the original project. A watershed is the geographic area included in a 10-digit Hydrologic Unit Code and a sewershed is the area where storm water is conveyed by the applicant's MS4 to a common outfall or point of discharge. If proposing to allow for off-site mitigation, provide the reference to the ordinance or regulatory mechanism submitted above with the off-site mitigation requirements. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

N/A

44. An applicant may choose to allow for the approval of payment in lieu for projects that cannot meet 100 percent of the performance standards on-site after maximizing storm water retention. A payment in lieu program refers to a developer paying a fee to the applicant that is applied to a public storm water management project within the same jurisdiction and watershed/sewershed as the original project in lieu of installing the required BMPs onsite. The storm water management project may be either a new BMP or a retrofit to an existing BMP and shall be developed in accordance with the applicant's performance standards. A watershed is the geographic area included in a 10-digit Hydrologic Unit Code and a sewershed is the area where storm water is conveyed by the applicant's MS4 to a common outfall or point of discharge. If proposing to allow for payment in lieu, provide the reference to the ordinance or regulatory mechanism submitted above with the payment in lieu requirements. If not available at this time, provide the date the ordinance or regulatory mechanism will be available. If not pursuing the options available in Questions 43 and 44, skip to Question 52.

N/A

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

N/A

46. Provide the reference to the ordinance or regulatory mechanism submitted above that establishes a minimum amount of storm water to be managed on-site as a first tier for off-site mitigation or payment in lieu. A higher offset ratio is required if off-site mitigation or payment in lieu is requested for the amount of storm water identified as the first tier. For example, a minimum of 0.4 inches of storm water runoff shall be managed on-site as a first tier. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

N/A

47. Provide the reference to the ordinance or regulatory mechanism submitted above that requires an offset ratio of 1:1.5 for the amount of storm water above the first tier (identified in Question 46) not managed on-site to the amount of storm water required to be mitigated at another site or for which in-lieu payments shall be made. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

N/A

48. Provide the reference to the ordinance or regulatory mechanism submitted above requiring that if demonstrated by the developer to the applicant that it is completely infeasible to manage the first tier of storm water identified in Question 47 on-site, the offset ratio for the unmanaged portion is 1:2. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

N/A

49. Provide the reference to the ordinance or regulatory mechanism submitted above that requires a schedule for completing off-site mitigation and in-lieu projects. Off-site mitigation and in-lieu projects should be completed within 24 months after the start of the original project site construction. If not available at this time, provide the date the ordinance or regulatory mechanism will be available.

N/A

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

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

52. If there are any other exceptions to the performance standards (other than off-site mitigation and payment in lieu) being implemented or to be implemented during the permit cycle, provide the reference to the document submitted above describing the exception(s). The applicant shall demonstrate how the exception provides an equivalent or greater level of protection as the performance standards.  
N/A

### Site Plan Review

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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.  
Refer to Appendix C Article V Section 2.

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.  
Refer to the attached pdf from the City of Ecorse Zoning Ordinance. The attached Section 12 pertains to site plan review procedures for the City.

CORRECTION REQUEST (APPROVED)

Clarify which section(s) of Ch. 23 ordinance

I am not sure which portion of this ordinance applies to the City's site plan review process. Is the City simply adopting Wayne County's process?

Created on 7/3/2019 2:26 PM by Erica Volansky

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.  
The City will refer to both the City of Ecorse Zoning Ordinances and Appendix C to determine if the site meets the current standards.

### Long-Term Operation and Maintenance of BMPs

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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.  
Refer to Appendix C Article V Section 2.

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.  
Refer to Appendix C Article V Section 2.

58. Does the maintenance agreement or other legal mechanism allow the applicant to complete the following?  
(Check if yes)  
Inspect the structural or vegetative BMP  
Perform the necessary maintenance or corrective actions neglected by the BMP owner or operator  
Track the transfer of operation and maintenance responsibility of the BMP (e.g., deed restrictions)

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

NONE PROVIDED

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.

Refer to Appendix C Article V Section 2.

## Section 10. Pollution Prevention and Good Housekeeping Program

NOTE (CREATED)

**APPROVED**

Created on 3/10/2020 12:56 PM by **Erica Volansky**

### Pollution Prevention and Good Housekeeping Program Procedures

[City Hall Aerial.pdf - 10/04/2019 01:21 PM](#)

[Updated Ecorse City Hall SOP - AEW.docx - 11/08/2019 10:24 AM](#)

[ADW PPGH GENERAL PROC - Ecorse AEW.docx - 11/08/2019 10:25 AM](#)

[DPW Yard Aerial.pdf - 11/08/2019 11:29 AM](#)

[Updated Ecorse DPW SOP AEW.docx - 11/08/2019 11:39 AM](#)

#### **Comment**

The locations of the DPW Yard catch basins are assumed based on old maps. The catch basins are buried and will be exactly located, dug up, vactored & inspected.

### 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.

Refer to Section C in Updated Ecorse City Hall SOP, Updated Ecorse DPW SOP AEW Section C, & ADW PPGH General Proc Section D.

CORRECTION REQUEST (APPROVED)

#### **Update reference**

Update the reference to refer to Section D in the SOP PP/GH General Procedures document.

Created on 7/3/2019 2:38 PM by **Erica Volansky**

1 COMMENT

**Erica Volansky (VolanskyE@michigan.gov) (8/14/2019 5:31 PM)**

If Ecorse does not have salt stocked at City Hall then remove "Salt storage" from Section E.1 of the General SOP. Also Section D on the City Hall SOP is not needed either. Please remove so that all references of salt storage are gone as to avoid confusion.

### Facilities that may have the high potential to discharge pollutants:

Salt storage facilities

Materials storage and Public Works yards



**CORRECTION REQUEST (APPROVED)**

**Salt Storage facility address**

Address for the City's salt storage facility is not correct. Please update.

Created on 7/3/2019 2:41 PM by **Erica Volansky**

**1 COMMENT**

**Mark Gaworecki (mfgaworecki@hengineers.com) (7/22/2019 5:03 PM)**

It should be noted that the City of Ecorse does not own or operate a salt storage facility at this time. The City is working with the City of Lincoln Park to store salt in their salt storage facility and then pay Lincoln Park for the use.

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

Administration buildings and libraries

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

Catch basins

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

Maps would be available at the DPW Department located on the 2nd floor of City Hall. A GIS system is being built and is located at AEW's Shelby Township office currently.

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

Refer to Section C in ADW PPGH General Procedures, Section F in Updated Ecorse City Hall SOP, & Section F in Updated Ecorse DW SOP AEW.

**Facility-Specific Storm Water Management**

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

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

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

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

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

Refer to the Updated Ecorse City Hall SOP & Updated Ecorse DPW SOP AEW.

**If not applicable**

NONE PROVIDED

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

Refer to the Updated Ecorse City Hall SOP & Updated Ecorse DPW SOP AEW.

**CORRECTION REQUEST (APPROVED)**

**Add salt storage facility to list**

Include the salt storage facility (if separate from the City Hall complex) on Table 1 in the SOP PP/GH General Procedures document.

Created on 7/3/2019 2:51 PM by Erica Volansky

65. Is a site-specific standard operating procedure (SOP) available identifying the structural and non-structural storm water controls implemented and maintained to prevent or reduce pollutant runoff at each facility with the high potential for pollutant runoff? The SOP shall be available at each facility with the high potential for pollutant runoff and upon request from the MDEQ. The SOP shall identify the person responsible for oversight of the facility. The MDEQ may request the submission of the SOP during the application review process.

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

66. Provide the reference in the SOP, for each facility with the high potential for pollutant runoff, to the following: the list of significant materials stored on-site that could pollute storm water; the description of the handling and storage requirements for each significant material; and the potential to discharge the significant material. (SOP Reference Example: DPW Yard SOP Section 2)

Updated Ecorse City Hall SOP Sections B - E & Updated Ecorse DPW SOP AEW Sections B - E.

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)

Updated Ecorse City Hall SOP Section E & Updated Ecorse DPW SOP Sections D - E

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)

Updated Ecorse City Hall SOP Section E, ADW PPGH General Procedures Sections F - H, & Updated Ecorse DPW SOP AEW Sections D & E .

**CORRECTION REQUEST (APPROVED)**

**Routine Inspection Schedule**

Please state how often routine inspections will be conducted/recorded. EGLE recommends a frequency of once every two weeks.

Created on 7/3/2019 3:03 PM by Erica Volansky

**1 COMMENT**

**Erica Volansky (VolanskyE@michigan.gov) (8/14/2019 5:33 PM)**

One month is fine but this needs to be stated in the SOP not just the application. Please update the SOP.

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)

Updated Ecorse City Hall SOP Section E.2, Updated Ecorse DPW SOP AEW Section D.2.

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

Updated Ecorse City Hall SOP Sections D & E, Updated Ecorse DPW SOP AEW Sections D & E.

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

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**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.**

Updated Ecorse City Hall SOP Section E, Updated Ecorse DPW SOP AEW Section D, ADW PPGH General Procedures 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.**

Refer to Section D in ADW PPGH General Procedures, City Hall Aerial, DPW Yard Aerial.

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.**

Updated Ecorse City Hall SOP Section E, Updated Ecorse DPW SOP AEW Section D & ADW PPGH General Procedures Section G.

CORRECTION REQUEST (APPROVED)

#### **Catch Basin inspection**

When the City inspects a catch basin how does it determine if it needs to be cleaned? EGLE recommends a cleaning criteria of a sump being 50% full with sediment.

Created on 7/3/2019 3:08 PM by **Erica Volansky**

1 COMMENT

**Erica Volansky (VolanskyE@michigan.gov) (8/14/2019 5:34 PM)**

This is good. Please include it in the SOP not just in the permit application.

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.**

ADW PPGH General Procedures Section G.

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

ADW PPGH General Procedures Section J.

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

ADW PPGH General Procedures Section K.

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

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

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

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

Right-of-way maintenance

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

**CORRECTION REQUEST (APPROVED)**

**Include road, parking lot & sidewalk maintenance procedure**

Include in one of the SOPs. You can just put what you wrote for the application questions as the procedure.

Created on 7/3/2019 4:26 PM by **Erica Volansky**

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

ADW PPGH General Procedures Section I & Updated DPW SOP AEW Section E

**78. Provide the reference to the procedure submitted above for prioritizing applicant-owned or operated streets, parking lots, and other impervious infrastructure for street sweeping based on the potential to discharge pollutants to surface waters of the state. The procedure shall include assigning a priority level for each parking lot and street and the associated cleaning schedule (i.e., sweeping frequency and timing) based on preventing or reducing pollutant runoff. The procedure shall include a process for updating/revising the priority level giving consideration to street sweeping findings and citizen complaints. A recommended timeframe for updating/revising the prioritization is 30 days following the construction of a new street, parking lot, or other applicant-owned or operated impervious surface or within 30 days of identifying a need to revise a priority level. If the applicant does not own or operate any streets, parking lots, or other impervious infrastructure, skip to Question 82.**

ADW PPGH General Procedures Section I.

**CORRECTION REQUEST (APPROVED)**

**Cleaning when funding is available is not acceptable.**

This program should be used to obtain funding so the City can meet its permit requirements. Please provide a more committed schedule for street and parking lot sweeping.

Created on 8/15/2019 12:00 PM by **Erica Volansky**

**79. Provide the reference to the narrative description or map submitted above with the geographic location of the streets, parking lots, and other impervious surfaces in each priority level.**

ADW PPGH General Procedures Section I.

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

ADW PPGH General Procedures Section I.

81. Provide the reference to the procedure submitted above for dewatering, storage, and disposal of street sweeper waste material. An MDEQ Catch Basin Cleaning Activities guidance document is available at the following link and includes

information on street sweeping requirements.  
[Catch Basin Cleaning Activities Guidance Document](#)

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

ADW PPGH General Procedures Section H.

### Managing Vegetated Properties

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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.**

ADW PPGH General Procedures Section L.

**CORRECTION REQUEST (APPROVED)**

**Update reference**

Update this reference to state Section L in the SOP PP/GH General Procedures document.  
Created on 7/3/2019 4:36 PM by **Erica Volansky**

### 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.**

ADW PPGH General Procedures Section N.

**CORRECTION REQUEST (APPROVED)**

**Update reference**

Update this reference to state Section N in the SOP PP/GH General Procedures document.  
Created on 7/3/2019 4:44 PM by **Erica Volansky**

### Employee Training

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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.**

ADW PPGH General Procedures Section M.

**CORRECTION REQUEST (APPROVED)**

**Update reference**

Update this reference to state Section M in the SOP PP/GH General Procedures document.  
Created on 7/3/2019 4:56 PM by **Erica Volansky**

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

---

NOTE (CREATED)

**APPROVED**

Created on 3/10/2020 5:11 PM by **Erica Volansky**

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**

[FINALadw\\_tmdl\\_plan\\_2019\\_final.pdf - 03/10/2020 01:16 PM](#)

[FINAL ADW-TMDL-MS4-Plan-Priority-Action-Table.xlsx - 03/10/2020 01:36 PM](#)

#### **Comment**

NONE PROVIDED

**CORRECTION REQUEST (APPROVED)**

### **Upload ADW Approved TMDL**

The ADW's final TMDL was approved in May 2019. This document needs to be uploaded before a permit can be issued. Please also make sure that any application references are updated, if necessary

Created on 7/3/2019 5:22 PM by **Erica Volansky**

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

Yes

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

Excessive bacteria (E. coli), and sediment in the Ecorse River. Excessive bacteria (E. coli) in the Detroit River. Refer to Pages 1 & 2 of FINALadw\_tmdl\_plan\_2019\_final, attached to this section.

**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.**

Refer to Page 2 of the attached document under section II. Prioritizing And Implementation BMPs.

**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.**

Refer to Page 2 of the attached document under section II. Prioritizing And Implementation BMPs.

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

Refer to Page 2 and Page 3 of the attached document under section III. Monitoring Plan.

## **Section 12. Phase I only Industrial Facility Inspection Program**

### **Industrial Facility Inspection Program Procedures**

NONE PROVIDED

#### **Comment**

NONE PROVIDED

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

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

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

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

NONE PROVIDED

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

N/A

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

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

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

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

N/A

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

N/A

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

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

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

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

N/A

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

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

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

N/A

## **Section 13. Certify and Submit**

### **Comments (As needed)**

Submitting document on behalf of the City of Ecorse

**Additional Documents (As needed)**

NONE PROVIDED

**Comment**

NONE PROVIDED

**Attachments**

Date	Attachment Name	Context	User
3/10/2020 1:36 PM	FINAL ADW-TMDL-MS4-Plan-Priority-Action-Table.xlsx	Attachment	Ashley Casey
3/10/2020 1:16 PM	FINALadw_tmdl_plan_2019_final.pdf	Attachment	Ashley Casey
11/8/2019 11:39 AM	Updated Ecorse DPW SOP AEW.docx	Attachment	Ashley Casey
11/8/2019 11:29 AM	DPW Yard Aerial.pdf	Attachment	Ashley Casey
11/8/2019 10:25 AM	ADW PPGH GENERAL PROC - Ecorse AEW.docx	Attachment	Ashley Casey
11/8/2019 10:24 AM	Updated Ecorse City Hall SOP - AEW.docx	Attachment	Ashley Casey
11/8/2019 9:56 AM	City Hall Aerial.pdf	Attachment	Ashley Casey
10/4/2019 1:21 PM	City Hall Aerial.pdf	Attachment	Ashley Casey
10/4/2019 11:22 AM	Outfall_Survey_Ecorse_Crk_Ecorsev3 - Rev 2.pdf	Attachment	Ashley Casey
9/27/2019 11:24 AM	2019 09 16 Ecorse Appendix C DRAFT.docx	Attachment	Ashley Casey
9/27/2019 11:23 AM	ADW CSWRCP County - Part 91 - Ecorse AEW.docx	Attachment	Ashley Casey
9/27/2019 11:23 AM	2019 09 16 Ecorse Appendix C DRAFT.docx	Attachment	Ashley Casey
9/27/2019 11:21 AM	ADW ERP - Ecorse - AEW.docx	Attachment	Ashley Casey
9/27/2019 10:49 AM	Outfall Map Panels.pdf	Attachment	Ashley Casey
9/27/2019 10:49 AM	City of Ecorse Outfall Data - AEW.pdf	Attachment	Ashley Casey
9/24/2019 2:14 PM	2019 09 16 Appendix C Flow Chart.docx	Attachment	Ashley Casey
9/24/2019 1:32 PM	2019 09 16 Appendix C Flow Chart.docx	Attachment	Ashley Casey
9/3/2019 3:56 PM	adw_collaborative_idep_approved.pdf	Attachment	Mark Gaworecki
9/3/2019 3:43 PM	City_Ecorse_CMI_EC_Final05.pdf	Attachment	Mark Gaworecki
8/15/2019 11:49 AM	Example Ordinance 1.pdf	Correction Request	Erica Volansky
8/15/2019 11:49 AM	MS4-IDEP-ComplianceAssistance_highlighted.pdf	Correction Request	Erica Volansky
8/15/2019 11:22 AM	ERP Example -.pdf	Correction Request	Erica Volansky
7/25/2019 10:47 AM	Section 12 - Ecorse Zoning Ordinance.pdf	Attachment	Mark Gaworecki
7/25/2019 10:09 AM	adw_public_education_plan_pep_table_0419.pdf	Attachment	Mark Gaworecki
5/10/2017 10:22 AM	ADW Public Participation Program - Ecorse.docx	Attachment	Mark Gaworecki

**Status History**

	User	Processing Status
3/10/2020 1:09:25 PM	Ashley Casey	Draft
3/10/2020 1:38:59 PM	Ashley Casey	Submitted

**Audit**

Event	Event Description	Event By	Event Date
Submission Locked	Submission Locked	Erica Volansky	6/27/2019 3:41 PM
Submission Locked	Submission Locked	Erica Volansky	6/27/2019 4:13 PM



<b>Event</b>	<b>Event Description</b>	<b>Event By</b>	<b>Event Date</b>
Submission Unlocked	Submission Unlocked	Erica Volansky	7/3/2019 5:30 PM
Submission Locked	Submission Locked	Erica Volansky	8/13/2019 5:01 PM
Submission Unlocked	Submission Unlocked	Erica Volansky	8/15/2019 12:04 PM
Submission Unlocked	Submission Unlocked	Erica Volansky	11/20/2019 1:31 PM

## Revisions

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<b>Revision</b>	<b>Revision Date</b>	<b>Revision By</b>
Revision 1	4/13/2017 2:53 PM	Mark Gaworecki
Revision 2	7/22/2019 4:54 PM	Mark Gaworecki
Revision 3	8/26/2019 12:16 PM	Ashley Casey
Revision 4	9/16/2019 12:25 PM	Ashley Casey
Revision 5	10/1/2019 12:33 PM	Ashley Casey
Revision 6	11/8/2019 9:55 AM	Ashley Casey
Revision 7	3/10/2020 1:09 PM	Ashley Casey

**STORMWATER DISCHARGE  
PERMIT APPLICATION  
COLLABORATIVE  
ILLICIT DISCHARGE ELIMINATION PLAN**



**For the Alliance of Downriver Watersheds MS4s**

**Effective upon NPDES Permit issuance for a period of five (5) years.**

Allen Park  
Belleville  
Dearborn Heights  
Ecorse  
Flat Rock  
Gibraltar  
Grosse Ile Township

Inkster  
Lincoln Park  
Melvindale  
Riverview  
Rockwood  
Romulus  
Southgate  
Sumpter Township

Taylor  
Van Buren Township  
Wayne County  
Westland  
Woodhaven  
Woodhaven-Brownstown  
School District  
Wyandotte

May 31, 2019

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### ATTACHMENTS

- ATTACHMENT A: Complaint Track Form & Routine Field Work Log
- ATTACHMENT B: Advanced Investigation Procedure for Locating the Source of Suspicious Discharges
- ATTACHMENT C: Regional IDEP Training Program
- ATTACHMENT D: ADW Member Facilities to be Dye-Tested
- ATTACHMENT E: Outfall Screening Procedure for Identifying Potential Illicit Discharges
- ATTACHMENT F: Corrective Action Notification Letter
- ATTACHMENT G: State and Federal Regulatory Mechanisms

## I. INTRODUCTION

This Collaborative Illicit Discharge Elimination Plan (IDEP) presents **the watershed-wide priority action plan that is being pursued to effectively and efficiently identify and eliminate illicit discharges within the Alliance of Downriver Watersheds (ADW)**. This Plan consists of existing and planned activities and strategies, anticipated through the duration of the permit, that ADW members are individually and collectively implementing to identify and eliminate illicit discharges and reduce pathogen levels in Ecorse Creek, Combined Downriver, and Lower Huron River watersheds. This collaborative plan builds on the collective knowledge of the ADW members and implementation team. Specifically, the plan starts by evaluating the status and trends of surface waters in the ADW to identify priorities, followed by investigation and remediation of problem areas. Such a strategy focuses resources on the most likely sources of pollution or illicit discharge, rather than on areas with low likelihoods of problems.

The Alliance of Downriver Watersheds (ADW) is a permanent watershed organization in southeast Michigan and formed under Public Act 517 of the Public Laws of 2004. The ADW formally established themselves in 2007, but members have been working together for many more years to manage the area's water resources. The ADW consists of 23 public agencies in the Ecorse Creek, Combined Downriver, and Lower Huron River Watersheds within Wayne County. The ADW is relatively urban in nature consisting of 203.3 square miles of land mass and more than 450,000 people (2010 census). Major watercourses within the ADW that flow into the Detroit River and Lake Erie include Ecorse Creek, Sexton Kilfoil Drain, Frank and Poet Drain, Blakely Drain, Brownstown Creek, Huron River, Silver Creek, and Woods Creek.

The consortium of agencies that make up the ADW meet on a regular basis and work together to cooperatively manage the rivers, lakes, and streams within the watershed. Examples of ADW efforts include long-term water quality monitoring, stormwater permit compliance and reporting to the State, submittal of grant applications for water quality improvements, public education, and illicit discharge identification and elimination. Collaborative IDEP efforts began in 2007 when the ADW budgeted \$101,094 for Wayne County Department of Public Services to provide staff training and to perform problem area identification across the watershed area over a two-year period. Since 2010, the ADW has budgeted over \$840,000 for collaborative IDEP activities. Over 150 ADW member staff have received IDEP training and Wayne County alone has performed IDEP advance investigation (specifically facility dye-testing) at over 280 commercial and municipal facilities throughout the ADW watersheds.

## II. PRIORITY AREAS

There is evidence of elevated levels of *E.coli* throughout portions of the ADW. An *E.coli* total maximum daily load (TMDL) allocation plan was developed for the Ecorse Creek watershed by the MDEQ in 2008. ADW member municipalities support a robust program to monitor surface waters for chemistry, biology and stream flow. Monitoring conducted by citizen volunteers, Huron River Watershed Council (HRWC), Wayne County, and MDEQ staff have established baseline conditions, current status and trends over the last six years in the ADW. Analysis of the monitoring data has allowed the ADW Technical committee to prioritize IDEP work areas. The data used includes: MDEQ Bacterial Source Tracking (BST) studies conducted in 2007 within the Ecorse Creek watershed; monitoring conducted by Wayne County across the ADW through the MDEQ grant in 2007-2008; monitoring conducted by Wayne County in 2015 through a SAW grant; and, annual volunteer and staff monitoring funded by the ADW beginning in 2012 that continues through the present. Priority areas may change during the course of the permit based on new data and/or elimination of certain areas based on investigation.

To identify priority IDEP work areas, the ADW Technical Committee uses the following process and criteria. At the end of each sampling season (usually in February or March), the committee evaluates the past year's surface water monitoring results. The monitoring includes a number of long-term sampling stations and 3-5 one-season investigative stations. Investigative stations are used to subdivide watersheds in an attempt to narrow in on potential pollutant sources. New or unusual results are flagged and discussed. The team evaluates the biological and chemical status at each monitoring site and summarizes results for subdrainages across the three watersheds. The direction and amplitude of trends are also evaluated. Drainages with the worst current conditions and trends are listed for prioritization according to the below criteria. Observations by the monitoring team and volunteer collectors about short-term conditions, climatic variables and other influences are also discussed. The criteria are regularly evaluated for revision.

The criteria used to identify them as a priority included:

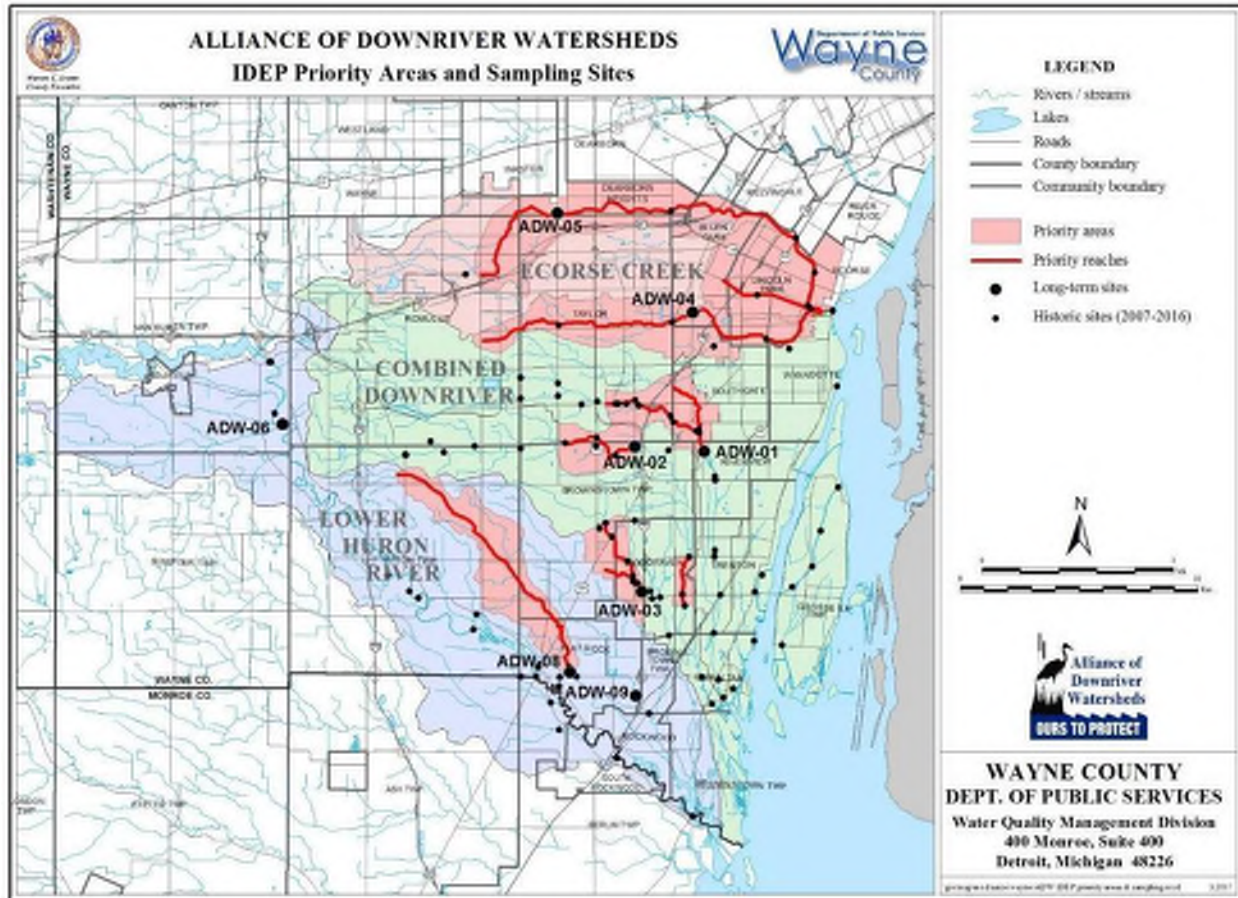
- Multiple events with *E. coli* concentrations in excess of 1,000 cfu/100 mL of water during dry weather
- Dry weather Human *E. coli* (based on MDEQ 2007 BST studies)
- Upstream of known CSO areas
- High mean *E. coli* concentrations from sampling
- Elevated mean total phosphorus levels from sampling
- Wayne County's 2007 IDEP Monitoring found 3 or more monitoring events with one or more elevated IDEP monitoring parameters
- Areas upstream of sites with unexplained, declining macroinvertebrate populations

### **Priority IDEP Work Areas**

Eight stream segments were identified by the ADW Technical Committee as Priority IDEP Work Areas (Figure 1) for the [permit period]. Three of the 8 areas are within the Ecorse Creek watershed (*North Branch Ecorse Creek, LeBlanc Drain, S. Branch Ecorse Creek*); 4 areas are within the Combined Downriver watershed (*Blakely Drain, Frank & Poet Drain and Brownstown Creek*); and 1 of the 8 areas are within the Lower Huron River watershed (*Silver Creek*). The areas that drain to these eight stream segments constitute approximately 28% of the total ADW area. These areas are shown in Figure 1.

Within the Priority Areas, ADW members will implement all of the Collaborative IDEP Activities described below. The ADW will also dedicate the majority of their annual ADW IDEP budget, during the term of the permit, to perform IDEP Advanced Investigations (IDEP#2) and Inspection of ADW Member Facilities (IDEP#6) to aggressively identify and eliminate sources of human sewage and elevated bacteria in these Priority Areas.

**Figure 1: IDEP Priority Work Areas and Monitoring Sites**



**Routine IDEP Areas**

All other areas of the ADW are being classified as Routine IDEP Areas. Within these Routine Areas, ADW members will implement the Collaborative IDEP Activities as described below, but little of the annual ADW IDEP budget will be utilized to implement these activities. Collaborative IDEP activities in these routine areas will focus on (IDEP #3: Staff Training) and (IDEP #10: Volunteer Training) to identify and report suspicious discharges including sanitary sewer discharges to storm sewers or surface waters. In addition, the Inspection of ADW Member Facilities (IDEP#6) will also be performed in the Routine IDEP Areas to identify and eliminate sources of human sewage and elevated bacteria.

**III. COLLABORATIVE IDEP ACTIVITIES**

**IDEP# 1: IDEP Investigative & Progress Evaluation Monitoring**

Funding: ADW

Activity Description: Consistent with the ADW’s 5-year monitoring strategy, the ADW will utilize HRWC, Wayne County, and volunteers to perform instream water quality monitoring to identify problems areas, prioritize advanced investigation activities, and track water quality data trends to assess IDEP progress. Eight (8) long-term sites have been established and will be monitored annually along with four (4) additional annual rotating investigative sites to attempt to identify new problems and/or refine priority action areas and advance investigation activities (see Figure 1).

Schedule: Annually, April – September

ADW Member Responsibilities:

- ADW
  - Review and approve annual budgets and work plans to ensure resources are directed to the appropriate areas
  - Conduct annual monitoring at 8 long-term sites and 4 investigative sites as outlined in the ADW monitoring plan (see TMDL Implementation Plan)

Measure of Assessment:

- Number/portion of sites sampled

BMP Goal:

- 100% of long-term and investigative sites sampled, as outlined in the ADW monitoring plan

**IDEP #2: Environmental Hotline and Coordinated Complaint Response**

Funding: Wayne County, ADW Members

Activity Description: Wayne County operates an environmental hotline to field and respond to environmental complaints including illegal dumping and suspicious discharges. Local communities also receive pollution complaints directly from residents. Local communities will promote the use of the County hotline number by their residents (as discussed in the ADW Collaborative Public Education Plan) and assist with and/or perform follow up complaint response as appropriate. Community staff may also identify a potential pollution issue during their day-to-day activities. These issues will be handled just like a pollution complaint from a resident.

Investigative responses will range from a site visit that fails to confirm a problem to full scale advanced investigation to identify the source and eliminate the illicit discharge.

Schedule: Continuous

ADW Member Responsibilities:

- ADW
  - Develop and distribute a log sheet that ADW member's field staff will use to document that illicit discharges were looked for during routine maintenance activities. See Attachment A.
  - Develop and distribute a complaint response form to be utilized by ADW members. See Attachment A.
  - Maintain a list of community contacts and update annually via annual ADW membership General Facilitation survey.
- Communities and nested school districts
  - Provide the county with a contact person for addressing pollution complaints.
  - Track status of complaints handled internally or those referred to them.
  - Track and record follow up communication from resident complaints as appropriate.
  - Investigate and resolve complaints within their MS4.

- Wayne County
  - Provide technical guidance as requested by local communities.
  - Track the status of any pollution complaints that they investigate.
  - Track and record follow up communication regarding complaints as appropriate.
  - Investigate and resolve complaints within their MS4.

Measures of Assessment:

- Number of complaints received, referred, and investigated
- Number of issues identified
- Number of issues resolved

BMP Goal:

- 100% of complaints addressed and plan for resolution identified

**IDEP #3: Priority Area IDEP Advanced Investigations**

Funding: ADW

Activity Description: Using water quality data, system data/knowledge, and/or pollution complaints, the ADW Technical Committee will continue to prioritize areas for advanced investigations to identify and eliminate the source of illicit discharge/poor water quality. Priority areas may change during the course of the permit based on new data and/or elimination of certain areas based on investigation. The Wayne County Water Quality Management Division will lead investigation efforts in the priority areas, as identified in Section II of this plan, with assistance from the local communities. Advanced investigations may include outfall/stream surveys, instream water quality investigative monitoring, manhole inspection or sampling, dye-testing, smoke testing, or televising. Procedures for these investigative methods can be found in Attachment B. When a potential IDEP issue is suspected outside the participating members/ jurisdictions, it will be referred to the appropriate jurisdiction for their follow-up. The referral will occur in writing and include the rationale for the referral.

Schedule: Years 1-5 of permit for IDEP Priority Work Areas

ADW Member Responsibilities:

- ADW
  - Review and approve annual budgets and work plans to ensure resources are directed to the appropriate areas.
  - Hold ADW Technical Committee discussions to review ongoing investigations. The Technical Committee will also provide its recommendations for priority areas to Members. Members will provide feedback on the appropriateness of the selected priority areas and can also nominate areas for priority investigations. Nominations will be taken once every 5 years or more frequently if deemed necessary by the Technical Committee. Nominations will be reviewed by the Technical Committee to determine if they should be included for priority investigation.
  - Facilitate between Wayne County and MS4s on strategies to locate sources.



- Communities and Nested School Districts
  - Assist the County in conducting advanced investigations to locate sources. This may include providing maps and staff, tracking suspicious discharges up their MS4s, and supplying staff/equipment/contractor as the situation requires (e.g. closed circuit televising equipment).
  - Work with property owners to eliminate identified sources and track correction measures.
  - Lead enforcement measures as appropriate.
- Wayne County
  - Lead investigations in priority areas to identify illicit discharge sources.
  - Track investigation efforts and provide reports.

Measures of Assessment:

- Number of outfalls inspected/dry weather screened
- Length of streams surveyed
- Amount of instream water quality investigative monitoring performed
- Number of manhole inspections
- Amount of dye testing performed
- Amount of smoke testing performed
- Amount of televising performed
- Number of illicit connections/discharges found and resolved

BMP Goals:

- Follow the advanced investigation protocol for Priority Area IDEP Advanced Investigations (Attachment B).
- 100% of known illicit connections resolved or plan in place for resolution

**IDEP #4: Staff Training**

Funding: ADW

Activity Description: There are several mechanisms available for IDEP training for various competencies as described below. Each permittee will have at least one person trained at the Investigator Level and 50% of field staff at the Alert Observer Level. Field staff is defined as those working at least 50% of their day out-of-the-office and includes Department of Public Works/Services staff and community building/plumbing inspectors.

*Investigator Level*

The Wayne County Illicit Discharge Investigator Training (a half day training workshop) where attendees are taught how to identify and investigate the sources of illicit discharges including failing septic systems, seepage from sanitary sewers, illegal dumping, and suspicious discharges from outfalls. A competency exam is also administered at the end of the workshop.

*Alert Observer Level*

Training at this level can consist of one of the following:

- The Alert Observer IDEP Training (a 30 minute to 1 hour workshop) which provides the goals of the IDEP program, how to recognize illicit discharges and conduct field screenings, and the mechanisms to report suspicious discharges.
- The Working for Clean Water municipal staff training (a 15-minute video) where attendees are provided a general overview of the IDEP program, how to recognize illicit discharges, encouraged to report suspicious discharges, and provides pollution prevention and good housekeeping best management practices.

In addition, an IDEP Tip Card for Municipal Staff, which was developed by the Southeast Michigan IDEP Work Group, will be provided to field staff for both training programs. The Tip Card provides photographic examples of illicit discharges and phone numbers to report complaints.

Each community and county should have at least one person who is trained at the Investigator Level. If not currently, this will be obtained in Year 1 of the permit. This level of training will be maintained. Wayne County and the ADW will continue to offer the Investigator Training Workshop to ADW membership every other year according to the Southeast Michigan Regional IDEP Training Plan (See Attachment C). ADW staff will look to extend the training plan another 5 years or offer an alternate training program if one is not available.

The Working for Clean Water video will be made available on the ADW's website or by searching "IDEP Municipal Training" on www.YouTube.com. The Alert Observer Training Workshop will be included in the municipal pollution prevention training every other year according to the IDEP Training Plan (See Attachment C). Additional training opportunities can be arranged if demand warrants. The Tip Card will be distributed at the Investigator and Alert Observer trainings and can be obtained on the ADW's website.

Schedule: One person trained at the Investigator Level, confirmed annually  
50% of field staff will be trained at the Alert Observer Level by Year 3 of the permit

ADW Member Responsibilities:

- ADW
  - Provide funding for the Investigator Training and Alert Observer Training Workshops
  - Provide Working for Clean Water video on ADW website
  - Provide Tip Card on ADW website
- Communities, Wayne County
  - Provide IDEP training to field staff
  - Provide field staff the IDEP Tip Card for Municipal Staff in conjunction with the training sessions
  - Document and track staff training

Measures of Assessment:

- Number of staff trained

BMP Goals:

- 1 person per MS4 trained at Investigator Level
- 50% of field staff trained at the Alert Observer Level

## **IDEP #5: Inspection of ADW Member Owned Facilities**

Funding: ADW

Activity Description: Dye-testing will be conducted on ADW member-owned or operated facilities by County IDEP staff for the purpose of identifying any illicit connections or illicit discharges. Any identified issues will be corrected by owner. Many of the ADW member-owned facilities have already been dye-tested. A list of facilities that have not yet been dye-tested is included as Attachment D. Any changes to this list during the course of the permit will be submitted to the DEQ.

Schedule: Years 1-2 of permit for Priority IDEP Work Areas  
Years 3-5 of permit for Routine IDEP Areas

### ADW Member Responsibilities:

- ADW
  - Provide funding for facility dye-testing
- Wayne County
  - Provide staff to conduct facility inspections
- Communities and School Districts:
  - Provide the ADW a list of facilities needing to be dye tested.
  - Provide access to facilities and plans, if available, and storm/ sanitary sewer maps for the immediate area.
  - Repair/correct illicit connections/discharges that were revealed during the site inspection. If the discharge is significant, take immediate steps to stop the illicit discharge

### Measures of Assessment:

- Number of facilities dye tested
- Number of issues identified
- Number of issues resolved

### BMP Goals:

- Develop a completed list of ADW member-owned facilities
- 100% of ADW member-owned facilities dye tested in priority areas
- 50% of ADW member-owned facilities dye tested in routine areas
- 100% of issues addressed, or a plan in place to address

## **IDEP #6: Visual Inspection during Routine Field Operations**

Funding: ADW, Wayne County, and Communities

Activity Description: Consistent with IDEP#4 & IDEP#9, field staff involved in various work programs have been trained to identify and report suspicious discharges during routine field operations. Routine field operations may include:

- Catch basin cleaning/repairs
- Mosquito treatment of catch basins for West Nile Virus
- Street and parking lot sweeping
- Re-ditching and open ditch maintenance, and
- Sanitary sewer maintenance (cleaning, CCTV, lining)



## **IDEP #7: Point of Storm Water Discharge – Dry Weather Screening**

Funding: Communities and nested school districts

Activity Description: Dry weather screening of points of storm water discharge will occur in Priority IDEP Work Areas when identified as the appropriate IDEP advanced investigation technique. Dry weather screening may also occur in response to suspicious discharge complaints. Any new outfalls identified by permittees will also be screened once. A procedure for performing outfall screening was developed for use by the ADW members as part of the development of this Collaborative IDEP.

Schedule: Years 1-5 of permit for Priority IDEP Work Areas, as part of Priority Area IDEP Advanced Investigations  
As needed based on complaints

### ADW Member Responsibilities:

- ADW
  - Develop and distribute a consistent procedure and forms for ADW members to appropriately document dry weather screening activities (Attachment E).
  - Maintain a list of community contacts and update annually.
  - Review of reported issues at quarterly ADW Technical Committee meetings.
- Communities and nested school districts
  - Document dry weather screening inspections
  - Track status of complaints handled internally or those referred to them.
  - Track and record follow up communication from resident complaints as appropriate.
  - Investigate and resolve complaints within their MS4.
  - Require field staff to utilize the ADW procedure and forms for documenting responses to potential illicit discharge complaints/reports and corrective actions taken to eliminate illicit discharges.
  - Perform dry weather screening of new outfalls within 6 months of construction or taking ownership.
- Wayne County
  - Provide technical guidance as requested by local communities.
  - Track the status of any pollution complaints that they investigate.
  - Track and record follow up communication regarding complaints as appropriate.
  - Investigate and resolve complaints within their MS4.
  - Perform dry weather screening of 10% of County/stream crossings using ARC/ADW dry weather screening procedures.

### Measures of Assessment:

- Number of inspections
- Number of illicit discharges found/corrected

### BMP Goals:

- 100% of known illicit connections/discharges resolved, or plan in place to resolve

## **IDEP #8: Mapping of Storm Water Outfalls to Waters of the State**

Funding: ADW with Wayne County providing GIS data management

Activity Description: A watershed-wide GIS database and map of known outfalls to waters of the State is being compiled and will be maintained. A clearinghouse for ADW digital storm sewer maps will also be established. These maps will be compiled based on available GIS data from ADW members. In addition, field surveys will be performed to fill in data gaps in priority reaches, as shown in Figure 1. This activity to centralize data will be an ongoing effort that will facilitate source-tracking and ease reporting to the MDEQ overtime.

Schedule: Initial mapping completed by December 2019  
Annual survey and map/database update

### ADW Member Responsibilities:

- ADW/Wayne County
  - Initiate map development of centralized datasets of stormwater outfalls, discharge points and MS4 system assets based on available GIS data from ADW members. A map of outfalls to waters of the State within the ADW will be prepared.
  - Perform field surveys to GPS and fill in data gaps in outfalls to waters of the state, stormwater discharge points and MS4 system assets within IDEP priority reaches. Update centralized database and maps.
  - Update the watershed's outfall/discharge point map on an annual basis.
- Communities and Wayne County
  - Provide existing GIS datasets of storm sewer systems and points of discharge to initiate development of centralized datasets of stormwater outfalls, discharge points and MS4 system assets.
  - Update maps of outfalls/discharge points on an annual basis and provide to the ADW.

### Measures of assessment:

- Portion of watershed area with known outfalls mapped in GIS

### BMP Goal:

- 100% of available data from ADW members incorporated into centralized dataset

## **IDEP #9: Volunteer Training**

Funding: ADW via Public Education and Progress Evaluation budgets

Activity Description: Participants in the various volunteer monitoring activities being implemented in the ADW have been and will be instructed and given informational materials as part of their training on how to identify and report illegal dumping and suspicious discharges. This will be carried out by Wayne County and/or HRWC staff during training for the various volunteer monitoring programs.

Schedule: Annually as volunteer monitoring training occurs.

ADW Member Responsibilities:

- ADW
  - Financially support volunteer monitoring activities
  - Provide annual volunteer training
- Communities, Wayne County and nested school districts
  - Promote citizen involvement in Volunteer monitoring efforts at which volunteers will receive training on the identification and reporting of suspicious discharges

Measures of Assessment:

- Number of volunteers trained

BMP Goal:

- Training held annually during each year of the permit cycle

**IDEP #10: Method to Evaluate IDEP Effectiveness**

Funding: ADW, Wayne County, communities, nested school districts

Activity Description: Records for each of the above IDEP activities will be kept and a biennial summary report submitted documenting the output of each activity and the summary number of illicit discharges identified and eliminated. Overall effectiveness will be based on the long-term natural resource response as determined through the progress evaluation monitoring described below (see Progress Evaluation Monitoring below).

Schedule: Continuous with summary report submitted biennially.

ADW Member Responsibilities:

- ADW
  - Conduct instream monitoring for select indicators to determine the effectiveness of IDEP efforts. The monitoring information will be evaluated and assessed during future priority area discussions.
  - Continue watershed-wide monitoring for select parameters to assess the general health of the river.
- Communities, Wayne County and nested school districts
  - Keep records of their activities with respect to the above IDEP activities and provide such information to ADW staff annually to assist with the collaborative reporting and IDEP effectiveness evaluation.

## IV. 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 Permit Progress Report. 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 the Permit Progress Report to the MDEQ.

### **Discharges from Private Sources to MS4s**

If the source of an illicit discharge has been determined to be privately owned, discharging to an 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, who is ultimately responsible for elimination. 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. In these situations, corrective action notification and enforcement will be led by the township, who will coordinate with the health department or other agencies, as needed.

*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. A sample letter is included in Attachment F.

*Final Notice:* If 14 days have passed from the date of the 1<sup>st</sup> 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.

*Enforcement:* If 30 days have passed from the date of the first written notice, a citation will be issued. The MS4 owner will issue civil infractions as described in the Enforcement Response Procedure (ERP) for the violation of the applicable IDEP-related ordinances as listed in individual permittee stormwater management plans. A citation shall include fines and may require a court appearance.

### *Corrections/Repairs:*

In the event that the owner does not contact the MS4 owner within 14 days of the Final Notice and/or the discharge is not addressed by the owner 30 days after civil infractions have been issued, the MS4 owner will pursue other enforcement actions such as: discontinue water service to the property and designate the property uninhabitable, place a lien on the property, and initiate efforts to complete the necessary repairs, as authorized by law.



### **Discharges from Public Properties to MS4s**

If the discharge is emanating from a public property (other than the permittee's property), the MS4 owner will request correction or a written corrective action plan be submitted within 60 days of notification. If the discharge cannot be corrected within 60 days of notification, interim measures shall be implemented, as practical, to reduce the impact of the discharge on the receiving water. The corrective action plan will include a schedule for completion with a goal of completion within 18 months of plan approval. The plan will be reviewed by the MS4 owner within 60 days and approved or denied with explanation. Approval of the plan will not waive any local permitting requirements of the community.

### **Discharges from Permittee's Properties**

For discharges emanating from the permittee's own property, a corrective action plan will be developed within 60 days of discovery of the discharge. The plan will include a schedule for completion with a goal of completion within 18 months of plan completion. If the discharge cannot be corrected within 60 days of discovery, interim measures shall be implemented, as practical, to reduce the impact of the discharge on the receiving water.

### **Discharges from Septic Systems**

For illicit discharges from failed septic systems, the corrective action procedures of the Wayne County Health Department will be followed. This procedure is documented in the County's stormwater management plan.

## **V. LEGAL AUTHORITY**

The legal authority that allows permittees to prohibit, investigate and/or enforce the correction of illicit discharges is established on an individual permittee basis. For most communities, legal authority is granted via the Plumbing Code, Sewer Use Ordinance, Nuisances Ordinance, and Municipal Civil Infraction Ordinance as indicated in the table below. Permittees will review their existing codes/ordinances/rules and provide a table that cross references the regulatory mechanism (chapter and section) with the items included in the table below. Table 1 provides the list of regulatory mechanisms by type of illicit discharge that are available to local, school and county agencies to investigate and eliminate illicit discharges. In some cases, permittees can seek the assistance of state and federal agencies to investigate and eliminate illicit discharges. Examples include sewage discharges from mobile home parks, discharges from non-municipal facilities that have a NPDES permit and agricultural properties as shown in Table 2.

**Table 1. IDEP Regulatory Mechanisms Available to Permittees**

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 individual stormwater management plans.
Discharges to school or township MS4s	School or Township	See individual stormwater management plans
Sanitary sewage and waste matter into County Drains	County Drain or Water Resource Commissions	<p>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.</p> <p>See Items 1-10 of Chapter 18, Section 280.423 of the Michigan Drain Code at: <a href="http://legislature.mi.gov/doc.aspx?mcl280-423">http://legislature.mi.gov/doc.aspx?mcl280-423</a></p> <p>See also Section 280.421: Obstructions; removal; expenses, notice; livestock; criminal complaint of Chapter 18 of the Drain Code at: <a href="http://www.legislature.mi.gov/%28S%28fpcedzixcmfe3wvtvqmyto3x%29%29/mileg.aspx?page=getObject&amp;objectName=mcl-280-421">http://www.legislature.mi.gov/%28S%28fpcedzixcmfe3wvtvqmyto3x%29%29/mileg.aspx?page=getObject&amp;objectName=mcl-280-421</a></p>
Discharges to County Road Drains	Road Agencies	Public Highways and Private Roads Act 283, 1909 Sect. 224.19b
Soil Erosion from Construction Sites	Part 91 Authority	Part 91, Soil Erosion and Sedimentation Control (SESC), of NREPA, Public Act 451 of 1994
Discharges from Onsite Sewage Disposal Systems (OSDS)	Wayne County Dept. of Health	<p><a href="http://www.waynecounty.com/hhs/onsitesewage.htm">http://www.waynecounty.com/hhs/onsitesewage.htm</a></p> <p><i>Specifications Governing On-Site Disposal of Sanitary Sewage and Human Excreta as follows:</i></p> <ul style="list-style-type: none"> <li>-Prohibit discharges: Article III, Sec. 3.13.2</li> <li>-Right to inspect: Article IV, Sec. 4.3</li> <li>-Corrective action: Article IV, Sec. 4.5-4.7</li> <li>-Penalties: Article XVI, Sec. 16.1</li> </ul> <p><i>Wayne County On-Site Sewage Disposal Operation and Maintenance Ordinance as follows:</i></p> <ul style="list-style-type: none"> <li>-Right to inspect: Sec. 803</li> <li>-Corrective action: Sec. 802</li> <li>-Penalties: Sec. 804-815</li> </ul>

Source: Modified from a table included in the Alliance of Rouge Communities Collaborative IDEP

**Table 2 – IDEP Regulatory Mechanisms Available to State and Federal Agencies to Assist Permittees**

Discharge Type or Source	State or Federal Enforcement Agency	Regulatory Authority
Discharges from Mobile Home Parks	MDLEG	Mobile Home Commission Act Public Act 96 of 1987 <a href="http://www.legislature.mi.gov/documents/mcl/pdf/mcl-Act-96of-1987.pdf">http://www.legislature.mi.gov/documents/mcl/pdf/mcl-Act-96of-1987.pdf</a>
Discharges from Part 5 facilities and industrial NPDES regulated facilities	MDEQ-WRD	Part 31, NREPA, PA 451 of 1994
Discharges from agricultural properties and livestock facilities	MDARD	Michigan Right to Farm Act, Public Act 93 of 1981
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 G 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

**STORMWATER DISCHARGE  
PERMIT APPLICATION**



**Complaint Tracking Form &  
Routine Field Work Log**

**For the Alliance of Downriver Watersheds MS4s**

**Pollution Complaint Tracking Form Illicit Discharge Elimination Program**

Community Name: \_\_\_\_\_

Complaint made by: \_\_\_\_\_ Phone #: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Location of Problem: \_\_\_\_\_

Offending Party (if known) \_\_\_\_\_

Nature of Problem (i.e. paper waste, odor, color, etc.):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Is this an Emergency?  No  Yes (then call 911)

Nature of Emergency: \_\_\_\_\_

Initial contact made to:  911  City Dept \_\_\_\_\_  
 Wayne County 888-223-2363  PEAS Hotline (State) 800-292-4706  
 Other \_\_\_\_\_

**Pollution Complaint Tracking Form Illicit Discharge Elimination Program**

Investigation Summary     Initial Investigation                       Follow-up Investigation

Date of Investigation: \_\_\_\_\_ Investigating Agency: \_\_\_\_\_

Crew Members \_\_\_\_\_

Location of Discharge: \_\_\_\_\_

Investigation Location: \_\_\_\_\_

Observations (odor, color, volume, etc.): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Actions Taken (dye testing, notification letter, etc.): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Were photos taken?    No    Yes

Agency Referred to: \_\_\_\_\_ Agency Contact: \_\_\_\_\_

Method of Communication:    E-mail\*    Letter/memo\*    Phone    \*Attached copies

Content of Communication: \_\_\_\_\_

\_\_\_\_\_

Date Corrected or Resolved: \_\_\_\_\_

**Routine Fieldwork Log – Illicit Discharge Elimination Program**  
**Wayne County 24 hr Environmental Hotline 1-888-223-2363**

Date:	Crew:	Suspicious Discharge Observed? <input type="checkbox"/> No <input type="checkbox"/> Yes*
Location of Field Work:		
Date:	Crew:	Suspicious Discharge Observed? <input type="checkbox"/> No <input type="checkbox"/> Yes*
Location of Field Work:		
Date:	Crew:	Suspicious Discharge Observed? <input type="checkbox"/> No <input type="checkbox"/> Yes*
Location of Field Work:		
Date:	Crew:	Suspicious Discharge Observed? <input type="checkbox"/> No <input type="checkbox"/> Yes*
Location of Field Work:		
Date:	Crew:	Suspicious Discharge Observed? <input type="checkbox"/> No <input type="checkbox"/> Yes*
Location of Field Work:		
Date:	Crew:	Suspicious Discharge Observed? <input type="checkbox"/> No <input type="checkbox"/> Yes*
Location of Field Work:		

\* If "Yes" is checked, the Pollution Complaint Tracking Form must be completed

**STORMWATER DISCHARGE  
PERMIT APPLICATION**



**Advanced Investigation Procedure for Locating the  
Source of Suspicious Discharges**

**For the Alliance of Downriver Watersheds MS4s**



## Attachment B

### **I. 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 priority area designation, 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.

### **II. Performing Source Investigations**

The investigation parameters will be selected based on the nature of the complaint or initial field screening results according to the parameters and threshold values indicated in the Field Screening Procedure for Identifying Potential Illicit Discharges Standard Operating Procedure. If working within a river/stream/open drain, then samples or observations will be taken 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.

#### **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 ADW 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 ADW Collaborative IDEP Plan, then they will be notified in writing of the suspicious discharge and any pertinent information about the discharge. This will occur within a timeframe ranging from immediately/within 24 hours (for sources posing an imminent threat) or for non-emergency issues up to 5 working days of the discovery of the discharge from the other jurisdiction.

#### **Source Investigations**

Enclosed drain investigations will proceed, following discovery of a suspicious discharge. The site of the discharge will be resampled during dry conditions for the appropriate indicator parameter. The sample parameters will be the same as those used during the initial field screening. If no flow is present, a second site visit will be conducted within 4 weeks of discovery, weather permitting. If no flow is present during the second site, a third site visit will be conducted within 2 months of the date of the second visit, weather permitting.

Additional sampling/observations will be conducted upstream within the drainage system to narrow down the section of pipe from which the suspicious discharge is emanating. Sampling will be conducted as outlined in the Field Screening Procedure for Identifying Potential Illicit Discharges SOP.

## Attachment B

Ideally, the sampling data or observations will allow staff to isolate a section of storm sewer to employ advanced investigation techniques. These techniques include televising the storm sewer, smoke testing, and conducting dye testing of homes, facilities, or sewers to verify a suspected illicit connection or discharge. The lead investigator will determine which of these techniques (or other technique) will be employed.

### III. Closed Circuit Televising (CCTV)

CCTV inspections may be performed to determine if illicit connections are present in a storm drain. This allows for inspectors to identify suspicious taps to the drain. This work will be performed by a qualified staff or contractor. If possible, a video recording of the inspection will be performed. If possible, the lead investigator will be present during the CCTV inspection in order to direct additional efforts.

### IV. Smoke Testing

Smoke testing may be performed to determine if a residence or facility is illicitly connected to the storm drain. This work will be performed by a qualified staff or contractor. This testing requires homeowner notification to ensure all plumbing traps are filled with water and to make them aware of the potential intrusion of smoke into their homes. The local fire department should also be notified prior to testing. Non-toxic smoke is used. The drain may be plugged at various locations to ensure the testing is limited to the area of interest. Smoke found exiting a building plumbing vent indicates that the home is illicitly connected to the storm sewer. Care must be taken to perform this testing during the appropriate weather conditions in order not to mistaken steam from a heating system or fog as smoke. This testing may also identify improper connections between the storm and sanitary system.

### V. Dye Testing

Dye testing may be performed on plumbing fixtures (i.e. sinks, toilets, floor drains, etc.) within facilities/structures that are suspected of illicitly discharging non-stormwater flows into the MS4 to determine if they are properly connected to the appropriate sewer. Prior to administering a tracer dye, the lead investigator will submit a Notice of Intent to the MDEQ under General Rule 97 Certification of Approval Authorizing Tracer Dyes in Surface Waters. In addition, the following agencies shall be notified 48 hours prior to the application:

- Local Municipality
- Local Health Department
- Downstream Municipalities and Health Departments potentially affected
- Local Fire Department

Once approved, tracer dye will be applied to the appropriate plumbing fixture(s) per the manufacturer's recommendations and in a manner that will minimize potential effects to surface water. The following information will be documented when conducting a dye test:

- 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

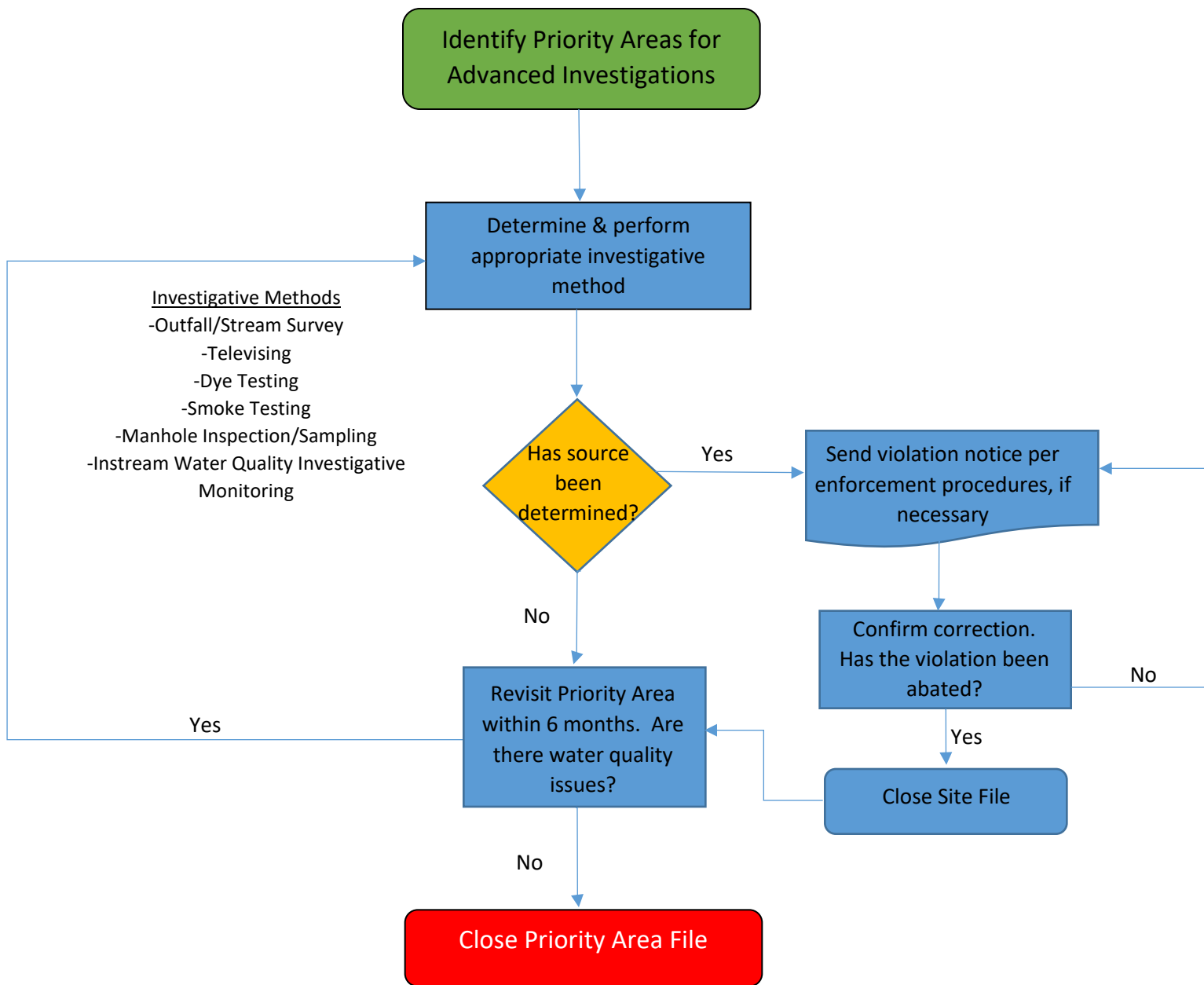
## Attachment B

- Location where dye is observed (i.e. sanitary manhole, northeast of building)
- Time of Travel
- Follow up action, if needed

Sample dye test forms are included with this Attachment.

### **VI. Process for Revision**

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





# Alliance of Downriver Watersheds

*Dye Testing Form adapted from  
Wayne County Department of Public Services (Environment)  
Water Quality Management Division*

## Facility Information Sheet

Field Inspection                       Survey                       WMD Complaint, # \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_ Community: \_\_\_\_\_

Name of Facility: \_\_\_\_\_

Type of Business: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Title: \_\_\_\_\_

SIC Code: \_\_\_\_\_ Priority: \_\_\_\_\_

Watershed: \_\_\_\_\_ Subwatershed: \_\_\_\_\_ Subarea: \_\_\_\_\_

Field Representative(s): \_\_\_\_\_

River Friendly Partners Program Information Requested: \_\_\_\_\_



# Alliance of Downriver Watersheds

*Dye Testing Form adapted from  
Wayne County Department of Public Services (Environment)  
Water Quality Management Division*

## Field Inspection Results

Date: \_\_\_\_\_

Address: \_\_\_\_\_ Community: \_\_\_\_\_

Name of Facility: \_\_\_\_\_

- Proper Connection - The Fixtures “dye tested” in this establishment have been found to be properly connected to the sanitary sewer system. No problems were noticed at time of inspection.
  
- Incomplete: \_\_\_\_\_  
*reason*
  
- No Show - Unsuccessful attempt, unable to detect “dye” in the sanitary sewer.
  
- Violation/Illicit Connection/Improper discharge - Situation resulting in pollution of surface waters.
  - Illicit Connection
  - Improper Discharge
  - House Keeping

LIST ALL FIXTURES DYE TESTED:

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# Alliance of Downriver Watersheds

*Dye Testing Form adapted from  
Wayne County Department of Public Services (Environment)  
Water Quality Management Division*

## Field Notes & Observations

Date: \_\_\_\_\_ Complaint Number: \_\_\_\_\_

Address: \_\_\_\_\_ Community: \_\_\_\_\_

Name of Facility: \_\_\_\_\_

- Follow Up Inspection
  Survey
  Complaint

Notes: \_\_\_\_\_

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Attachment C

**STORMWATER DISCHARGE  
PERMIT APPLICATION**



**Regional IDEP Training Program**

**For the Alliance of Downriver Watersheds MS4s**

**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.

Every other year beginning with 2013, Wayne County’s IDEP Training will be provided to the region. Table 1 lists the responsibilities and schedule for each IDEP training session. In 2014 and 2016, SEMCOG’s municipal facility training with illicit discharge recognition training will be provided. Table 2 lists the responsibilities for the SEMCOG municipal facility and illicit discharge recognition training.

Note: This schedule is consistent with the language concerning training in the new State stormwater permit.

**Cost Sharing**

The goal is to distribute cost among the region by rotating sites for the training, so that the trainings can be offered at no charge. This would reduce the cost to the ARC since the IDEP training registration would be handled by others and since it would be offered every other year. This will also reduce the cost to other permittees, since the IDEP training charge would be offered at no charge (a savings of around \$75 per attendee).

**Table 1: Traditional IDEP Training Schedule and Responsibilities**

<b>Year</b>	<b>Staff Cost<sup>1</sup></b>	<b>Facility/Refreshments<sup>2</sup></b>	<b>Registration<sup>3</sup></b>	<b>Print and Mail Certificates</b>
2013	ADW, ARC	Wayne County	Wayne County	Wayne County
2015	ADW, ARC	Washtenaw County	Washtenaw County	Wayne County
2017	ADW, ARC	Macomb County	Macomb County	Wayne County

- 1- Will provide trainers for the event at no charge to the municipalities or other counties.
- 2- Will arrange for a training location and provide refreshments/snack
- 3- Will handle advanced registration and sign-in the day of the event and create an advertisement for distribution to the region. Distribution will occur via email to the county stormwater coordinators.

**Table 2: SEMCOG Municipal Facility and Illicit Discharge Training Schedule and Responsibilities**

<b>Year</b>	<b>Staff Cost</b>	<b>Facility/Refreshments<sup>3</sup></b>	<b>Registration<sup>4</sup></b>
2014	Host County <sup>1</sup> , SEMCOG <sup>2</sup>	St. Clair County	SEMCOG
2016	Host County <sup>1</sup> , SEMCOG <sup>2</sup>	Oakland County	SEMCOG

- 1- Will provide or arrange for trainers for the event in collaboration with SEMCOG.
- 2- SEMCOG donated time
- 3- Will arrange for a training location and provide refreshments/snack
- 4- Will handle advanced registration and sign-in the day of the event and create an advertisement for distribution to the region. Distribution will occur via email to the county stormwater coordinators.

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 Representative**

W. Musteredovich W. MUSTERDOVICH CHIEF DEPUTY MACOMB COUNTY PUBLIC WORKS 05-17-2013  
Signature Name/Title COMMISSIONER Date

**Oakland County Representative**

James W. Wierka JAMES WIERKA / ASST. CHIEF ENG. 4/17/13  
Signature Name/Title Date

**Saint Clair County Representative**

Steve French Steve French DIRECTOR 4-29-13  
Signature Name/Title Date

**Washtenaw County Representative**

Evan Pratt EVAN PRATT Water Resources Commissioner 8/8/12  
Signature Name/Title Date

**Wayne County Representative**

Kelly A. Cave KELLY A. CAVE WAYNE CO. STORM WATER COORDINATOR 11 APRIL 13  
Signature Name/Title Date

**SEMCOG Representative**

Kathleen Lomako Kathleen Lomako 8/14/2013  
Signature Name/Title Date

**Alliance of Rouge Communities Representative**

Kevin L. Buford Kevin Buford, ARC Chair 3/28/13  
Signature Name/Title Date

**Alliance of Downriver Watersheds Representative**

Mark Gahry Mark Gahry, Chairman May 7, 2013  
Signature Name/Title Date

# **STORMWATER DISCHARGE PERMIT APPLICATION**



## **ADW Member Facilities To be Dye-Tested**

### **For the Alliance of Downriver Watersheds MS4s**

Community	Facilities
<b>Allen Park</b>	Library Parks and Rec Fire Station DPS Building
<b>Belleville</b>	Belleville Fire Department Public Golf Courses
<b>Dearborn Heights</b>	No facilities left to test
<b>Ecorse</b>	No facilities in ADW to test
<b>Flat Rock</b>	Animal Shelter City Hall DPS Mechanic's Garage DPS Yard Fire Department Police Station Library
<b>Gibraltar</b>	Community Center - Annex School District Transportation & Maintenance Garage with salt storage DPW Building Carlson High School/Shumate Middle School Parsons Elementary School
<b>Grosse Ile</b>	Animal Shelter Water's Edge Municipal Golf Course DPS Building & Yard Recreation/Restaurant Building Grosse Ile Township Schools Grosse Ile High School Grosse Ile Middle School Meridian Elementary School Parke Lane Elementary School
<b>Inkster</b>	No facilities in ADW to test
<b>Lincoln Park</b>	Historical Museum Animal Control
<b>Melvindale</b>	Melvindale Library: 18650 Allen Rd (City reports already dye tested - confirm)
<b>Riverview</b>	Riverview Highland Golf Course Maintenance DPW Facility Fire Hall Forest Elementary School Huntington Elementary Kennebec Park Kingswood Nature Park Memorial Elementary Riverview High School Riverview Schools Operations Building Riverview Schools Warehouse Seitz Middle School GSRP Preschool
<b>Rockwood</b>	Municipal Building (includes Fire & Police Stations) Public Works & Salt Storage Community Center
<b>Romulus</b>	Animal Shelter Romulus Athletic Center Romulus Community Schools Romulus Elementary School Barth Elementary School Romulus Senior High School Wick Elementary School Hale Creek Elementary School Romulus Middle School Romulus Virtual Learning Center
<b>Southgate</b>	Downriver Animal Control Building Southgate Municipal Golf Course
<b>Sumpter Twp</b>	no facilities list
<b>Taylor</b>	Fire Station (Goddard) Fire Station (Eureka) Lakes of Taylor Golf Course Library Kinyon Elementary School Taylor School District Blair Moody Elementary School Taylor Parks Elementary School Robert J. West Middle School Clarence Randall Elem. School Bernice McDowell Elem. School Holland Elementary School Myers Elementary School Taylor Virtual Learning Academy Eureka Heights Elementary School Hoover Middle School Taylor High School Johnson Preschool Taylor SportsPlex
<b>Van Buren</b>	No facilities in ADW to test
<b>Westland</b>	No facilities in ADW to test
<b>Woodhaven</b>	Civic Center Animal Shelter City Hall DPW Yard Fire Station 1 Fire Station 2 Police Station Water Garage
<b>Woodhaven - Brownstown Schools</b>	No facilities left to test
<b>Wyandotte</b>	Recreation Center/Yack Arena Police Station Wyandotte Animal Pound Fire Station #1 Fire Station #2 Public Schools Wilson Middle School DPW Yard

**STORMWATER DISCHARGE  
PERMIT APPLICATION**



**Outfall Screening Procedure for  
Identifying Potential Illicit Discharges**

**For the Alliance of Downriver Watersheds MS4s**



## Attachment E

### I. Purpose

The purpose of this procedure is to describe the protocols to inspect stormwater outfalls for the presence of illicit discharges. 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.

### II. Performing Field Observations at Outfalls

Outfalls will be assessed during dry weather conditions focusing on the criteria listed below. This assessment will be conducted following at least 48 hours with no precipitation.

1. Presence/absence of flow
2. Deposits/stains on the discharge structure or bank
3. Vegetation condition
4. Structural condition
5. Biology, such as bacterial sheens, algae, and slimes
6. Water clarity
7. Color
8. Odor
9. Floatable materials

A field form (provided at the end of this procedure) that documents the condition of the outfall and any discharge will be completed. In addition to the assessment of the field screening criteria, GPS positioning will be obtained for new or previously unscreened outfalls.

### III. Performing Field Screening

Only individuals that have been trained to do so will perform field screening activities. Acceptable training includes the following elements: goals of the IDEP program, how to recognize illicit discharges and sampling techniques. Four months of IDEP field experience consisting of outfall screening and/or advanced investigations can be substituted for classroom training.

If the visual observations indicate a potential illicit discharge, flow is observed and the source of the flow is not immediately identifiable then sampling will be performed. Based on the suspected discharge or the pollutant of concern, some or all of the following parameters will be assessed:

1. pH will be sampled if an industrial discharge is suspected. A pH measurement will be obtained using calibrated portable field meter such as pH pen or multi-parameter probe.
2. Detergents will be sampled if flow is observed to have foam or suds or if a sanitary discharge is suspected. The sample will be field screened for surfactants using a colorimetric method such as CHEMets kit # K-9400 ([www.chemetrics.com](http://www.chemetrics.com)). The operating range of the test should be between 0 and 3 mg/L.
3. *E. coli* will be sampled if a sanitary discharge is suspected. These samples will be collected in a sterile 100 mL bottle, stored on ice, and transported to a laboratory for analysis. The analytical range 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.

## Attachment E

Disposable gloves will be worn to collect all samples. Gloves will be changed out between sampling sites. *E. coli* samples must be collected directly into the laboratory container, while sample collection cups may 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.

*E. coli* samples shall be delivered to the laboratory with sufficient time for the samples to be analyzed within the method specific hold time. Confirmation of method specific hold times shall be obtained from the laboratory at the onset of sampling efforts. For *E. coli* analysis, the goal of the sampling team will be to deliver samples to the laboratory within 6 hours of collection where sample processing will occur within 2 hours for a total hold time of 8 hours. However, as these samples are intended to be used for screening purposes, a total hold time of 24 hours will be acceptable if it is not cost effective to meet the shorter hold time.

If sample result exceeds the threshold(s) provided in Table 1, additional investigations are recommended to locate the source of the suspicious discharge.

Field screenings will be conducted in conjunction with field observation procedures as described in Section II. 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 1 – Guidance for Screening Results**

Typical Parameters	
Parameter	Follow-up Threshold
pH	>9 or <6.5
Surfactants	>0.75 mg/L
<i>E. coli</i>	>1,000 cfu/100 mL or MPN/100 mL resampled up to two more times within 12 months
	>5,000 cfu/100 mL or MPN/100 mL for advanced investigations
Physical signs	unusual odor, color, clarity, floatables, deposits, stains, vegetation change, outfall structural damage
Additional Parameters	
Parameter	Follow-up Threshold
Ammonia	>1 mg/L
Conductivity	>1,000 uS/cm
Turbidity	>5 NTU
TDS	>500 mg/L
Dissolved oxygen	< 5 mg/L
Temperature	+5°F warm water stream +2°F cold water stream

### IV. 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 the ADW Technical Committee.

Outfall ID:		Community:	
<b>Section 1: BACKGROUND DATA</b>			
Date:		Time:	
Inspector:			
Weather: <input type="checkbox"/> 48 hrs no rain <input type="checkbox"/> Sunny <input type="checkbox"/> Cloudy <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Rainy <input type="checkbox"/> Winter Inspection			
Photos Taken:		Receiving Water:	
Nearest Property Address/Location Description:			
Land Use: <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Residential <input type="checkbox"/> Other _____			
<b>Section 2: OUTLET DESCRIPTION</b>			
Type/Shape/Size	Size (in) Width/Height or Diameter: Type/Shape <input type="checkbox"/> Round <input type="checkbox"/> Arch <input type="checkbox"/> Box <input type="checkbox"/> Other _____ Material: <input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> CMP <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____		
Submerged	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully In Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully		
Outfall Damage	<input type="checkbox"/> Yes <input type="checkbox"/> Spalling/ <input type="checkbox"/> Corrosion <input type="checkbox"/> Other _____ <input type="checkbox"/> No		
Deposits/Stains	<input type="checkbox"/> Yes <input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other _____ <input type="checkbox"/> No		
Turbid/Cloudy Plunge Pool Below Outlet	<input type="checkbox"/> Yes <input type="checkbox"/> Odors <input type="checkbox"/> Floatables <input type="checkbox"/> Color <input type="checkbox"/> Other _____ <input type="checkbox"/> No <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae		
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial <input type="checkbox"/> No		
<b>Section 3: PHYSICAL INDICATORS FOR OUTFALLS WITH WATER</b>			
Odor of Water	<input type="checkbox"/> Sewage <input type="checkbox"/> Sulfide <input type="checkbox"/> Oil/Gas <input type="checkbox"/> Other _____ <input type="checkbox"/> None <input type="checkbox"/> Rancid/Sour		
Color of Water:	<input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Dark Brown/ Tannic <input type="checkbox"/> Muddy <input type="checkbox"/> Other _____		
Floatables (not including trash)	<input type="checkbox"/> Paint <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Algae <input type="checkbox"/> Other _____ <input type="checkbox"/> None <input type="checkbox"/> Sewage <input type="checkbox"/> Suds/bubbles		
Trash/debris	<input type="checkbox"/> Glass <input type="checkbox"/> Yard Waste <input type="checkbox"/> Paper <input type="checkbox"/> Plastics <input type="checkbox"/> None <input type="checkbox"/> Mixed Mate: <input type="checkbox"/> Metal <input type="checkbox"/> Other _____		
Sample Obtained	<input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Section 4: PRIMARY SCREENING/SAMPLES COLLECTED</b>			
Screening Parameters	Result	Possible Illicit Discharge?	Equipment
pH		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Temperature (F)		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Conductivity (µS/cm)		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Ammonia (ppm)		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Detergents (ppm)		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Section 5: ILLICIT DISCHARGE POTENTIAL</b>			
Do the screening results above indicate that an illicit discharge may be present?			
<input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Section 6: NOTES</b>			

**STORMWATER DISCHARGE  
PERMIT APPLICATION**



**Corrective Action Notification  
Sample Letter**

**For the Alliance of Downriver Watersheds MS4s**

## Attachment F

### NOTICE OF ILLEGAL DISCHARGE OR CONNECTION SAMPLE LETTER

<Person or Business Name>

<Address Line 1>

<Address Line 2>

Dear <Property Owner>:

The Michigan Department of Environmental Quality (MDEQ) Municipal Separate Storm Sewer System Permit requires the <CVT> to control the amount of pollutants entering the drainage system. This includes the detection and elimination of illegal discharges or connections to the system that may contain pollutants or are otherwise not allowed. Left uncorrected, any pollutants entering the system will ultimately impact nearby lakes or streams as storm drainage is not treated at any sort of treatment facility. Any discharge/connection without permission is illegal and requires immediate termination of the discharge.

An inspection of the drainage system has occurred in the vicinity of your property and an illegal connection/discharge was discovered entering into the <CVT> system. The discharge/connection was discovered on <date> at <business name and address>. <Description of indicators or source>.

This discharge directly pollutes the surface waters of the State of Michigan. This is a violation of the Federal Clean Water Act, PL 92-500, as amended, State of Michigan Natural Resources and Environmental Protect Act 451, Public Act of 1994, as amended, Part 31, and the Michigan Department of Environmental Quality NPDES Storm Water General Permit (MIG610000). Please contact me within 14 days to report plans for correction of the violation.

A follow-up investigation will be conducted to ensure compliance. If the illegal discharge/connection cannot be removed immediately, you do not understand this notice, or you disagree that an illegal discharge/connection exists at your property, please contact me with further details or explanation by calling <phone number> or via email at <email address>.

Sincerely,

<Name>

<Title>

**STORMWATER DISCHARGE  
PERMIT APPLICATION**



**State and Federal Regulatory Mechanisms**

**For the Alliance of Downriver Watersheds MS4s**

## SECTION ONE: Environmental Regulations

### Release Notification Requirements in Michigan\*

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

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 Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>NREPA 1994 PA 451 Part 201, <b>Environmental Remediation</b></p>	<p>(i) Unpermitted release into the environment over a 24-hour period of a <b>hazardous</b> substance (<i>July 1, 2012, edition</i> of the CERCLA list, 40 CFR 302, Table 302.4) in a quantity equal to or greater than its corresponding reportable quantity.</p> <p>Does not include release solely from UST systems regulated under Part 213, and release solely from disposal area licensed under Part 115 and discovered through disposal area's hydrogeological monitoring plan.</p> <p>Release of substance regulated by MI Dept of Agriculture &amp; Rural Development (MDARD) (fertilizer, soil conditioner, or pesticide) excluding normal agricultural practices: <i>also</i> report to MDARD.</p>	<p>Within 24 hours after discovery: to DEQ-RRD district office (PEAS after hours) by owner or operator or person holding easement interest.</p> <p>Report agricultural release to MDARD.</p>	<p>Upon request: Provide a response activity plan to DEQ-RRD district supervisor.</p>	<p>PEAS: 800-292-4706</p> <p>MDARD Agriculture Pollution Emergency Hotline: 800-405-0101</p> <p>For further information contact DEQ-RRD</p>
<p>NREPA 1994 PA 451 Part 201, <b>Environmental Remediation</b> (Continued)</p>	<p>(ii) The owner or operator has reason to believe that one or more <b>hazardous</b> substances are migrating or have migrated from his or her property and are present beyond the property boundary at a concentration in excess of cleanup criteria for unrestricted residential use.</p> <p>(iii) The release is a result of an activity that is subject to permitting under NREPA Part 615 and the owner or operator is not the owner of the surface property and the release results in <b>hazardous</b> substance concentrations in excess of cleanup criteria for unrestricted residential use.</p> <p>Hazardous substance means a hazardous substance defined in CERCLA (40 CFR 302), hazardous waste as defined in NREPA part 111, petroleum as defined in NREPA part 213, or any substance demonstrated to pose an unacceptable risk to public health, safety, welfare, or the environment.</p> <p>Cleanup criteria for unrestricted residential use means criteria that satisfy the requirements in section 20120a(1)(a) or (16); or as defined under NREPA part 213.</p>	<p>Within 30 days after discovery: to DEQ-RRD district office and owners of property to which hazardous substances migrated or owner of surface property by owner or operator of property where release occurred.</p> <p>Specific form required for: "Notice of Migration of Contamination" (Form EQP4482).</p>	<p>Upon request: Provide a response activity plan to DEQ-RRD district supervisor.</p>	<p>For further information contact DEQ-RRD</p>
<p>NREPA 1994 PA 451 Part 83, Pesticide Control Regulation 640, Commercial Pesticide Bulk Storage <b>(Agricultural)</b></p>	<p>Release to the environment of a commercial <b>pesticide</b> &gt;5 gallons or 100 pounds.</p> <p>Reportable agricultural spills as defined in the provisions of SARA Title III section 304 and CERCLA section 103 shall be immediately reported to PEAS and the NRC.</p> <p>The term "release" excludes normal agricultural practices.</p>	<p>Immediate: to PEAS*</p> <p>Also notify NRC for spills reportable under SARA Title III &amp; CERCLA.</p> <p>*MDARD prefers direct notification to their hotline. PEAS forwards all agriculture calls to MDARD.</p>	<p>Within 90 days: to MDARD Pesticide and Plant Pest Management Div. a revised site plan.</p>	<p>MDARD Agriculture Pollution Emergency Hotline: 800-405-0101</p> <p>PEAS: 800-292-4706</p> <p>NRC 800-424-8802 or online at www.nrc.uscg.mil</p> <p>For further information contact MDARD 517-284-5644</p>



**SECTION ONE: Environmental Regulations**

**Release Notification Requirements in Michigan\***

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>NREPA 1994 PA 451 Part 85, Fertilizers Regulation 641 Commercial Fertilizer Bulk Storage Regulation 642, On Farm Fertilizer Bulk Storage (Agricultural)</p>	<p>Release to the environment of a commercial <b>fertilizer</b> &gt;55 gallons liquid or 650 pounds dry, or tank overfills; or an on farm fertilizer &gt; 55 gallons liquid.</p> <p>For storage tank with bladder system instead of diking: also report all overfills and internal spills.</p> <p>The term "release" excludes normal agricultural practices. The term "liquid fertilizer" excludes anhydrous ammonia.</p>	<p>Immediate: to MDARD by commercial bulk storage facility personnel</p> <p>(For farms, the regulation does not specify who makes the report.)</p>	<p>Not required.</p>	<p>MDARD Agriculture Pollution Emergency Hotline: 800-405-0101</p> <p>For further information contact MDARD 517-284-5644</p>
<p><b>Fire Prevention Code</b> 1941 PA 207 Section 29.5g</p>	<p>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.</p> <p><b>Hazardous</b> 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.</p> <p>Act 207 amended 6/19/2006. The State Fire Marshall is in LARA, Bureau of Fire Services.</p>	<p>Immediately following incident, report known details regarding incident: to LARA Bureau of Fire Services <i>and</i> organized local fire department by owner of firm or vehicle or the person <i>and</i> the chief of first police or organized fire dept upon scene of incident.</p>	<p>Not required.</p>	<p>Contact LARA Bureau of Fire Services by calling the MSP HazMat hotline: 800-525-5555</p> <p>For further information: contact local fire department</p>
<p><b>Fire Prevention Code</b> 1941 PA 207 Part 2 of Storage and Handling of Flammable and Combustible Liquids rules (FL/CL code)</p>	<p>A release from an <b>AST</b> system of &gt; 55 gal of any <b>flammable or combustible liquid</b> (flash point &lt; 200°F) to the ground or within a secondary containment area during any 24 hour period.</p> <p>Note: Many liquid pesticides are combustible (flash point between 100 and 200°F).</p>	<p>As soon as practicable after detection of release: to PEAS by owner or operator.</p>	<p>Within 10 days after release: to LARA Bureau of Fire Services, Storage Tank Division outlining cause, discovery, response to prevent recurrence.</p>	<p>PEAS: 800-292-4706</p> <p>For further information: contact LARA Bureau of Fire Services, Storage Tank Division 517-335-7211</p>

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 Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>49 CFR 171 (Transportation of Hazardous Materials)</p>	<p>Initial verbal notice: Incident during transportation (including loading, unloading, temporary storage) involving (1) <b>hazardous</b> material and resulting in death, injury requiring hospitalization, public evacuation <math>\geq</math> 1 hour, major transportation artery or facility closure <math>\geq</math> 1 hour, or flight pattern alteration; (2) fire, breakage, spillage, or suspected radioactive contamination occurs involving a <b>radioactive</b> material; (3) fire, breakage, spillage or suspected contamination involving an <b>infectious</b> substance other than a regulated medical waste; (4) <b>marine pollutant</b> release exceeding 450 L (119 gal) liquid or 400 kg (882 lbs) solid; (5) other per judgment of person in possession of the hazardous material (e.g., continuing danger to life exists at scene of incident); (6) during transportation by aircraft, a fire, violent rupture, explosion or dangerous evolution of heat occurs as a direct result of a battery or battery-powered device.</p> <p>Hazardous material = CERCLA hazardous substance (40 CFR 302, Table 302.4), hazardous waste (40 CFR 262), marine pollutant (49 CFR 172.101 Appendix B), elevated temperature material, listed on Hazardous Materials Table (49 CFR 172.101), or meets criteria for hazard class/division in 49 CFR 173.</p> <p>Written follow-up report: Required for all of above, plus any unintentional release of hazardous material from a package (including tank); or any quantity of hazardous waste discharged during transportation; or structural damage to lading retention system, even if no release, on specification cargo tank with <math>\geq</math> 1000 gal capacity containing hazardous material; or undeclared hazardous material discovered.</p>	<p>As soon as practical but no later than 12 hours after occurrence of the incident: to NRC by each person in physical possession of the hazardous material.</p> <p>(A reportable incident <i>must</i> be reported by telephone, not online.)</p> <p>For infectious substances, notice may be given to the Director, Centers for Disease Control and Prevention, U.S. Public Health Service instead of NRC.</p>	<p>Within 30 days after discovery: to US DOT on DOT Form F 5800.1 (01-2004) "Hazardous Materials Incident Report."</p> <p>Report online at <a href="https://hazmatonline.phmsa.dot.gov/incident/">https://hazmatonline.phmsa.dot.gov/incident/</a></p> <p>Report must be updated w/i 1 year of incident if: Death results from injury; hazardous material or package info on prior report misidentified; damage, loss or cost not known on prior report becomes known or changes by \$25,000 or 10%.</p> <p>See regulation for exceptions to written report.</p>	<p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>U.S. Public Health Service 800-232-0124</p> <p>For further information contact US DOT Hazardous Materials Information Center at 800-467-4922 or online at <a href="http://www.phmsa.dot.gov/hazmat">www.phmsa.dot.gov/hazmat</a></p>
<p>NREPA 1994 PA 451 Part 31, Water Resources Protection (Release to <b>surface of ground, surface water, groundwater or public sewer system</b>)</p>	<p>Unpermitted release directly or indirectly to public sewer system, surface of ground, surface water or groundwater from an oil storage facility or on-land facility of a "<b>polluting material</b>" (<b>oil, salt</b>, or any material specified in table 1 in R 324.2009) in excess of its threshold reporting quantity during any 24-hour period.</p> <p>See Part 5 rules, effective 8/31/01, for details and exemptions. HB 5586 effective 6/15/04 amended the reporting requirements.</p> <p><i>Rule revisions pending as of April 2014.</i></p>	<p>As soon as practicable after detection: to PEAS <i>and</i> 911 by owner, operator or manager.</p> <p>State agencies call 911 if release reported to them by another state or Canada.</p>	<p>Within 10 days after release: to DEQ-WRD district supervisor <i>and</i> to the local health department where the release occurred, outlining cause, discovery, response &amp; prevention of recurrence.</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-WRD</p>

**SECTION ONE: Environmental Regulations**

**Release Notification Requirements in Michigan\***

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>CWA Section 311 33 CFR 153 (<b>Navigable waters</b> – Coast Guard/DOT) Control of Pollution by <b>Oil</b> and <b>Hazardous Substances</b>, Discharge Removal</p>	<p>Discharge of a harmful quantity of <b>oil</b> or a <b>hazardous</b> substance from a vessel or onshore or offshore facility into or upon navigable <b>waters</b> of the United States or adjoining <b>shorelines</b>.</p> <p>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 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.</p> <p>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.</p>	<p>Immediate: to NRC by person in charge of vessel or facility.</p> <p>If direct reporting to NRC not practicable, may report to district Coast Guard or EPA predesignated OSC.</p>	<p>Not required.</p>	<p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>District 9 Coast Guard 216-902-6117</p> <p>EPA Region 5 for predesignated OSC 312-353-2318</p> <p>For further information contact EPA Region 5 at 312-353-8200 or District 9 Coast Guard at 216-902-6045</p>
<p>CWA Section 311 40 CFR 110 (<b>Discharge of Oil</b>)</p>	<p>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.</p> <p>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.</p>	<p>Immediate: to NRC by person in charge of vessel or facility.</p>	<p>Not required.</p>	<p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>For further information contact DEQ-WRD</p>
<p>NREPA 1994 PA 451 Part 31, Water Resources Protection (<b>Sewer Systems</b>)</p>	<p>Discharge of untreated sewage or partially treated sewage from a <b>sewer system</b> onto land or into the waters of the state.</p> <p>“Sewer system” means a sewer system designed and used to convey sanitary sewage or storm water, or both.</p>	<p>Immediate (within 24 hours): to DEQ-ODWMA district office (PEAS after hours); Local health depts.; Daily newspaper circulated in source &amp; affected counties; &amp; Affected municipalities.</p>	<p>At end of discharge: to same parties notified initially on Form EQP 5857 (Rev. 12/2011) “Report of Discharges of Untreated or Partially Treated Sewage.” Includes results of E. coli testing.</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-ODWMA</p>
<p>NREPA 1994 PA 451 Part 41, <b>Sewerage Systems</b></p>	<p>Discharges of pollutants from <b>sewerage systems</b> (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.</p> <p>Sewerage systems handle sanitary sewage or other industrial liquid wastes.</p>	<p>Promptly: to DEQ-ODWMA district office (PEAS after hours) by owner.</p>	<p>Within 72 hours: to DEQ-ODWMA district supervisor, outlining cause, discovery, corrective actions taken to minimize impact, restore operations, and eliminate future unpermitted discharges.</p>	<p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-ODWMA</p>

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 Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>NREPA 1994 PA 451 Part 211, <b>Underground Storage Tanks</b> Part 213, Leaking Underground Storage Tanks</p>	<p>Releases of a <b>regulated substance</b> of any amount from underground storage tank (UST) systems (includes the emergency shutoff valve on down) subject to registration; overfill from UST fillpipe or vent onto ground; release from aboveground pipe attached to UST system.</p> <p>Regulated substance = petroleum or CERCLA hazardous substance (40 CFR 302, Table 302.4) or substance listed in CAA title 1 part A sect 112. Petroleum includes, but is not limited to, crude oil, motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, and petroleum solvents.</p>	<p>(Part 211) Within 24 hours after discovery: to LARA Bureau of Fire Services, Storage Tank Division by email, or fax on Form EQP 3826 (Rev. 4/12) If free product, Form EQP 3800 (Rev 02/2003) required by UST owner or operator, or employee of owner or operator.  Includes releases discovered years after UST system removed</p>	<p>(Part 213) At 180 days Initial Assessment Report on Form EQP3841 (Rev. 02/2003) if not closed; at 365 days Final Assessment Report on Form EQP3842 (Rev. 11/2006) if still not closed; at closure Closure Report on Form EQP3843 (Rev. 02/2003) to DEQ-RRD district project manager.</p>	<p>Email: <a href="mailto:deq-std-tanks@michigan.gov">deq-std-tanks@michigan.gov</a>  Fax: 517-335-2245  For further information contact DEQ-RRD or phone 800-MICHUST</p>
<p>NREPA 1994 PA 451 Part 111, <b>Hazardous Waste Management</b> (Generators; Treatment, Storage &amp; Disposal Facilities (TSDF); Transporters)</p>	<p>Any amount of characteristic <b>hazardous waste</b> or listed hazardous waste (as defined in R 299.9203 "Hazardous Waste Rule 203") reaches the surface water or groundwater, or A fire, explosion, or other release of hazardous waste or hazardous waste constituent occurs that could threaten human health or the environment. or A release of &gt;1lb (or ≤1lb if not immediately cleaned up) hazardous waste to the environment from a tank system or associated secondary containment system.</p> <p>Additional hazardous waste reporting requirements under NREPA Part 201 and CERCLA.</p> <p>NREPA Part 111 requires transporters to comply with 49 CFR 171 and 33 CFR 153.</p>	<p>Immediate: to PEAS (or for Tank systems/secondary containment, within 24 hours of discovery: to DEQ-OWMRP)  and to NRC if threat to human health or environment outside facility by generator, or owner or operator of TSDF, or transporter.</p>	<p>For large quantity generators and TSDF: Within 15 days after incident IF the contingency plan had to be implemented: to DEQ-OWMRP.  For tank/secondary containment systems: Within 30 days of discovery: to DEQ-OWMRP.  For transporters: to US DOT if required per 49 CFR 171.</p>	<p>PEAS: 800-292-4706  NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a>  For further information contact DEQ-OWMRP</p>
<p>NREPA 1994 PA 451 Part 121, <b>Liquid Industrial Waste</b></p>	<p>The <b>liquid industrial waste</b> spill could threaten public health, safety, welfare, or the environment, or has reached surface water or groundwater.</p> <p>Liquid industrial waste includes nonhazardous brine, by-product, industrial wastewater, leachate, off-spec commercial chemical product, sludge, sanitary or storm sewer clean-out residue, grease trap clean-out residue, spill residue, used oil, or other liquid waste not regulated by other laws.</p>	<p>Immediate: to PEAS and local authorities by generator, transporter, or owner or operator of facility.  Refer to MCL 324.12111(1) for required report elements</p>	<p>Prepare within 30 days after incident. Submit upon request: to DEQ-OWMRP district supervisor.  Refer to MCL 324.12111(1) for required report elements</p>	<p>PEAS: 800-292-4706  For further information contact DEQ-OWMRP</p>
<p>NREPA 1994 PA 451 Part 55, <b>Air Pollution Control</b></p>	<p>Abnormal condition, start-up, shutdown, or malfunction that results in emissions exceeding permissible (in rule, permit or order) levels of <b>hazardous air pollutants</b> (HAPs) (CAA Sect. 112(b)) or <b>toxic air contaminants</b> (as specified in permit) for &gt; 1 hour, or any air contaminant for &gt; 2 hours.</p> <p>Written follow-up report only required for emission exceedences lasting &gt; 2 hours.</p>	<p>As soon as possible, but not later than 2 business days after discovery: to DEQ-AQD district office (PEAS after hours) by owner or operator.</p>	<p>Within 10 days after start-up, shutdown, or abnormal condition, malfunction corrected. Or within 30 days of abnormal condition, malfunction discovery- whichever first: to DEQ-AQD district supervisor.</p>	<p>PEAS: 800-292-4706  For further information contact DEQ-AQD</p>

## SECTION ONE: Environmental Regulations

### Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
NREPA 1994 PA 451 Part 55, <b>Air Pollution Control</b> (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 environment if not controlled immediately. See R 336.1285(mm), effective 6/20/2008, for details.	Within 24 hours of the event: to PEAS by owner or operator.	Not required.	PEAS: 800-292-4706  For further information contact DEQ-AQD
Public Health Code 1978 PA 368 Part 133, <b>Dry Cleaning</b>	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 contact DEQ-AQD
NREPA 1994 PA 451 Part 615, Supervisor of Wells ( <b>oil and gas production fields</b> )	A loss, spill or release of (1) any amount of <b>brine, crude oil, or 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, or (2) any unpermitted amount of <b>natural gas</b> , or (3) <b>chemicals</b> used in association with oil and gas activities.	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, or; less than 42 gallons if the spill contacts surface water, groundwater, or other environmentally sensitive resources, or is not completely contained and cleaned up within 48 hours: to DEQ-OOGM district office (PEAS after hours) by permittee.	Within 10 days after discovery of loss or spill: to DEQ-OOGM district supervisor on Form EQP-7233 (Rev 1/2012) "Report of Loss or Spill." by permittee  Written report only for less than 42 gallons of brine, crude oil, or oil and gas field waste if spill does not contact surface water, groundwater, or other environmentally sensitive resources, and is completely contained and cleaned up within 48 hours.	PEAS: 800-292-4706  For further information contact DEQ-OOGM
49 CFR 191 Transportation of Natural and Other <b>Gas by Pipeline</b>	An incident, meaning: (1) Event that involves a release of <b>gas</b> from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility that results in: Death or hospitalization; or Property damage ≥ \$50,000; or estimated gas loss of ≥ three million cubic feet. (2) Event that results in emergency shutdown of LNG facility. (3) Significant event per operator.  Written Incident reports not required for LNG facilities.  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.)	Earliest practicable moment following discovery: to NRC by operator.  Notification must be electronic unless there is a safety-related condition to report.	As soon as practicable, and within 30 days after discovery: to US DOT. on DOT Form PHMSA F 7100.1 "Incident Report – Gas Distribution System." or PHMAS F 7100.2 "Incident Report – Gas Transmission and Gathering Systems" or PHMSA F 7100.3 "Incident Report – Liquefied Natural Gas (LNG) Facilities"  Supplemental report filed as necessary as soon as practicable.	NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a>  For further information contact US DOT Pipeline Safety Information Center at 202-366-4595 or online at <a href="http://ops.dot.gov">http://ops.dot.gov</a>

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 Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
<p>49 CFR 195 Transportation of <b>Hazardous Liquids by Pipeline</b></p>	<p>Release of hazardous liquid (<b>petroleum, petroleum products, or anhydrous ammonia</b>) or <b>carbon dioxide</b> from a pipeline system that results in any of the following: (a) Explosion or fire; (b) Release of <math>\geq 5</math> gallons (except if <math>&lt; 5</math> barrels released due to maintenance and release not otherwise reportable, confined to property, does not pollute water, and cleaned up promptly); (c) Death of any person; (d) Injury requiring hospitalization; or (e) Property damage <math>&gt; \\$50,000</math>. (See 49 CFR 195.50, revised 1/8/02, for details)</p> <p>Applies to pipeline facilities and the transportation of hazardous liquids associated with those facilities in or affecting interstate or foreign commerce. (See 49 CFR 195.1 for details.)</p>	<p>Earliest practicable moment following discovery: to NRC by operator if Release caused: Death or hospitalization; Fire or explosion; Property damage; Water pollution; or was Significant per the operator.</p>	<p>As soon as practicable, and within 30 days after discovery: to US DOT on DOT Form PHMSA F 7000-1 "Accident Report – Hazardous Liquid Pipeline Systems"</p> <p>Supplemental report must be filed within 30 days after operator receives changes or additions to original report.</p>	<p>NRC 800-424-8802 or online at <a href="http://www.nrc.uscg.mil">www.nrc.uscg.mil</a></p> <p>For further information contact US DOT Pipeline Safety Information Center at 202-366-4595 or online at <a href="http://ops.dot.gov">http://ops.dot.gov</a></p>
<p>1978 PA 368 Part 135, <b>Radiation Control</b></p>	<p>For any emergency. Or for incident involving naturally occurring or accelerator produced <b>radioactive material</b>- Immediate notice if: Incident may have caused or threatens to cause: dose to body 25 rems, to skin 150 rems, to extremities 375 rems (per rule 247); 24 hour concentration exceeds 5000 times limits specified in table II of rules 261 to 269; contamination causes operation shut down for 1 week, or property damage <math>&gt; \\$100,000</math>.</p> <p>Notice within 24 hours if: Incident may have caused or threatens to cause: dose to body 5 rems, to skin 30 rems, to extremities 75 rems (per rule 247); 24 hour concentration exceeds 500 times limits specified in table II of rules 261 to 269; contamination causes operation shut down for 1 day, or property damage <math>&gt; \\$1000</math>.</p>	<p>Immediate or within 24 hours (see reporting criteria): to DEQ-OWMRP Radiological Protection Section (PEAS after hours) or MSP Operations Division for all <b>Power Plant</b> related incidents (day or night). by licensee or registrant.</p>	<p>Within 30 days after release: to DEQ-OWMRP Radiological Protection Section by licensee or registrant.</p> <p>Written report also required if level of radiation or concentration of radioactive material in unrestricted area <math>&gt; 10</math> times any applicable limit.</p> <p>See Rule 250 (R 325.5250) for required report content.</p>	<p>DEQ-OWMRP Radiological Protection Section 517-284-5185</p> <p>MSP Operations Div 517-241-8000</p> <p>PEAS: 800-292-4706</p> <p>For further information contact DEQ-OWMRP Radiological Protection Section</p>
<p>10 CFR 20 (Standards for Protection Against <b>Radiation</b>)</p>	<p>For incident involving source, by-product, or special nuclear <b>radioactive material</b>- Immediate notice if: Event that may have caused or threatens to cause: effective dose equivalent to individual 25 rems, lens dose equivalent 75 rems, shallow-dose equivalent to skin or extremities 250 rads; individual could receive 5 times annual limit on intake in 24 hours. OR Any lost, stolen, or missing licensed material in an aggregate quantity equal to or greater than 1000 times the quantity specified in appendix C to part 20 under such circumstances that it appears to the licensee that an exposure could result to persons in unrestricted areas.</p> <p>Notice within 24 hours if: Event that may have caused or threatens to cause: an individual in 24 hours to receive effective dose equivalent <math>&gt; 5</math> rems, lens dose equivalent <math>&gt; 15</math> rems, shallow-dose equivalent to skin or extremities <math>&gt; 50</math> rems; individual could receive <math>&gt; 1</math> times annual limit on intake in 24 hours.</p>	<p>Immediate or within 24 hours (see reporting criteria): to USNRC by USNRC Licensee responsible for the incident.</p>	<p>Within 30 days of incident: to USNRC by licensee.</p> <p>Report content specified in 10 CFR 20.2003</p> <p>Written report also required for occurrences as specified in 10 CFR 20 Section 20.2203 and after the occurrence of any lost, stolen, or missing licensed material becomes known to the licensee, and if at the time the report is filed all licensed material in a quantity greater than 10 times the quantity specified in appendix C to part 20 is still missing.</p>	<p>US Nuclear Regulatory Commission (USNRC) 301-816-5100</p> <p>For further information contact DEQ-OWMRP Radiological Protection Section 517-284-5185</p>
<p>MIOSHA 1974 PA 154 Section 61, Records &amp; Reports; Notice of <b>Fatalities or Hospitalization</b></p>	<p>Any release that results in one <b>death</b> or the <b>hospitalization</b> of 3 or more persons.</p>	<p>Within 8 hours: to MIOSHA Hotline.</p>	<p>Not required.</p>	<p>MIOSHA Fatality or Catastrophe Hotline 800-858-0397</p> <p>For further information contact LARA-MIOSHA 517-322-1831</p>



## SECTION ONE: Environmental Regulations

### Release Notification Requirements in Michigan\*

Act & Regulation	Reporting Criteria	Initial Notification	Written Follow-up Report	Notes
TSCA 40 CFR 761.125 (PCBs)	Spills of <b>PCBs</b> at concentrations of 50 ppm or more and subject to decontamination requirements under TSCA that: contaminate surface water, sewers, drinking water supplies, grazing lands or vegetable gardens, or exceed 10 pounds.  (TSCA specifies that these requirements are in addition to any under CWA or CERCLA. e.g. CERCLA requires spills of 1 pound or more to be reported to NRC.)	As soon as possible after discovery, and within 24 hours: to EPA Region 5.	Not required to be submitted. Records of cleanup and certification of decontamination shall be documented.	EPA Region 5 Corrective Action Section 312-886-7890  For further information contact EPA Region 5 Corrective Action Section
SARA Title III Section 313 40 CFR 372 (Toxic chemical release reporting)	Covered facilities as defined in 40 CFR 372 subpart B are subject to <b>toxic</b> chemical release reporting for toxic chemicals and chemical categories listed in 40 CFR 372 subpart D.	Not applicable.	Annually by July 1: to EPA & SERC on EPA's Form R "Toxic Chemical Release Inventory Reporting Form" (EPA Form 9350-1, Rev.10/2011)  Report aggregate releases (permitted & unpermitted)	Michigan SARA Title III Program accepts reports on behalf of SERC  For further information contact Michigan SARA Title III Program 517-284-7272

#### Acronyms used in table:

AQD = Air Quality Division

AST = Above Ground Storage Tank

CAA = Clean Air Act

CAFO = Concentrated Animal Feeding Operation

CERCLA = Comprehensive Environmental Response, Compensation

and Liability Act of 1980

CFR = Code of Federal Regulations

CWA = Clean Water Act

DEQ = Michigan Department of Environmental Quality

DOT = Department of Transportation

EHS = Extremely Hazardous Substance

EPA = U. S. Environmental Protection Agency

EPCRA = Emergency Planning & Community Right-to-Know Act

FIFRA = Federal Insecticide, Fungicide, & Rodenticide Act

FL/CL = Flammable and combustible liquids

FR = 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

NRC = National Response Center (U.S. Coast Guard)

NREPA = Natural Resources & Environmental Protection Act

ODWMA = Office of Drinking Water & Municipal Assistance

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

PA = Public Act (Michigan)

PCB = Polychlorinated biphenyl

PEAS = Pollution Emergency Alerting System

PHMSA = Pipeline & Hazardous Materials Safety Administration

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

TSCA = Toxic Substance Control Act

TSDF = Treatment, Storage & Disposal Facility

US DOT = U.S. Department of Transportation

USNRC = U. S. Nuclear Regulatory Commission

UST = Underground Storage Tank

WRD = Water Resources Division

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.**



Notations/Instructions highlighted in yellow. Please remove highlighting OR notation where appropriate prior to finalizing.

The table of contents is automatically generated and must be updated (look in the Microsoft Word References Tab, select "Update Table"). Headings are specifically formatted (Headings styles 1, 2, or 3) to auto-populate the table of contents.

Previous PEPs referenced the actual permit for the regulatory language. This PEP references the Stormwater Discharge Permit Application (shown in red). These citations are meant to remain.

# STORMWATER DISCHARGE PERMIT APPLICATION COLLABORATIVE PUBLIC EDUCATION PLAN



## For the Alliance of Downriver Watersheds MS4s

**Effective upon NPDES Permit issuance for a period of five (5) years.**

Allen Park	Inkster	Taylor
Belleville	Lincoln Park	Van Buren Township
	Melvindale	Wayne County
Dearborn Heights	Riverview	Westland
Ecorse	Rockwood	Woodhaven
Flat Rock	Romulus	Woodhaven-Brownstown
Gibraltar	Southgate	School District
Grosse Ile Township	Sumpter Township	Wyandotte



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Exhibit A – Table of PEP Tasks by Topic and Activity

## I. INTRODUCTION

### Purpose of Public Education Plan

In accordance with the permit requirements for Federal Phase II Storm Water Regulations, this Public Education Plan (PEP) was prepared to instill within the residents, businesses, and officials of the communities in regulated watersheds a heightened level of awareness of the connection between individual actions and the health of their watershed and water resources. The objective of this plan is to promote, publicize, and facilitate watershed education for the purpose of encouraging the public to reduce the discharge of pollutants in storm water.

### Federal Phase II Storm Water Regulations

A 1987 amendment to the Federal Clean Water Act required the U.S. Environmental Protection Agency (EPA) to develop regulations setting forth National Pollutant Discharge Elimination System (NPDES) permit application requirements for storm water discharges from municipal separate storm sewer systems (MS4s). An MS4 is a drainage system that discharges to waters of the State and is owned or operated by a federal, state, county, city, village, township, district, association or other public body of government. Such drainage systems may include roads, catch basins, curbs, gutters, parking lots, ditches, conduits, pumping devices, or man-made channels.

Phase I of the NPDES regulations went into effect in 1990, which regulated discharges from communities with populations greater than 100,000. The rules for Phase II of the NPDES regulations were issued in 1999, requiring storm water discharge permits for communities with populations under 100,000 that have MS4s in “urbanized areas” as defined by the U.S. Bureau of the Census.

In Michigan the Michigan Department of Environmental Quality (MDEQ) is administering the federal Phase II permitting process.

This section can be updated to incorporate the current permitting program for Phase II as known.

### Required Public Education Plan Elements

The PEP program is designed to promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants in stormwater to the maximum extent practicable. The plan describes current and proposed best management practices (BMPs) to meet the minimum control measure requirements in a Public Education Plan (PEP).

This section can be updated to incorporate the current permitting program for Phase II.

The PEP may involve watershed or regional partners collaborating to combine or coordinate existing programs for public stewardship of water resources. Permittees shall indicate if they are or will be working collaboratively with watershed or regional partners on any or all activities in the PEP during the permit cycle, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

The PEP is designed to implement a sufficient amount of educational activities to ensure that the targeted audiences are reached with the appropriate messages to the maximum extent practicable. The permittee shall identify applicable topics from the topics listed below, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

Each applicable topic shall be prioritized based on a procedure for assessing high-priority community-wide issues and targeted issues to reduce pollutants in stormwater runoff, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

- A. Promote public responsibility and stewardship in the applicant(s) watershed.
- 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.
- C. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.
- D. Promote preferred cleaning materials and procedures for car, pavement, and power washing.
- E. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.
- F. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.
- G. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.
- H. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.
- I. Educate the public on and promote the benefits of green infrastructure and Low Impact Development.
- J. Promote methods for managing riparian lands to protect water quality.
- K. Identify and educate commercial, industrial and institutional entities likely to contribute pollutants to stormwater runoff.

For all applicable topics, the PEP shall identify:

1. Target audience.
2. Key message.
3. Delivery mechanism.
4. Year and frequency the BMP will be implemented.
5. Responsible party.

**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, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

The PEP shall provide the procedure for evaluating and determining the effectiveness of the overall PEP. The procedure shall include a method for assessing changes in public awareness and behavior resulting

from the implementation of the PEP and the process for modifying the PEP to address ineffective implementation, ([Stormwater Discharge Permit Application, Public Education Program \(PEP\) p. 3](#)).

## II. COLLABORATION OF WATERSHED PARTNERS

The permittees identified below have elected to meet the PEP requirements by working with each other and other watershed and regional partners to develop, submit, and implement a PEP that includes both collaborative and individual BMPs:

Allen Park	Rockwood
Belleville	Romulus
Dearborn Heights	Southgate
Ecorse	Sumpter Township
Flat Rock	Taylor
Gibraltar	Van Buren Township
Grosse Ile Township	Wayne County
Inkster	Westland
Lincoln Park	Woodhaven
Melvindale	Woodhaven-Brownstown School District
Riverview	Wyandotte

These permittees are members of the Alliance of Downriver Watersheds (ADW). The ADW is a permanent watershed organization in Southeast Michigan, formed under Public Act 517 of the Public Laws of 2004. Its membership consists of 22 public agencies in the Ecorse Creek, Combined Downriver, and Lower Huron River Watersheds within Wayne and Monroe Counties.

The ADW was formed in 2007 to build on its members' ongoing efforts to work together in managing the area's water resources. The ADW is relatively urban in nature consisting of 203.3 square miles and more than 450,000 people (2010 census). Major watercourses within the ADW that drain to the Detroit River and Lake Erie include Ecorse Creek, Sexton Kilfoil Drain, Frank and Poet Drain, Blakely Drain, Brownstown Creek, Huron River, Silver Creek and Woods Creek.

The consortium of agencies that make up the ADW meet on a regular basis and work together to cooperatively manage the rivers, lakes and streams within the watershed. Examples of ADW efforts include long-term water quality monitoring, stormwater permit compliance and reporting to the State of Michigan, submittal of grant applications for water quality improvements, and public education on items such as rain barrel use, phosphorus fertilizer, and proper pet waste management.

The consortium is governed by adopted bylaws that set forth its composition, duties and responsibilities. The member agencies assess themselves annually or bi-annually based on population and land areas within the watershed to establish an operating budget that they use to work toward water quality improvements.

Member agencies designate a person to represent them and vote at ADW meetings. Members can be a township, city, village, county, public school district, public college or university, or any other local or regional public agency that meets the following criteria:

- Has been issued a state permit for a water discharge into waterways within the three ADW watersheds
- Whose legal jurisdiction incorporates areas wholly or partially within the watershed boundaries
- Whose governing body by resolution, voluntarily adopts the ADW Bylaws

The ADW also includes Cooperating Partners, who are non-profit organizations, businesses, residents, etc., who provide their time, services, expertise and resources toward the common goal of protecting and restoring the watershed. Cooperating Partners are recognized as non-voting members.

### III. PROCEDURE FOR IDENTIFYING AND PRIORITIZING APPLICABLE PEP TOPICS

The public education topics A-K listed above in Section II were identified in the permit application. These topics are referred to by their corresponding letter in the Public Education BMPs below as well as on the PEP table.

#### Watershed-Wide Priority Topics

The procedure for identifying high-priority watershed-wide or targeted issues suited for collaborative public education efforts includes:

- A review of Watershed Management Plans for the Ecorse Creek, Combined Downriver and Lower Huron River watersheds including any established Total Maximum Daily Loads for waterbodies in each area.
- A review of data from on-going Wayne County, Huron River Watershed Council and ADW Stream Monitoring and Water Quality Monitoring Programs.
- A review of public opinion surveys on watershed issues and water quality concerns conducted by the Southeast Michigan Council of Governments (SEMCOG) in 2004 and the ADW in 2016.
- Topics identified by permittees at quarterly group meetings, in periodic subcommittee meetings and in permittee opinion surveys prior to and throughout the permit cycle.
- Discussion and input from the permitted entities regarding individual jurisdictional versus watershed-wide needs, potential public outreach opportunities, and existing and future programs.

Any additional procedural steps for identifying high-priority or targeted issues by individual permittees include:

Individual permittees will want to include any additional steps they may have taken to review and identify individual priority topics as part of the procedure here.

The ADW's high priority community-wide issues and targeted issues for collaborative efforts are:

- High yet stable levels of phosphorus in stormwater runoff from most monitored streams indicating broad sources;
- High and increasing *E. coli* counts in most monitored streams;
- High conductivity levels (indicating potential dissolved contaminants) in most monitored streams;
- Moderate to high flashy flows in monitored streams indicating the need for infiltration and storage across the watersheds;

- A need for greater protection of riparian areas to reduce erosion and slow and treat stormwater runoff; and
- Target audience research and public survey results indicating a need for continued education about stormwater pollution and specific residential responsibilities.

The high priority community-wide issues and targeted issues were used to **prioritize** topics A-K for **collaborative efforts**. Existing and Proposed Collaborative Public Education BMPs include in some way all topics, but the emphasis will be on Collaborative High Priority Topics. Individual permittees may have additional or other priorities for individual education efforts as shown below and may address these in Existing and Proposed Individual Public Education BMPs (Section V.):

Individual permittees may rank individual priority topics high/medium/low in the table below or prioritize topics specific to their MS4.

Collaborative Priority Level	Permittee Priority	Topic Letter	Topic Description
High		A	Public responsibility and stewardship in the watershed.
High		B	The connection of the MS4 to area waterbodies and the potential impacts of discharges.
High		C	Illicit discharges and public reporting of illicit discharges and improper disposal of materials.
Med		D	Promote preferred cleaning materials and procedures for car, pavement, and power washing.
High		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, yard wastes, and motor vehicle fluids.
Low		H	Proper septic system care and maintenance, and how to recognize system failure.
Med		I	Benefits of green infrastructure and Low Impact Development.
Med		J	Promote methods for managing riparian lands to protect water quality.
Medium		K	Identify and educate commercial, industrial and institutional entities likely to contribute pollutants to stormwater runoff.

## IV. EXISTING AND PROPOSED COLLABORATIVE PUBLIC EDUCATION BMPs

To address each of the PEP requirements, the permittee will, individually or collaboratively, implement the following specific activities, which include a description, timeline, evaluation component, and the required topic that the activity meets. Activities will be completed with the involvement of responsible parties as noted in each activity description, and/or in cooperation with identified permitted communities.

DEQ reads this as stating that unless otherwise specified where “permittee” is included in the responsible party all permittees will implement the activity. Please note that some collaborative activities below also require individual permittees to do their part, which may include distributing print and digital materials, providing links on websites, promoting Wayne County’s household hazardous waste collections and environmental hotlines, promoting stream monitoring, installing and maintaining watershed signs, etc. It is expected that permittees will track and report these individual efforts toward collaborative ADW activities in their own annual report to DEQ. The ADW will report on group efforts only.

Time lines for implementation of proposed activities extend from permit issuance (year 1) when implementation of the PEP begins for a period of five (5) years.

### Activity #1: Produce and distribute a printed watershed community calendar and social media-driven photo contest

**Delivery Mechanism:** Coordinated by the ADW, permittees will participate in the bulk printing and distribution of a Watershed Community Calendar to residents. The calendar will include a social media-driven photo contest where residents will be encouraged to post and tag photos related to stormwater pollution-reducing behaviors on social media.

**Key Messages:** Calendars typically feature a different tip each month for increasing public awareness of watershed issues and improving personal actions affecting the health of their watershed. Topics/messages are likely to include key messages associated with A-J of the PEP topics that are suited for homeowners, such as general watershed stewardship; household hazardous waste disposal; proper lawn care; car washing; storm drain pollutants; pet waste; riparian land management; green infrastructure and LID; and illegal dumping in storm drains.

**Target Audience:** Residents.

**Year/Frequency:** Biannually (even calendar years).

**Goal:** During the permit cycle, the ADW will collaboratively produce a biannual print calendar in even calendar years that permittees will distribute to residents. To promote a calendar-related public photo contest during even calendar years, the ADW will also produce and permittees will distribute monthly social media posts/digital ads/content. The calendar and photo contest will be posted to the ADW website and permittees will provide links from their websites to the ADW website.

**Assessment:** Number of calendars distributed by the ADW and permittees;  
Number of posts/views on ADW social media sites and on the ADW website;  
Number of photo contest participants.

**Responsible Parties:** Permittees produce calendars and coordinate and run the photo contest collaboratively through the ADW. Permittees distribute calendars individually and help promote the photo contest within their communities.

**Topics Addressed:** A-J

### **Activity #2: Organize and run focused-topic pollution prevention campaigns**

**Delivery Mechanism:** The ADW will organize and run print or digital pollution prevention pledge campaigns that are focused on a single message or topic and that seek commitment from residents for positive action.

**Key Messages:** Campaigns will feature a different topic each year for increasing public awareness of watershed issues and improving personal actions affecting the health of their watershed. Topics/messages are likely to include key messages associated with A-J of the PEP topics that are suited for homeowners, such as general watershed stewardship; household hazardous waste disposal; proper lawn care; car washing; storm drain pollutants; pet waste; riparian land management; green infrastructure and LID; and illegal dumping in storm drains.

**Target Audience:** Residents.

**Year/Frequency:** Biannually (odd calendar years).

**Goal:** Biannually, the ADW will collaboratively host one print or digital single-topic pledge campaign. The ADW and permittees will distribute print and digital campaign materials that include a flyer, an ad graphic, and at least eight social media posts through local venues and customer service locations, newsletters and/or other publications, social media and websites.

**Assessment:** Number of print campaign materials distributed by the ADW and permittees; Number of posts/views on ADW social media sites and on the ADW website; Number of pledges collected.

**Responsible Parties:** ADW to coordinate and run the campaign as a collaborative effort. Permittees to help promote the campaign individually within their communities.

**Topics Addressed:** A-J

### **Activity #3: Provide displays for community venues and outreach activities at events**

**Delivery Mechanism:** The ADW will produce and make available a shared pop-up display and educational posters for use at community venues, regional fairs and events, and community meetings and events. The ADW will host the pop-up display at regional fairs/events with a water, green living or a sustainability focus. Individually, permittees will promote and support stormwater education by displaying posters or the pop-up display at their locations and other key public venues in their community such as municipal libraries, city/township halls, or schools or at community meetings, fairs and/or events.

**Key Messages:** Public awareness of watershed issues and improving personal actions affecting the health of the watershed also including key messages associated with A-K of the PEP topics, such as general watershed stewardship; household hazardous waste disposal; proper lawn care; car washing; storm drain pollutants; pet waste; riparian land management; benefits of native plants; and illegal dumping in storm drains.

**Target Audience:** Residents, visitors, community leaders.



**Year/Frequency:** 2-3 events annually for the ADW collaboratively. Permittee placement of ADW educational posters or pop-up display in at least 1 permittee location or public venue or meeting or event in the permittee’s community per year.

**Goal:** The ADW will produce/provide a pop-up display for ADW and permittee use and a set of educational posters for each permittee during the permit cycle. The ADW will collaboratively host the pop-up display at two regional events annually. Permittees will display posters or host the pop-up display in at least one location or at one community event annually.

**Assessment:** Name, date and location of event where the ADW hosted the pop-up display; Permittees will also report the location, date and name of meeting/event (if applicable) where they placed posters or hosted the pop-up display in their permittee locations, public venues, meetings/events.

**Responsible Parties:** ADW and permittees.

**Topics Addressed:** A-J

#### **Activity #4: Support green schools program with incentives to qualifying ADW schools**

**Delivery Mechanism:** The ADW supports the Michigan Green Schools Program by providing incentives and recognition to participating schools in the ADW area who strive to earn and maintain Green School status. Past incentives have included trees for planting at school locations and educational materials featuring their stormwater benefits. More recently the ADW provided professionally run, curriculum-based in-school watershed workshops and educational signage for five schools earning the Green School designation. The ADW will continue to offer these incentives and educational opportunities to Green Schools annually throughout the permit cycle.

**Key Message:** Watershed awareness and stewardship.

**Target Audience:** Wayne county elementary, middle and high school students and teachers

**Year/Frequency:** Annually.

**Goal:** The ADW will engage at least three Green Schools in the ADW area each year during the permit cycle in incentives and educational opportunities.

**Assessment:** ADW will report a list of schools with number of students participating in tree plantings, watershed workshops or other ADW incentives and educational opportunities;  
List of schools displaying ADW-provided educational signage or distributing ADW materials;  
Number of schools including water-related activities in their Green Schools applications.

**Responsible Parties:** Wayne County (Green Schools program coordinator) and ADW

**Topics Addressed:** A, B, I

#### **Activity #5: Support and promote volunteer stream and water quality monitoring**

**Delivery Mechanism:** Permittees will support and assist in promoting the volunteer stream and water quality monitoring programs coordinated by the Huron River Watershed Council (HRWC) and others to their residents. The ADW will produce publicity materials including flyers and press releases, seek earned media placement and run digital or print advertising in watershed media outlets. The ADW will also seek help

from regional cooperating partners to distribute these materials. Permittees will help promote these programs by distributing materials individually within their communities, providing literature and posting volunteer event opportunities at customer service locations, on web sites, on social media outlets and in newsletters. The ADW will collect and provide information ongoing to permittees on volunteer opportunities prior to events.

<b>Key Messages:</b>	Volunteer monitoring for water quality is conducted spring through fall at stream sites in the ADW waterbodies. Additionally, watershed volunteers and students assess habitat, water quality, and aquatic life via benthic macroinvertebrate monitoring. These programs strive to educate participating watershed residents about their connection to the river and the current conditions. A central goal of the programs is to inspire people to take actions that lead to better river protection at home and in their communities.
<b>Target Audience:</b>	Residents, teachers, students.
<b>Year/Frequency:</b>	Stream monitoring occurs annually at unique events in winter, spring, fall. Water quality monitoring is ongoing spring through fall, with a training in the spring.
<b>Goal:</b>	The ADW and permittees will promote three one-day volunteer macro-invertebrate monitoring events in the Huron River watershed and a seasonal volunteer chemistry and flow monitoring program in the Huron River and ADW area that are coordinated by the Huron River Watershed Council.
<b>Assessment:</b>	Compilation of all promotional efforts by the ADW; Number of people participating in events as recorded by HRWC; Resulting stewardship actions taken as reported by participants through event surveys conducted by HRWC; Permittees will also report individual efforts to distribute promotional event materials.
<b>Responsible Parties:</b>	Permittees, ADW, HRWC.
<b>Topics Addressed:</b>	A in particular, but also B-J

#### **Activity #6: Stream and river crossing road signs**

<b>Description:</b>	Through an ADW program, permittees have previously installed 80 stream crossing and watershed signs along roads where creeks or streams cross as well as at locations near watershed boundaries. Permittees will maintain these existing signs and the ADW will review and promote the placement of additional signs in areas where a need for signage has been identified and not met, coordinating or facilitating sign production for members.
<b>Target Audience:</b>	Visitors, residents.
<b>Year/Frequency:</b>	Ongoing.
<b>Goal:</b>	The ADW has recently completed a baseline survey and map inventory of existing stream crossing and watershed signs documenting location, type and condition. Based on survey results the ADW will advise permittees regarding maintenance and replacement needs and will recommend additional sign locations to increase visibility and public recognition. The ADW will facilitate the production of replacement signs and at least 5 new signs during the permit cycle. Permittees will install and maintain signage.
<b>Assessment:</b>	Survey results, map inventory and recommendations;

Number of new and replacement signs produced by the ADW;  
Permittees will report installation and maintenance activities.  
**Responsible Parties:** ADW and local community officials, permittees.  
**Topics Addressed:** A

#### **Activity #7: Participate in regional partnership activities**

**Delivery Mechanism:** The ADW and permittees will seek to participate and collaborate with regional partners such as SEMCOG, the Alliance of Rouge Communities, Great Lakes Commission, Friends of the Detroit River, Detroit International Wildlife Refuge and others in activities that further public education on watershed awareness and stormwater issues. The ADW will attend regional partner meetings and report potential opportunities to ADW members.

**Key Messages:** Collaborative efforts are effective at reaching a greater number of target audiences with persuasive messaging that works.

**Target Audience:** Stakeholders of partner organizations.

**Year/Frequency:** 3-4 meetings annually.

**Goal:** The ADW collaboratively will identify opportunities to build upon and improve collaborative public education efforts by seeking out and attending at least three meetings annually with regional groups working on watershed awareness and stormwater issues.

**Assessment:** ADW provided list of meetings with date, location, meeting topic and participating groups and any resulting opportunities identified and reported to permittees.

**Responsible Parties:** ADW and individual permittees.

**Topics Addressed:** A-K

#### **Activity #8: Promote county-wide complaint tracking and response system**

**Delivery Mechanism:** Permittees will educate the public on illicit discharges and work with Wayne County to publicize county-wide public reporting and response system for illicit discharges or improper disposal of materials into local storm drain systems. A 24- Hour Environmental Hotline is in place and administered by the Wayne County Department of Public Services. The County promotes the use of the 24-Hour Environmental Hotline on County web sites. Permittee efforts will include providing public information and promoting the Hotline at their customer service locations, on web sites and social media outlets and in newsletters.

**Key Messages:** Prevention and reporting of illicit discharges and/or improper disposal of materials into MS4s.

**Target Audience:** Residents, visitors, commercial and industrial businesses, local government officials and employees.

**Year/Frequency:** Ongoing promotional efforts.

**Goal:** The ADW and permittees will annually distribute materials with the hotline number referenced and will promote the hotline on the ADW and permittee websites and social media outlets or newsletters.

**Assessment:** Number of materials distributed annually with hotline number referenced reported by ADW for collaborative efforts and reported by permittees for permittee efforts.

**Responsible Parties:** -Number of views on ADW website and social media reported by ADW  
ADW, Wayne County, permittees.  
**Topics Addressed:** B, C, K

#### **Activity #9: Promote water resource protection workshops**

**Delivery Mechanism:** The permittees will promote regional educational workshops and programs for residential, business and municipal target audiences that are organized through agencies such as Wayne County, MSU Extension, SEMCOG, the Michigan Water & Environment Association, the Natural Shorelines Partnership, the Friends of the Detroit River, the Alliance of Rouge Communities, Friends of the Rouge and others. Permittee efforts will include providing public information and promoting workshops at their customer service locations, on web sites and social media outlets and in newsletters.

**Key Messages:** Programs may include the following: Watershed Management Short Course, Master Rain Gardener and Master Composter program, the Michigan Water Stewards program, watershed-friendly golf course management workshop, illicit discharge and connections elimination workshop, road salt BMP/de-icing alternatives workshop, land use/storm water planning workshops, and riparian land management workshops.

**Target Audience:** Residents, government officials and employees, construction contractors, and developers.

**Year/Frequency:** Throughout the permit cycle as workshop dates are established and need for promotional assistance are identified by others.

**Goal:** The ADW and permittees will annually distribute information and promotional materials for at least one regional educational workshop/program through customer service locations websites, social media outlets and newsletters.

**Assessment:** Number of materials distributed annually reported by ADW for collaborative efforts and reported by permittees for permittee efforts;  
Number of views on ADW website and social media reported by ADW.

**Responsible Parties:** Permittees will promote workshop events as developed by outside agencies.  
**Topics Addressed:** K in particular, but also A-J

#### **Activity #10: Promote county household hazardous waste reduction program**

**Delivery Mechanism:** Permittees will work with Wayne County to publicize residential disposal options for flammable, poisonous, toxic and corrosive materials through community collection events, and informational materials for the public that promote the collection events and proper disposal of household hazardous waste and recycling. Permittee efforts will include providing public information and promoting collection events and information at their customer service locations, on web sites and social media outlets and in newsletters.

**Key Messages:** The program seeks to address the environmental (including water quality) and public health effects resulting from improper handling and disposal of household hazardous waste, and is committed to reducing the use of home toxics and keeping citizens informed about the choices and responsibilities associated with purchasing, handling and disposing of toxic substances.

**Target Audience:** Wayne County residents.  
**Year/Frequency:** Annually. HHW collections are typically held by the Wayne County Department of Public Services 4 times each year in different communities.  
**Goal:** The ADW and permittees will annually distribute information and promotional materials for all HHW collections scheduled by Wayne County through customer service locations websites, social media outlets and newsletters.  
**Assessment:** Number of materials distributed annually reported by ADW for collaborative efforts and reported by permittees for permittee efforts;  
Number of views on ADW website and social media reported by ADW.  
**Responsible Parties:** Resource Recovery Guide is produced by Wayne County. Events and informational materials are promoted by Wayne County and permittees.  
**Topics Addressed:** G

## V. EXISTING AND PROPOSED INDIVIDUAL PUBLIC EDUCATION BMPs

Reported above and as follows:

Individual permittees should fill in details of their individual activities here.

**Activity #X: Description**

**Delivery Mechanism:**

**Key Messages:**

**Target Audience:**

**Year and Frequency:**

**Goal:**

**Assessment:**

**Responsible Parties:**

**Topics Addressed:**

## VI. OTHER INVOLVED ORGANIZATIONS

In implementing this Public Education Plan, the permittees will pursue cooperative partnerships plus information and resource sharing with several organizations, including but not limited to:

Organization	Program	Contact If Known
Alliance of Downriver Watersheds	Chairperson Facilitation Team Leader	Jim Gorris, City of Gibraltar Vicki Putala, OHM
Huron-Clinton Metropark Authority, Pointe Mouillée State Game Area (Michigan Department of Natural Resources), Detroit River International Wildlife Refuge, Friends of the Detroit River, Detroit Riverkeeper	Environmental Education and Interpretive Programs	Jennifer Hollenbeck, HCMA; Zach Cooley, Pointe Mouillée State Game Area; Susan White, DRIWR; Robert Burns, Detroit Riverkeeper
Huron River Watershed Council	Water Quality Monitoring Program, Facilitation of Collaborative Permittee Activities, Information and Education Campaign	Ric Lawson Andrea Paine Pam Labadie
Wayne County Department of Public Services, Water Quality Management Division	Workshops, Illicit Discharge & Dumping Response System, water quality monitoring; watershed signs and informational displays; Green Schools program	Noel Mullett Mike Flowers Nancy Gregor
Wayne County Department of Public Services, Land Resource Management Division	Household Hazardous Waste Collection Sites, composting, waste disposal and recycling	John Demerjian
MSU Extension – Wayne County	Horticulture & Natural Resources, Watershed Management, and other programs	Gary Williams, Extension Educator, Natural Resources-Outdoor Education; Mary Bohling, Extension Educator, Sea Grant; Kristine Hahn, Extension Educator, Consumer Horticulture
Michigan Department of Environmental Quality	Water Resources Division, Field Operations Section, MS4 Staff	Lishba Varughese Erica Stevenson
Michigan Water Environment Association	The Michigan Water Network (MWN) information conduit and repository for important news, data, facts, etc. pertaining to the water-related issues of Michigan and the Great Lakes	Allison Wood, Executive Director
Southeast Michigan Council of Governments	Workshops, educational events, and public education materials, SEMCOG Partners for Clean Water	Katherine Grantham

## **VII. EVALUATION OF EFFECTIVENESS**

Evaluation of the overall effectiveness of the PEP will consist of a combination of both the accumulated measures of the effectiveness of the PEP's individual activities and a measure of the effectiveness of the sum of all the activities.

Evaluation of accumulated measures of the effectiveness of the PEP's individual activities success can be categorized in terms of output (i.e., effort or activity) that measures short-term goals and milestones. Examples of output measurements include tracking web site hits or the number of literature pieces distributed to a target audience.

When practicable, measurements of outcome (i.e., results that indicate actual behavior change) will be incorporated into BMP activity evaluations. Such measures are expected to include public comment and feedback, level of participation in programs and activities, and tools that measure behavior change. When applicable, these measures will be reasonably coordinated with other communities and organizations and will be designed to supplement or provide comparison to the ADW's 2016 Resident Survey on Water Quality. Results will serve to provide a basis for evaluating PEP activities going forward and will provide an opportunity to benchmark social indicators for subsequent permit cycles.

## **VIII. PERIODIC PROGRESS REPORT**

Permittees will provide documentation of PEP efforts, a summary of the evaluation of its effectiveness when appropriate, and any proposed revisions or amendments to the PEP program in the periodic stormwater reports to the MDEQ. Reporting on PEP efforts will reflect data gathered on a calendar year basis.

**STORMWATER DISCHARGE PERMIT APPLICATION  
COLLABORATIVE PUBLIC EDUCATION PLAN TABLE  
For the Alliance of Downriver Watersheds MS4s**

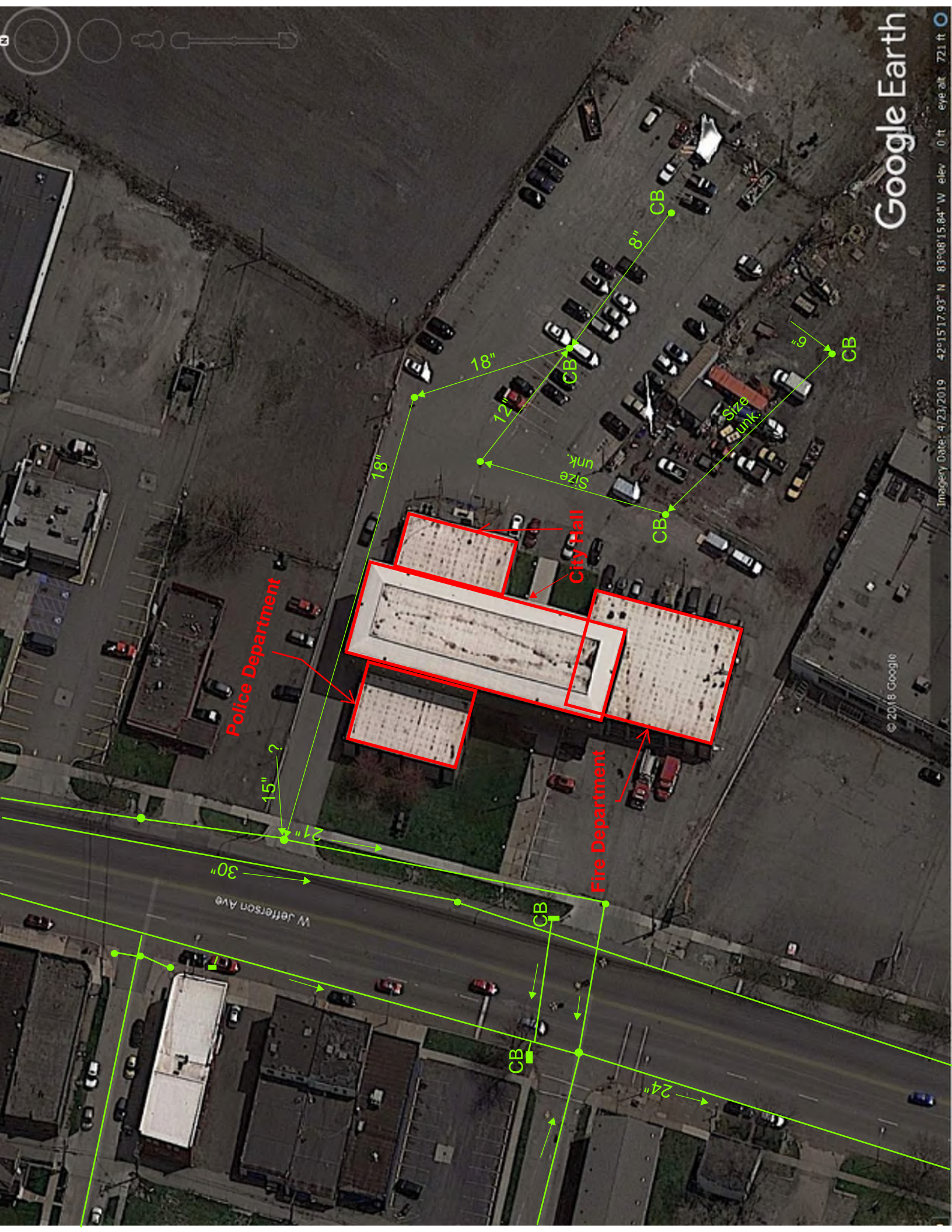
Public Education Topic	BMP Activity #	BMP Activity Description	Partner Collaboration	Target Audience	Key Message	Delivery Mechanism	Year	Frequency	Responsible Party	Goal	Assessment
A-J	1	Watershed community calendar and social media photo contest	Yes	Residents	A-J	Distributed print calendar and photo contest on social media	Even calendar years	Biannually	ADW/Permittees	During the permit cycle, the ADW will collaboratively produce a biannual print calendar in even calendar years that permittees will distribute to residents. To promote a calendar-related public photo contest during even calendar years, the ADW will also produce and permittees will distribute monthly social media posts/digital ads/content. The calendar and photo contest will be posted to the ADW website and permittees will provide links from their websites to the ADW website.	Number of calendars distributed by the ADW and permittees; Number of posts/views on ADW social media sites and on the ADW website; Number of photo contest participants.
A-J	2	Focused topic pollution prevention pledge campaigns	Yes	Residents	A-J	Digital pollution prevention pledge campaign seeking resident commitment toward a positive action	Odd calendar years	Biannually	ADW/Permittees	Biannually, the ADW will collaboratively host one print or digital single-topic pledge campaign. The ADW and permittees will distribute print and digital campaign materials that include a flyer, an ad graphic, and at least eight social media posts through local venues and customer service locations, newsletters and/or other publications, social media and websites.	Number of print campaign materials distributed by the ADW and permittees; Number of posts/views on ADW social media sites and on the ADW website; Number of pledges collected.
A-J	3	Displays at community venues and outreach activities at events	Yes	Residents, visitors, community leaders	A-J	Pop-up display and educational posters at regional fairs and events and community venues, meetings or events	1-5	2-3 regional fairs and events annually; Ongoing at community venues	ADW/Permittees	The ADW will produce/provide a pop-up display for ADW and permittee use and a set of educational posters for each permittee during the permit cycle. The ADW will collaboratively host the pop-up display at two regional events annually. Permittees will display posters or host the pop-up display in at least one location or at one community event annually.	Name, date and location of event where the ADW hosted the pop-up display; Permittees will also report the location, date and name of meeting/event (if applicable) where they placed posters or hosted the pop-up display in their permittee locations, public venues, meetings/events.
A, B, I	4	Support county green schools program	Yes	Students, teachers	A, B, I	Incentives, educational opportunities and activities (water-related) for green schools and watershed educational signage	1-5	Annually	Wayne County/ADW	The ADW will engage at least three Green Schools in the ADW area each year during the permit cycle in incentives and educational opportunities.	ADW will report a list of schools with number of students participating in tree plantings, watershed workshops or other ADW incentives and educational opportunities; List of schools displaying ADW-provided educational signage or distributing ADW materials; Number of schools including water-related activities in their Green Schools applications.
A primary, B-K secondary	5	Support/promote volunteer stream and water quality monitoring	Yes	Residents, students, teachers	A, B-K	Permittees promote HRWC volunteer water quality monitoring; and volunteer and student benthic macroinvertebrate monitoring	1-5	Annually spring-fall; annually at unique events winter, spring, fall	HRWC/ADW/Permittees	The ADW and permittees will promote three one-day volunteer macro-invertebrate monitoring events in the Huron River watershed and a seasonal volunteer chemistry and flow monitoring program in the Huron River and ADW area that are coordinated by the Huron River Watershed Council.	Compilation of all promotional efforts by the ADW; Number of people participating in events as recorded by HRWC; Resulting stewardship actions taken as reported by participants through event surveys conducted by HRWC; Permittees will also report individual efforts to distribute promotional event materials.



**STORMWATER DISCHARGE PERMIT APPLICATION  
COLLABORATIVE PUBLIC EDUCATION PLAN TABLE  
For the Alliance of Downriver Watersheds MS4s**

Public Education Topic	BMP Activity #	BMP Activity Description	Partner Collaboration	Target Audience	Key Message	Delivery Mechanism	Year	Frequency	Responsible Party	Goal	Assessment
A, B, C	6	Stream and river crossing road signs	Yes (to install and/or maintain)	Residents, visitors	A	Roadside Signage	1-5	On-going	ADW/local community officials/Permittees	The ADW has recently completed a baseline survey and map inventory of existing stream crossing and watershed signs documenting location, type and condition. Based on survey results the ADW will advise permittees regarding maintenance and replacement needs and will recommend additional sign locations to increase visibility and public recognition. The ADW will facilitate the production of replacement signs and at least 5 new signs during the permit cycle. Permittees will install and maintain signage.	Survey results, map inventory and recommendations; Number of new and replacement signs produced by the ADW; Permittees will report installation and maintenance activities.
J, K	7	Participate in regional partnership activities	Yes	Stakeholders of partner organizations; residents	A-K	Participate with regional partners in activities that that further public education of watershed and stormwater issues	1-5	On-going; identify and attend 3-4 partner meetings annually	ADW/Permittees	The ADW collaboratively will identify opportunities to build upon and improve collaborative public education efforts by seeking out and attending at least three meetings annually with regional groups working on watershed awareness and stormwater issues.	ADW provided list of meetings with date, location, meeting topic and participating groups and any resulting opportunities identified and reported to permittees.
A-K	8	Promote county-wide complaint tracking and response systems	Yes (to promote)	Residents; visitors; commercial and industrial businesses; local govt officials and employees	B, C, K	Permittees will publicize and promote regional reporting lines with print and digital promotional information	1-5	On-going	Wayne County/ADW/Permittees	The ADW and permittees will annually distribute materials with the hotline number referenced and will promote the hotline on the ADW and permittee websites and social media outlets or newsletters.	Number of materials distributed annually with hotline number referenced reported by ADW for collaborative efforts and reported by permittees for permittee efforts.
B, C	9	Promote water resource protection workshops	Yes (to promote)	Residents, local govt officials and employees; construction contractors and developers	A-J	Permittees will publicize and promote regional educational workshops at customer service locations, on websites, social media outlets and/or newsletters	1-5	On-going as workshops are organized	ADW/Permittees	The ADW and permittees will annually distribute information and promotional materials for at least one regional educational workshop/program through customer service locations websites, social media outlets and newsletters.	Number of materials distributed annually reported by ADW for collaborative efforts and reported by permittees for permittee efforts; Number of views on ADW website and social media reported by ADW.
A, G	10	Promote county household hazardous waste reduction program	Yes (to promote)	Residents	G	Permittees will publicize and promote county collection events and proper disposal of household hazardous waste and recycling with print and digital promotional information	1-5	Annually	Wayne County/ADW/Permittees	The ADW and permittees will annually distribute information and promotional materials for all HHW collections scheduled by Wayne County through customer service locations websites, social media outlets and newsletters.	Number of materials distributed annually reported by ADW for collaborative efforts and reported by permittees for permittee efforts; Number of views on ADW website and social media reported by ADW.





Police Department

City Hall

Fire Department

CB

CB

CB

CB

CB

CB

W Jefferson Ave

Size unk.

Size unk.

18"

12"

8"

18"

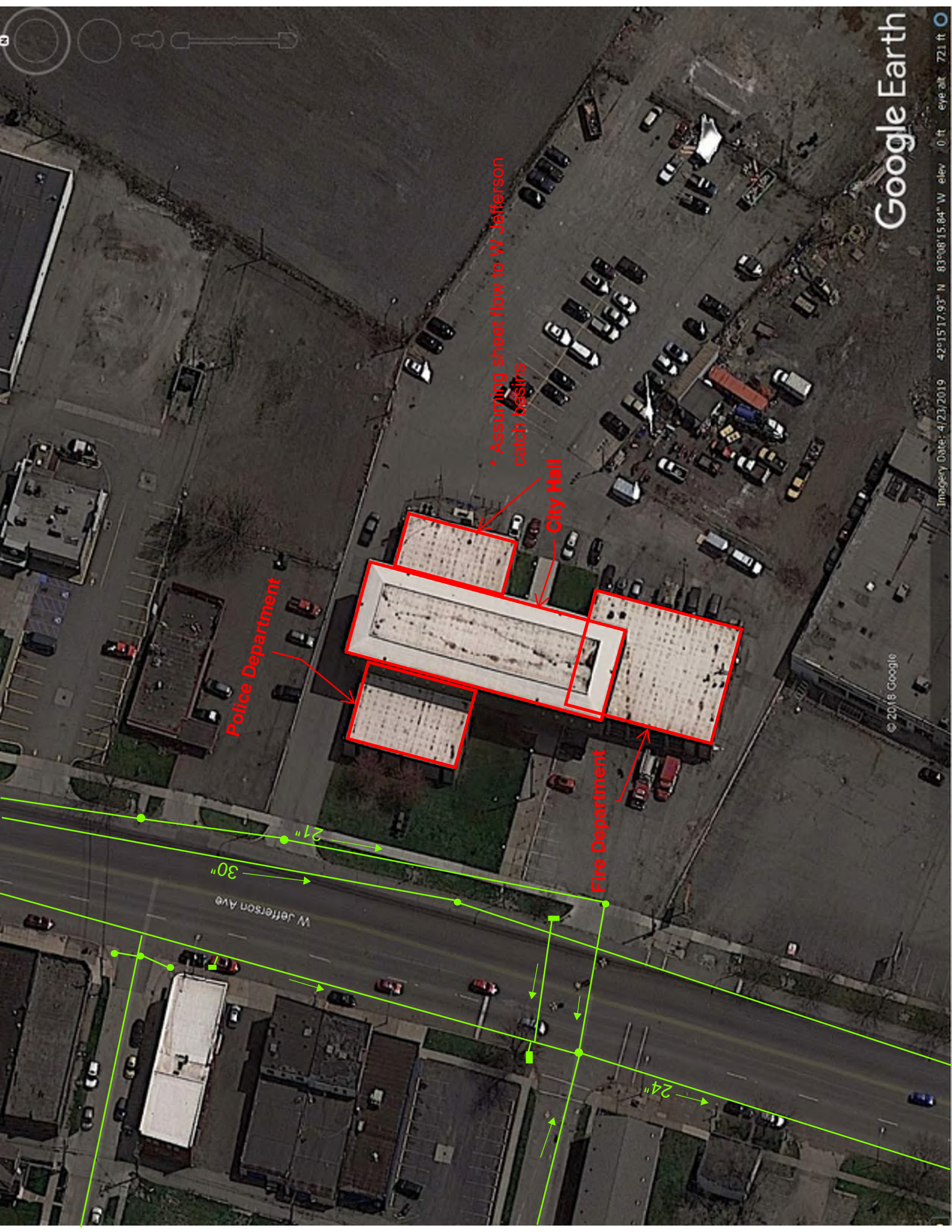
15" ?

21"

30"

24"





\* Assuming sheet flow to W Jefferson catch basins

City Hall

Police Department

Fire Department

W Jefferson Ave

30"

21"

24"



**Attachment A: City of Ecorse MS4 Outfall Survey Data, June 2005**

Outfall/Discharge Point	(Connection Type) Outfall/Point of Discharge	Map	Ownership	DataFile	UNFILT_POS	FILT_POS	UPDATE_STA	STD_DEV	GPS_HEIGHT	HORZ_PREC	VERT_PREC	Northing	Easting	Point ID	DATA_DICTI	GPS_WEEK	GPS_SECOND	Outfall / Discharge Points' MS4	** BMPs
Ecorse-01	Outfall	Sheet 6	City	LAST_combined.ssf	172	162	New	0.703303	569.404	0.540	1.253	276670.043547146	13450452.568735500	4	GPS Outfall Survey	1302	313830.000	Ecorse Creek	See below Note
Ecorse-02	Outfall	Sheet 6	City	LAST_combined.ssf	104	104	New	0.58661	582.450	0.338	0.561	276420.149429185	13450692.678540300	5	GPS Outfall Survey	1302	314641.500	Ecorse Creek	
Ecorse-03	Outfall	Sheet 6	City	LAST_combined.ssf	204	204	New	0.159405	576.465	0.402	0.749	276595.276033590	13450773.874049100	6	GPS Outfall Survey	1302	315046.000	Ecorse Creek	
Ecorse-04	Outfall	Sheet 6	City	LAST_combined.ssf	150	150	New	0.15706	578.113	0.450	1.066	276615.130165422	13450813.659950000	7	GPS Outfall Survey	1302	315435.000	Ecorse Creek	
Ecorse-05	Outfall	Sheet 9	City	LAST_combined.ssf	157	157	New	0.525171	585.587	0.500	1.013	274984.559111708	13450384.277491500	8	GPS Outfall Survey	1302	323355.000	Ecorse Creek	
Ecorse-06	Outfall	Sheet 11	City	LAST_combined.ssf	206	206	New	0.398052	589.971	0.640	1.067	272424.744105958	13450142.660569000	10	GPS Outfall Survey	1309	489812.000	Ecorse Creek	
Ecorse-07	Outfall	N/A	City	LAST_combined.ssf	267	267	New	0.339955	574.849	0.340	0.450	270187.351827181	13452397.649989200	11	GPS Outfall Survey	1309	494511.000	Ecorse Creek	
Ecorse-08	Outfall	N/A	City	LAST_combined.ssf	148	148	New	0.4797	571.633	0.367	0.486	270193.285851347	13452476.375929900	12	GPS Outfall Survey	1309	495027.000	Ecorse Creek	
Ecorse-09	Outfall	N/A	City	LAST_combined.ssf	198	198	New	0.091793	574.416	0.296	0.419	270189.045510918	13452532.178466400	16	GPS Outfall Survey	1309	495494.000	Ecorse Creek	
Ecorse-10	Outfall	N/A	City	LAST_combined.ssf	160	160	New	0.104995	578.407	0.290	0.400	270242.465865142	13453055.982302000	17	GPS Outfall Survey	1309	496901.000	Ecorse Creek	
Ecorse-11	Outfall	N/A	City	LAST_combined.ssf	209	209	New	7.918226	583.743	0.384	0.473	270289.134437811	13453278.881273000	18	GPS Outfall Survey	1309	497363.000	Ecorse Creek	
Ecorse-12	Outfall	Sheet 9	City	LAST_combined.ssf	148	148	New	0.436247	583.909	0.550	1.030	273812.504096878	13450212.905040300	19	GPS Outfall Survey	1309	498652.000	Ecorse Creek	
Ecorse-13	Outfall	N/A	City	LAST_combined.ssf								273800	13450200				0.000	Ecorse Creek	
Abandoned CSO Outfall#1	Outfall	Sheet 10	Possible County															Detroit River	
Storm PS Outfall	Outfall	Sheet 10	City																
Bulkheaded Outfall	Bulkheaded Outfall	Sheet 12	City																

Note:

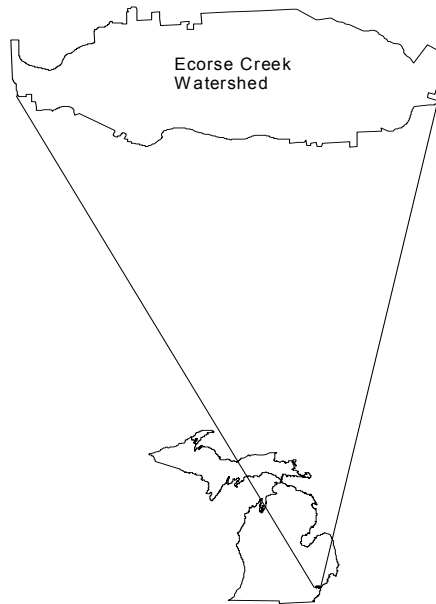
\*\* City of Ecorse conduct City wide Pollution Prevention and Good Housekeeping activities including the following,

1. MS4 System Cleaning (Catch Basin, Storm Manholes, Outfall Point, Storm Sewer)
2. Street Sweeping
3. Parking Lots Sweeping
4. Regular Pickup of Waste Materials
5. Pet Waste Management

**Ecorse Creek Illicit Discharge Elimination Program**  
**Funded by a Clean Michigan Initiative Grant and Local Community Contributions**

**Final Report to Communities**

**City of Ecorse**



Prepared by:  
Wayne County Department of Environment

June 6, 2005

**Ecorse Creek Illicit Discharge Elimination Program  
Final Report to Communities  
City of Ecorse**

**June 6, 2005**

**CONTENTS**

1. Data Review and Record Survey
2. Outfall Identification and Investigations
3. Outfall Sampling and Investigations
4. Facility Inspections
5. Advanced Investigations
6. Water Quality Monitoring

**Attachments And Figures**

Figure 1: Outfall Survey Map

Attachment A: Outfall Survey Data

Attachment B: Listing of Facilities Inspected

Figure 2: Ecorse Creek Watershed Water Quality Monitoring Locations

### 1) Data Review and Record Survey

Available water quality data for the Ecorse Creek Watershed was reviewed. There was a set of data collected seven to ten years ago, which indicated high levels of *E. coli* bacteria (an indicator of the presence of sewage) throughout the watershed. Recent data from a Wayne State University study conducted as a part of this project confirmed that high levels of *E. coli* bacteria are present throughout the watershed, with areas of higher concentrations (i.e., “hotspots”) in the downstream reach of both the north and south branches of Ecorse Creek.

A complaint history for the watershed was compiled by reviewing complaint logs from the following agencies:

- Michigan Department of Environmental Quality-Pollution Emergency Alerting Systems (PEAS),
- Wayne County Department of Public Health-Environmental Health Division
- Wayne County Department of Public Services-Roads Division
- Wayne County Department of Environment-Facilities Management Division, and
- Wayne County Department of Environment-Watershed Management Division.

Staff from the Wayne County Department of Environment-Watershed Management Division (DOE-WMD) also met with community staff to review storm sewer system plans, identify areas of concern and define investigative efforts.

### 2) Outfall Identification and Investigation

DOE-WMD performed an outfall survey of the Ecorse Creek reach within the City of Ecorse boundary. The data collected during the outfall survey was inventoried and mapped using GIS software. A total of thirteen outfalls were inventoried during the survey that covered approximately 1.5 miles of Ecorse Creek. *Figure 1* is a map of the outfalls. *Attachment A* is the data collected during the survey.

### 3) Outfall Sampling and Investigation

At the time of the survey no samples were collected because none of the ourfalls were discharging.

### 4) Facility Inspections

Based on the data review and record survey described in Section 1, DOE-WMD determined areas in each community to focus facility inspections, including dye testing efforts. County staff met with community staff and presented these recommendations. After discussions with community staff, the areas of dye testing activity were selected. *Table 1* presents a summary of facility inspection activities in the City of Ecorse. *Table 2*

summarizes by type the illicit connections and discharges identified in the City of Ecorse. *Attachment B* is a list of facilities inspected, violations, and status for the City of Ecorse.

**Table 1**  
**Summary of Facility Inspections, City of Ecorse**  
**Ecorse Creek Illicit Discharge Elimination Program**

Number of Facilities Inspected	28
Number of Facilities with Illicit Connections	0
Number of Illicit Connections	0
Number of Illicit Discharges	0
Number of Facilities with Confirmed Corrections	0
Date Range of Operations	August through September 2004

**Table 2**  
**Types of Illicit Connections/Discharges, City of Ecorse**  
**Ecorse Creek Illicit Discharge Elimination Program**

<b>Types of Illicit Connections</b>	<b>Number</b>
None	0
<b>Types of Illicit Discharges</b>	<b>Number</b>
None	0

5) Advanced Investigations

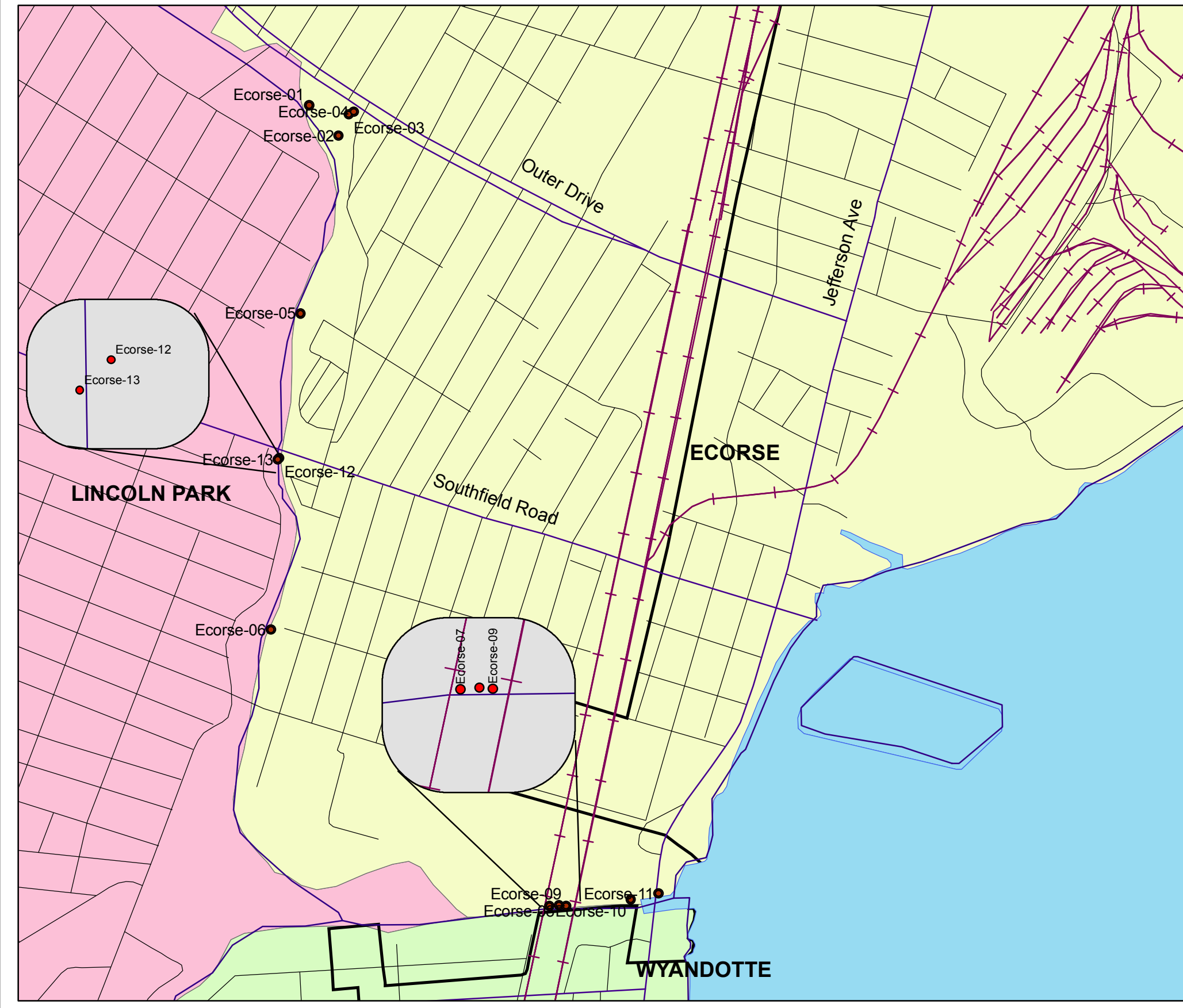
WMD staff performed advanced investigations in a storm sewer drainage area originating from an outfall of concern identified by the City of Ecorse. Staff performed visual inspections of many manholes on the trunk storm sewer line and laterals. A sewage-like odor was detected in a storm sewer manhole at three intersections where the sanitary sewer crossed through and into the storm sewer line. This arrangement presents a high potential for contamination and follow up investigations in this section are incomplete at the close of this grant period.



6) Water Quality Monitoring

Wayne State University (WSU) monitored pollutant concentrations of nitrites, nitrates ammonia, chloride, and phosphate in Ecorse Creek before and after performance of program activities. WSU is utilized state of the art isotope tracers to determine the presence of potable water in the storm sewer. The presence of potable water may indicate potential illicit connection/s in the area. *Figure 2* is a map of the monitoring locations. The final report produced by WSU is in the Appendix of the Final Report to Michigan Department of Environmental Quality.

Figure 1-Outfall Locations in the City of Ecorse  
Ecorse Creek Watershed



**Legend**

- Outfalls City of Ecorse
- Railroad
- County Road
- Local Road
- State Road
- Stream
- Detroit River
- Ecorse Creek Watershed
- TOWN NAME**
- ALLEN PARK
- DEARBORN
- DEARBORN HEIGHTS
- DETROIT
- ECORSE
- INKSTER
- LINCOLN PARK
- MELVINDALE
- RIVER ROUGE
- ROMULUS
- SOUTHGATE
- TAYLOR
- WESTLAND
- WYANDOTTE
- ecorse\_only\_wgeo



**Attachment A**  
 Outfall Survey Data  
 June 2005

OUTFALL_ID	PHOTO_ID	DATE	TIME	LOCATION_D	AIR_TEMPER	RAIN	SUNNY	CLOUDY	OUTFALL_SI
Ecorse-01	Ecorse-01	12/22/2004	10:10:16am	Left bank at church lot	29	No	No	No	12
Ecorse-02	Ecorse-02	12/22/2004	10:23:48am	Left bank tributary south of church	29	No	No	Yes	12
Ecorse-03	Ecorse-03	12/22/2004	10:30:33am	Left bank tributary at Outer Drive	29	No	No	No	12
Ecorse-04	Ecorse-04	12/22/2004	10:37:02am	Tributary to Ecorse Creek	29	No	Yes	Yes	180
Ecorse-05	Ecorse-05	12/22/2004	12:49:02pm	Left bank at Labadie Court	27	No	No	Yes	12
Ecorse-06	Ecorse-06	2/11/2005	11:04:58am	Left bank at Suburban and 9th	21	No	No	No	32
Ecorse-07	Ecorse-07	2/11/2005	12:21:38pm	Left bank 20 ft DS of RR tracks North set	21	No	No	No	18
Ecorse-08	Ecorse-08	2/11/2005	12:30:13pm	Left bank between rr tracks	21	No	No	Yes	18
Ecorse-09	Ecorse-09	2/11/2005	12:38:01pm	Left bank south side of rr track 2	21	No	No	No	18
Ecorse-10	Ecorse-10	2/11/2005	01:01:28pm	Left bank at marina under dock	21	No	No	Yes	4
Ecorse-11	Ecorse-11	2/11/2005	01:09:09pm	Left bank at Wyandotte YC east side of Jefferson	21	No	No	No	4
Ecorse-12	Ecorse-12	2/11/2005	01:30:39pm	Left Bank Center of Southfield Road	21	No	No	No	24
Ecorse-13	Ecorse-13	2/11/2005	01:35:00pm	Left Bank Southfield Road DS of Ecorse-12					4

**Attachment A**  
 Outfall Survey Data  
 June 2005

OUTFALL_ID	OUTFALL_MA	DEPTH_OF_P	ODOR	COLOR	TURBIDITY	FLOATABLES	DEPOSITS_S	VEGETATION	EXTENT
Ecorse-01	PVC	dry	None	None	None	None	None	Normal	na
Ecorse-02	concrete	dry	None	None	None	None	None	Normal	na
Ecorse-03	concrete	dry	None	None	None	None	None	Normal	na
Ecorse-04	natural	feet	None	None	Opaque	Other	None	Normal	na
Ecorse-05	PVC	dry	None	None	None	None	None	Normal	na
Ecorse-06	corugated steel	submerged	None	Red	Opaque	None	None	Normal	na
Ecorse-07	corrugated steel	na	None	None	None	None	Sediments	Excessive Growth	sediment and trash
Ecorse-08	corrugated pipi	na	None	None	None	None	Sediments	Normal	stones
Ecorse-09	corrugated pipe	na	None	None	None	None	None	Excessive Growth	na
Ecorse-10	PVC	na	None	None	None	None	None	Normal	na
Ecorse-11	PVC	na	None	None	None	None	None	Normal	na
Ecorse-12	concrete	submerged	None	None	None	None	None	Normal	na
Ecorse-13	concrete	submerged	None	None	None	None	None	Normal	na

**Attachment A**  
 Outfall Survey Data  
 June 2005

OUTFALL_ID	DAMAGE_TO	SAMPLE_TAK	SAMPLE_ID	SURFACTANT	AMMONIA_P	SPECIFIC_C	WATER_TEMP	PH	E_COLI	EQUIPMENT
Ecorse-01	None	No		0	0	0		0		
Ecorse-02	None	No	na	0	0	0		0		
Ecorse-03	None	No	na	0	0	0		0		
Ecorse-04	None	Yes	na	0	0	0		0		
Ecorse-05	None	No	na	0	0	0		0		
Ecorse-06	None	No	na	0	0	0		0		
Ecorse-07	Metal Corrosion	No	na	0	0	0		0		
Ecorse-08	Metal Corrosion	No	na	0	0	0		0		
Ecorse-09	Metal Corrosion	No	na	0	0	0		0		
Ecorse-10	None	No	na	0	0	0		0		
Ecorse-11	None	No	na	0	0	0		0		
Ecorse-12	None	No	na	0	0	0		0		
Ecorse-13	None	No	na	0	0	0		0		

**Attachment A**  
 Outfall Survey Data  
 June 2005

OUTFALL_ID	NEARBY_COM	DESCRIBE_U	STREAM_CON	MAX_PDOP	CORR_TYPE	RCVR_TYPE	GPS_DATE	GPS_TIME
Ecorse-01	No	parking lot	ice	5.7	Realtime Corrected	Taz	12/22/2004	11:10:16am
Ecorse-02	Yes	church parking lot	clear some ice	4.5	Realtime Corrected	Taz	12/22/2004	11:23:48am
Ecorse-03	No	parking lot	greenish color no flow	2.9	Realtime Corrected	Taz	12/22/2004	11:30:33am
Ecorse-04	Yes	residential drainage	greenish color no flow	3.8	Realtime Corrected	Taz	12/22/2004	11:37:01am
Ecorse-05	Yes	Park and Trailer Court	Iced over	5.3	Realtime Corrected	Taz	12/22/2004	01:49:01pm
Ecorse-06	Yes	apartment complex	frozen open near outfall	4.2	Realtime Corrected	Taz	2/11/2005	12:03:18pm
Ecorse-07	Yes	steel plant rr marina	frozen	2.0	Realtime Corrected	Taz	2/11/2005	01:21:37pm
Ecorse-08	Yes	rr tracks steel plant marina	frozen	3.1	Realtime Corrected	Taz	2/11/2005	01:30:13pm
Ecorse-09	Yes	rr tracks	frozen	1.8	Realtime Corrected	Taz	2/11/2005	01:38:00pm
Ecorse-10	Yes	marina	frozen	1.7	Realtime Corrected	Taz	2/11/2005	02:01:27pm
Ecorse-11	Yes	marina jefferson	frozen	6.8	Realtime Corrected	Taz	2/11/2005	02:09:10pm
Ecorse-12	Yes	commercial on southfield	slow flow opaque	4.2	Realtime Corrected	Taz	2/11/2005	02:30:39pm
Ecorse-13	Yes	commercial on southfield	slow flow opaque					

**Attachment A**  
Outfall Survey Data  
June 2005

<b>OUTFALL_ID</b>	<b>FEAT_NAME</b>
Ecorse-01	Outfall
Ecorse-02	Outfall
Ecorse-03	Outfall
Ecorse-04	Outfall
Ecorse-05	Outfall
Ecorse-06	Outfall
Ecorse-07	Outfall
Ecorse-08	Outfall
Ecorse-09	Outfall
Ecorse-10	Outfall
Ecorse-11	Outfall
Ecorse-12	Outfall
Ecorse-13	

**Attachment A**  
 Outfall Survey Data  
 June 2005

OUTFALL_ID	DATAFILE	UNFILT_POS	FILT_POS	UPDATE_STA	STD_DEV	GPS_HEIGHT	HORZ_PREC	VERT_PREC
Ecorse-01	LAST_combined.ssf	172	162	New	0.703303	569.404	0.540	1.253
Ecorse-02	LAST_combined.ssf	104	104	New	0.586610	582.450	0.338	0.561
Ecorse-03	LAST_combined.ssf	204	204	New	0.159405	576.465	0.402	0.749
Ecorse-04	LAST_combined.ssf	150	150	New	0.157060	578.113	0.450	1.066
Ecorse-05	LAST_combined.ssf	157	157	New	0.525171	585.587	0.500	1.013
Ecorse-06	LAST_combined.ssf	206	206	New	0.398052	589.971	0.640	1.067
Ecorse-07	LAST_combined.ssf	267	267	New	0.339955	574.849	0.340	0.450
Ecorse-08	LAST_combined.ssf	148	148	New	0.479700	571.633	0.367	0.486
Ecorse-09	LAST_combined.ssf	198	198	New	0.091793	574.416	0.296	0.419
Ecorse-10	LAST_combined.ssf	160	160	New	0.104995	578.407	0.290	0.400
Ecorse-11	LAST_combined.ssf	209	209	New	7.918226	583.743	0.384	0.473
Ecorse-12	LAST_combined.ssf	148	148	New	0.436247	583.909	0.550	1.030
Ecorse-13								



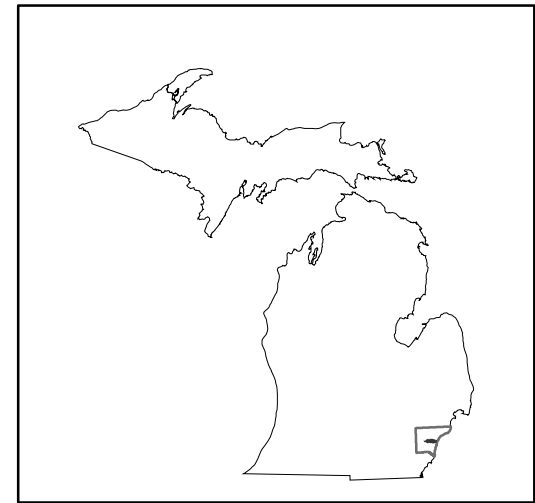
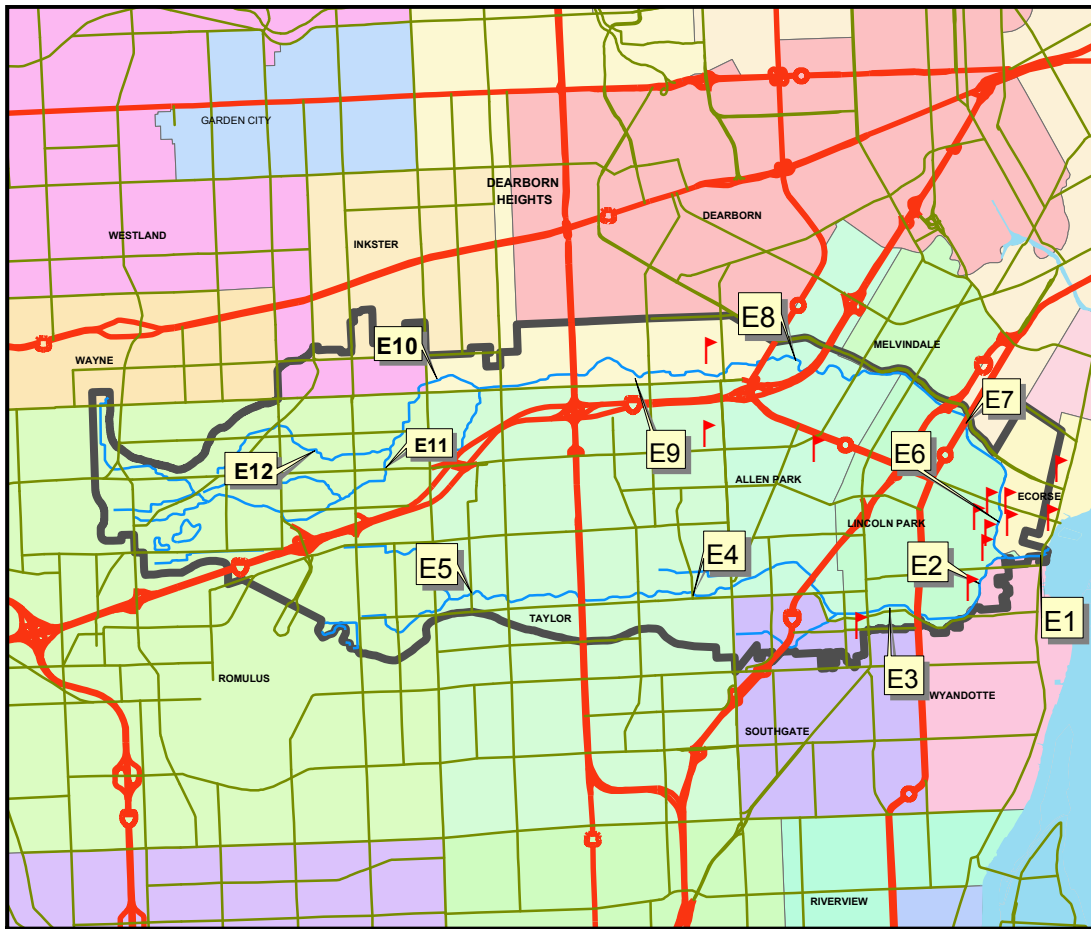
**Attachment A**  
 Outfall Survey Data  
 June 2005






OUTFALL_ID	NORTHING	EASTING	POINT_ID	DATA_DICTI	GPS_WEEK	GPS_SECOND
Ecorse-01	276670.043547146	13450452.568735500	4	GPS Outfall Survey	1302	313830.000
Ecorse-02	276420.149429185	13450692.678540300	5	GPS Outfall Survey	1302	314641.500
Ecorse-03	276595.276033590	13450773.874049100	6	GPS Outfall Survey	1302	315046.000
Ecorse-04	276615.130165422	13450813.659950000	7	GPS Outfall Survey	1302	315435.000
Ecorse-05	274984.559111708	13450384.277491500	8	GPS Outfall Survey	1302	323355.000
Ecorse-06	272424.744105958	13450142.660569000	10	GPS Outfall Survey	1309	489812.000
Ecorse-07	270187.351827181	13452397.649989200	11	GPS Outfall Survey	1309	494511.000
Ecorse-08	270193.285851347	13452476.375929900	12	GPS Outfall Survey	1309	495027.000
Ecorse-09	270189.045510918	13452532.178466400	16	GPS Outfall Survey	1309	495494.000
Ecorse-10	270242.465865142	13453055.982302000	17	GPS Outfall Survey	1309	496901.000
Ecorse-11	270289.134437811	13453278.881273000	18	GPS Outfall Survey	1309	497363.000
Ecorse-12	273812.504096878	13450212.905040300	19	GPS Outfall Survey	1309	498652.000
Ecorse-13	273800	13450200				0.000

**Attachment B**  
City of Ecorse  
Facilities Inspected  
Ecorse Creek Watershed  
July 2004 - September 2004

#	Site Evaluation.	Initial Contact	1 St Visit	Final Inspection	Follow Up	Facility	Facility address	City	Priority	# of violations	Types of Violations	# of visits	Status
1				8/5/2004		SAFEWAY TRANSPORT	4355 2nd St.	Ecorse	1	0		1	Dye Test OK
2				8/5/2004		ECORSE INDOOR FLEA MARKET	4411 2nd St.	Ecorse	2	0		1	Dye Test OK
3		9/24/2003		8/5/2004		FRANKLIN AUTO SALES	160 Southfield Rd.	Ecorse	1	0		1	Dye Test OK
4				8/5/2004		MARINA MINI MART	151 Southfield Rd.	Ecorse	1	0		1	Dye Test OK
5				8/5/2004		MARINA OIL CHANGE	148 Southfield Rd.	Ecorse	1	0		1	Dye Test OK
6			8/5/2004	8/10/2004		TCI POWER WASH	208 Southfield Rd.	Ecorse	1	0		2	no show
7				8/10/2004		P & J'S AUTO SERVICE	289 Southfield Rd.	Ecorse	1	0		1	Dye Test OK
8		7/31/2002		8/10/2004		LA SULTANA	321 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
9				8/11/2004		D & J TIRES	463 Visger Rd.	Ecorse	1	0		1	Dye Test OK
10				8/11/2004		PRICELESS GLO CAR WASH	315 Visger Rd.	Ecorse	1	0		1	Dye Test OK
11				8/11/2004		CORNER PUB	4678 High St.	Ecorse	2	0		1	incomplete
12				8/11/2004		MICHIGAN AMMO COMPANY	4680 High St.	Ecorse	1	0		1	Dye Test OK
13				8/18/2004		RITE ON AUTO SALES	4680 W. Jefferson Ave.	Ecorse	1	0		1	Dye Test OK/HK
14				8/18/2004		WYANDOTTE YACHT CLUB (OFFICE)	4700 W. Jefferson Ave.	Ecorse	3	0		1	Dye Test OK
15				8/18/2004		WYANDOTTE YACHT CLUB	4685 W. Jefferson Ave.	Ecorse	2	0		1	Dye Test OK
16				8/18/2004		DOWN RIVER STEVE'S PIZZA ISLAND & CONEY	4680 W. Jefferson Ave.	Ecorse	2	0		1	Dye Test OK
17				8/19/2004		BIG O CAFÉ	277 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
18				8/19/2004		MEXICO WAY KITCHEN	275 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
19				8/19/2004		TACO ESPECIAL	278 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
20				8/19/2004		LITTLE JOINT BAR & GRILL	337 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
21	8/19/2004			8/20/2004		TENNCO FOODS, INC.	295 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
22				8/20/2004		O'BRIEN'S SUPERMARKET, INC.	185 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
23				9/10/2004		BRAKEMAN'S WHEEL COVERS, INC.	205 Southfield Rd.	Ecorse	3	0		1	Dye Test OK
24				9/14/2004		AMERICAN UPHOLSTERY...INC.	226 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
25					9/9/2004	HOPES MILK DEPOT	316 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
26					9/9/2004	BEST OF SHOW CUSTOMS	308 Southfield Rd.	Ecorse	1	0		1	Dye Test OK
27	9/9/2004					RIVERSIDE LIQUOR	348 Southfield Rd.	Ecorse	2	0		1	SITE EVAL
28		9/24/2003			9/10/2004	DABREWSKI'S LIQUOR EMPORIUM	220 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
29					9/10/2004	ECORSE PARTY SHOPPE	270 Southfield Rd.	Ecorse	2	0		1	Dye Test OK
30	8/10/2004					ECORSE TELEGRAM NEWSPAPER	4122 10th St.	Ecorse	2			1	residence
31	8/10/2004					ON THE SPOT TOWING	4527 6th St.	Ecorse	1			1	residence
32	8/10/2004					ULTRA CHEMICAL, INC.	4359 2nd St.	Ecorse	1			1	vacant
33	8/10/2004					PETE'S FOREIGN & AMERICAN REPAIR	239 Southfield Rd.	Ecorse	1			1	vacant
34	8/11/2004					BALDWIN INTERNATIONAL	4111 12th St.	Ecorse	1			1	vacant
35	8/11/2004					G. D. ENTERPRISES, LTD.	4025 18th St.	Ecorse	2			1	residence
36	8/11/2004					L. B. WOODS JR. TAILORS	392 Salliotte Rd.	Ecorse	1			1	vacant
37	8/11/2004					NSL, INC.	139 Mill St.	Ecorse	1			1	demolition
38	8/18/2004					GLASS MASTER	4700 W. Jefferson Ave.	Ecorse	2			1	no water
39	8/18/2004					AQUA BOAT WORKS	4702 W. Jefferson Ave.	Ecorse	2			1	no water

Figure 2-Ecorse Creek Watershed  
Water Quality Monitoring Locations



-  Ecorse Creek
-  Ecorse Creek Watershed
-  State Highway
-  County Roads
-  Sample Site Location



Department of Environment  
**Wayne**  
County

Robert A. Ficano  
County Executive





DPW Yard CBs are buried and these are assumed locations. City will be locating, digging them up, vactoring, and inspecting.

**MUNICIPAL SEPARATE STORM SEWER SYSTEM ENFORCEMENT  
RESPONSE PROCEDURE**

**Appendix C**

City of ██████████

**I. POLICY:**

This policy is to establish the City of ██████████ Enforcement Response Procedure.

**II. BACKGROUND:**

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

**III. PROCEDURE:**

Each ordinance/regulatory mechanism within this jurisdiction includes an enforcement response to violations of the ordinance.

- Chapter 1 – General Provisions (Section 1-1 and 1-18);
- Chapter 5 – Zoning (Section 3700, (a-d));
- Chapter 20 – Environment (Section 20-93-94);
- Chapter 28 – Land Divisions, Subdivisions, and Development Standards (Section 28-122);
- Chapter 54 – Utilities (Section 54-427 (a-c) and 54-428-432)

As ordinances are completed and passed by the governing body, the enforcement mechanism will be conveyed to the MDEQ NPDES Permit Contact.

See Appendix D for a copy of the cited ordinances.

Illicit discharges and connections are to be corrected within 30 days of notice of violation (as practicable) as identified in Chapter 28, Article III, Division 3, Subdivision 3 – Nonstormwater Discharge Regulations (Section 28-122 (2-4)). In addition to the enforcement mechanisms noted in ordinance, additional tracking of instances of noncompliance occurs and includes the following information (identified in the Spill Notification/Complaint/Outfall Investigation Reporting Form – see attached):

- Name
- Date
- Location of Violation (address, cross streets, etc.,)
- Business/Agency/Organization (as appropriate)
- Description of Violation
- Description of Enforcement Response
- Schedule for Returning to Compliance
- Date Violation was Resolved.

**IV. OTHER:**

Any questions on this policy and procedure should be directed to the Storm Water Manager. Additional enforcement response procedure information can be found in the Pollution Incident Prevention Plan, Appendix J.

**MUNICIPAL SEPARATE STORM SEWER SYSTEM ENFORCEMENT  
RESPONSE PROCEDURE**

Appendix C

City of ██████████

**V. PROCESS FOR UPDATING/REVISING THIS PROCEDURE**

This procedure shall be reviewed on an annual basis by the Stormwater Manager for any updates to streamline the requirements.



**Spill Notification & Complaint Reporting Form**  
**Illicit Discharge Elimination Program**  
 City of ██████████ County

Complaint made by: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Location of Discharge: \_\_\_\_\_ Offending Party (if known) \_\_\_\_\_  
 Nature of Problem (i.e. paper waste, odor, color, etc.): \_\_\_\_\_

Is this an Emergency? \_\_\_\_\_  
 Yes  (Then Phone 911)  No  
 Nature of Emergency: \_\_\_\_\_

- Initial Contact made to:
- 911
  - Fire Dept. \_\_\_\_\_
  - Police Dept. \_\_\_\_\_
  - OCHD (248) 858-1280
  - OCWRC (IDEP) (248) 858-5248
  - PEAS Hotline (State) 1-800-292-4706
  - OCWRC 24-Hour Hotline (248) 858-0931

Additional Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

<p><b>Site Investigation</b></p> <p>Date of Observation: _____                  Investigating Agency: _____                  Location of Discharge: _____</p> <p><input type="checkbox"/> Initial Investigation  <input type="checkbox"/> Follow-up Investigation</p> <p>Crew Members: _____                  _____</p> <p>Investigation Location: _____                  _____</p> <p>Observations (odor, color, volume, etc):                  _____                  _____</p>	<p>Actions Taken:                  _____                  _____</p> <p>Danger to health and/or environment:  <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Were photos taken: <input type="checkbox"/> Yes* <input type="checkbox"/> No                  Date Corrected: _____                  * Please attach copies</p> <p>If necessary:                  Agency Referred to: _____                  Agency Contact: _____                  Method of Communication: _____  <input type="checkbox"/> E-mail <input type="checkbox"/> Letter/memo <input type="checkbox"/> Phone</p> <p>Content of Communication:                  _____                  _____</p>
---	---

Spill Notification & Complaint Reporting Form  
Illicit Discharge Elimination Program  
City of ██████████ County

Compliance Information & Schedule: _____ _____ _____
Date Violation Was Resolved: _____

1. Take down complaint information.
2. Fill out the Spill Notification form for the Illicit Discharge Elimination Reporting System.
3. Inform the caller that the problem will be further investigated and thank him/her for calling in.
4. If the problems are related to sanitary please contact the Oakland County Water Resources Commission at (248) 858-5248.
5. If the problem is related to oil please phone 911.
6. If the Problem is related to a construction site and there is sediment leaving that site please call Oakland County Water Resources Commission at: (248) 858-5389.

7. Please fax/email completed form to:
  - (i) ██████████ at the MDEQ and  
Fax #: ██████████  
Email: ██████████
  - (ii) ██████████  
██████████  
██████████  
Email: ██████████



Copies of the proposed ordinance are available for inspection or purchase at the Township Hall of the Charter Township of Port Huron, 3800 Lapeer Rd., Port Huron, MI 48060 (810) 987-6600 during regular posted hours. A complete copy may be also reviewed on our website at [www.porthurontownship.org](http://www.porthurontownship.org)

**Port Huron Charter Township  
 Illicit Discharge Elimination Program  
 Ordinance # 234**

An Ordinance to amend the Code of Ordinances, Charter Township of Port Huron, St Clair County, Michigan, to Chapter 16. ENVIRONMENT, by the addition of “Article V. Illicit Discharge Elimination Program” to provide for the regulation of discharges to the Port Huron Township storm drainage systems and to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process.

The Charter Township of Port Huron, St. Clair County, State of Michigan, ordains:

<b>Section 1: (Title)</b>	<b>Illicit Discharge Elimination Program</b>	<b>Page</b>
<b>Table of Contents</b>		
Section 2 (16-102) <u>Purpose/Intent</u> .....		2
Section 3 (16-103) <u>Definitions</u> .....		2
Section 4 (16-104) <u>Applicability</u> .....		3
Section 5 (16-105) <u>Responsibility for Administration</u> .....		4
Section 6 (16-106) <u>Severability</u> .....		4
Section 7 (16-107) <u>Ultimate Responsibility</u> .....		4
Section 8 (16-108) <u>Discharge Prohibitions</u> .....		4
Section 9 (16-109) <u>Suspension of MS4 Access</u> .....		5
Section 10 (16-110) <u>Industrial or Construction Activity Discharges</u> .....		5
Section 11 (16-111) <u>Monitoring of Discharges</u> .....		5
Section 12 (16-112) <u>Enforcement</u> .....		6
Section 13 (16-113) <u>Appeal of Notice of Violation</u> .....		7
Section 14 (16-114) <u>Enforcement Measures After Appeal</u> .....		7
Section 15 (16-115) <u>Cost of Abatement of the Violation</u> .....		7
Section 16 (16-116) <u>Injunctive Relief</u> .....		7

Section 17 (16-117) <u>Appeal of Notice of Violation</u> .....	8
Section 18 (16-118) <u>Violations Deemed A Public Nuisance</u> .....	8
Section 19 (16-119) <u>Criminal Prosecution</u> .....	8
Section 20 (16-120) <u>Remedies Not Exclusive</u> .....	8
Section 21 (16-121) <u>Adoption of Ordinance</u> .....	8

**Section 2: (16-102) Purpose/Intent.**

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Port Huron Township through the regulation of non-storm water discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are:

1. To regulate the contribution of pollutants to the municipal separate storm sewer system by stormwater discharges from any user;
2. To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system; and
3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

**Section 3: (16-103) Definitions.**

For the purposes of this ordinance, the following shall mean:

**Authorized Enforcement Agency.** employees or designees of the director of the municipal agency designated to enforce this ordinance.

**Construction Activity.** Activities subject to NPDES Construction Permits. Currently these include construction projects resulting in land disturbance of 1 acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

**Hazardous Materials.** Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

**Illicit Discharge.** Any discharge to, or seepage into, an MS4 that is not composed entirely of stormwater or uncontaminated groundwater except discharges pursuant to an NPDES permit.

**Illicit Connection.** A physical connection to an MS4 that primarily conveys non-stormwater discharges other than uncontaminated groundwater; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

**Industrial Activity.** Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14).

**Municipal Separate Storm Sewer System (MS4).** Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

**National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit.** Is a permit issued by Michigan Department of Environmental Quality (MDEQ) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

**Outfall or Discharge Point.** Any location on the MS4 owned or operated by the permittee that discharges directly to a surface water of the state, or any location on the MS4 owned or operated by the permittee that discharges to any other separate storm sewer system before discharging to a surface water of the state.

**Person.** means any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

**Pollutant.** Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

**Premises.** Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

**Storm Water.** Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

**Wastewater.** Any water or other liquid, other than uncontaminated storm water, discharged from a facility.

**Surface Waters of the State.** Waters defined consistent with the Part 4 Rules (Rules 323.1041 through 323.1117 of the Michigan Administrative Code) to mean all of the following, but not including drainage ways and ponds used solely for wastewater conveyance, treatment, or control:

- The Great Lakes and their connecting waters
- All inland lakes
- Rivers
- Streams
- Impoundments
- Open drain
- Other surface bodies of water within the confines of the state

#### **Section 4: (16-104) Applicability.**

This ordinance shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

### **Section 5: (16-105) Responsibility for Administration.**

Port Huron Township shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the Township Supervisor to persons or entities acting in the beneficial interest of or in the employ of the agency.

### **Section 6: (16-106) Severability.**

The provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this Ordinance.

### **Section 7: (16-107) Ultimate Responsibility.**

The standards set forth herein and promulgated pursuant to this ordinance are minimum standards; therefore this ordinance does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

### **Section 8: (16-108) Discharge Prohibitions.**

#### **Prohibition of Illicit Discharges. (Permit Application #20, 21, 22, 23, 24)**

1. No person shall discharge or cause to be discharged into the Municipal Separate Storm Sewer System (MS4) or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards.
2. The following discharges are excluded from this ordinance as long as they have not been identified as a significant source of pollutants to the MS4 or watercourse;

Discharges or flows from:

- a. Firefighting activities
- b. Water line flushing and potable water sources;
- c. Landscape irrigation runoff, lawn watering runoff, and irrigation waters;
- d. Diverted stream flows and flows from riparian habitats and wetlands;
- e. Rising groundwaters and springs
- f. Uncontaminated groundwater infiltration and seepage;
- g. Uncontaminated pumped groundwater, except for groundwater cleanups specifically authorized by NPDES permits;
- h. Foundation drains, water from crawl space pumps, footing drains, and basement sump pumps;
- i. Air conditioning condensation;
- j. Waters from noncommercial car washing;
- k. Street wash water; and
- l. Dechlorinated swimming pool water from single, two, or three family residences.

#### **Prohibition of Illicit Connections. (Permit Application #24)**

1. The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.

2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
3. A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

#### **Prohibition of Direct Dumping or Disposal of Materials into the MS4 (Permit Application #24)**

1. The direct dumping of materials or discharges into the MS4 is prohibited except for those discharges excluded under Prohibition of Illicit Discharges.

#### **Section 9: (16-109) Suspension of MS4 Access.**

##### **Suspension due to Illicit Discharges in Emergency Situations.**

Port Huron Township may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the State. If the violator fails to comply with a suspension order issued in an emergency, the Township may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the State, or to minimize danger to persons.

##### **Suspension due to the Detection of Illicit Discharge. (Permit Application #26)**

Any person discharging to the MS4 in violation of this ordinance may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing.

A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the authorized enforcement agency.

#### **Section 10: (16-110) Industrial or Construction Activity Discharges.**

Any person subject to an industrial or construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the Township, prior to the allowing of discharges to the MS4.

#### **Section 11: (16-111) Monitoring of Discharges.**

##### **A. Applicability.**

This section applies to all facilities, industrial, construction or residential, within the Township:

##### **B. Access to Facilities. (Permit Application # 25)**

1. The Township shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.

2. Facility operators shall allow the Township ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.
3. The Township shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's storm water discharge.
4. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the Township and shall not be replaced. The costs of clearing such access shall be borne by the operator.
5. Unreasonable delays in allowing the Township access to a permitted facility is a violation of a storm water discharge permit and of this ordinance. A person who is the operator of a facility with a NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this ordinance.
6. If the Township has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction.

**Section 12: (16-112) Enforcement. (Permit Application #26)**

Whenever the Township finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

1. The performance of monitoring, analyses, and reporting;
2. The elimination of illicit connections or discharges;
3. That violating discharges, practices, or operations shall cease and desist;
4. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
5. Payment of a fine to cover administrative and remediation costs bore by the Township and
6. The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline for up to 90 days from discovery of the violation within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

**Section 13: (16-113) Appeal of Notice of Violation. (Permit App. #27)**

Any person receiving a Notice of Violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received within 30 days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

**Section 14: (16-114) Enforcement Measures After Appeal. (Permit App. #26 &27)**

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 90 days of the decision of the municipal authority upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

**Section 15: (16-115) Cost of Abatement of the Violation. (Permit App. #26 & 27)**

Within 90 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within 30 days. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. Any person violating any of the provisions of this article shall become liable to the Township by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of percent per annum shall be assessed on the balance beginning on the 1st day following discovery of the violation.

**Section 16: (16-116) Injunctive Relief.**

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Ordinance. If a person has violated or continues to violate the provisions of this ordinance, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

**Section 17: (16-117) Appeal of Notice of Violation.**

In lieu of enforcement proceedings, penalties, and remedies authorized by this Ordinance, the authorized enforcement agency may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

**Section 18: (16-118) Violations Deemed A Public Nuisance.**

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

**Section 19: (16-119) Criminal Prosecution. (Permit App. # 26, 27)**

Any person that has violated or continues to violate this ordinance shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of \$500.00 dollars per violation per day and/or imprisonment for a period of time not to exceed 90 days.

The authorized enforcement agency may recover all attorney's fees court costs and other expenses associated with enforcement of this ordinance, including sampling and monitoring expenses.



**Section 20: (16-120) Remedies Not Exclusive.**

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

**Section 21: (16-121) Adoption of Ordinance.**

This ordinance shall be in full force and effective immediately after its final passage and adoption and legal publication in accordance with the provisions of the Act governing same. All prior ordinances and parts of ordinances in conflict with this ordinance are hereby repealed.

PASSED AND ADOPTED this 16th day of September 2013, by the following vote:

This ordinance shall be effective after

The above Ordinance was offered for adoption by Township Board Member \_\_\_\_\_, and was seconded by Township Board Member \_\_\_\_\_, the vote being as follows:

YEAS:

NAYS:

ABSTAIN/ABSENT:

ORDINANCE DECLARED ADOPTED:

\_\_\_\_\_  
By: Benita Davis, Township Clerk  
Charter Township of Port Huron

**CERTIFICATION**

I hereby declare that the above is a true copy of an Ordinance adopted by the Charter Township of Port Huron Board at a board meeting held on \_\_\_\_\_, at the Charter Township of Port Huron Hall, pursuant to the required statutory procedures.

Dated: \_\_\_\_\_

\_\_\_\_\_  
By: Benita Davis, Township Clerk  
Charter Township of Port Huron



# Total Maximum Daily Load (TMDL) Implementation Plan for the Alliance of Downriver Watersheds MS4s in Wayne County



*TMDL Plan Approved by Water Resources Division on May 31, 2019  
Detroit River TMDL added on August 19, 2019 and approved August 26, 2019*

The Michigan Department of Environmental Quality (MDEQ), under the National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit application, requires a plan or other documentation outlining how each Municipal Separate Stormwater Sewer System (MS4) will "make progress toward achieving the pollutant load reduction requirement" in each TMDL listed in each applicant's application notice. The purpose of this document is to provide the collective watershed plan for **addressing relevant TMDLs in the Alliance of Downriver Watersheds in Wayne County by MS4s** for the purpose of stormwater permit compliance through the permit cycle starting after 2016. This document addresses the permit application sections VII.86 through VII.88. It should be noted that this plan addresses only stormwater sources of impairments related to TMDLs and is not a *comprehensive* TMDL implementation plan.

## I. TMDL AND MS4 COVERAGE

This TMDL Plan is submitted on behalf of the following Phase I and II MS4s within the Alliance of Downriver Watersheds, for each of the below-listed TMDLs, with their target loads included:

### A. *Excessive bacteria (E. coli), and sediment in the Ecorse River*

*Targets: For bacteria, May-October – 300 E. coli per 100 ml daily maximum and 130 E. coli per 100 ml as a 30-day geometric mean. November-April – 1,000 E. coli per 100 ml daily maximum. For sediment, Primary – macroinvertebrate Procedure 51 score of at least -4, or a rating of "acceptable." Secondary – Annual mean wet-weather TSS concentration of 80 mg/l or less.*

Allen Park	Romulus
Dearborn Heights	Southgate
Ecorse	Taylor
Inkster	Wayne County
Lincoln Park	Westland
Melvindale	Wyandotte

### B. *Sediment in Brownstown Creek and Blakely Drain – Marsh Creek*

*Target: Primary – macroinvertebrate Procedure 51 score of at least -4, or a rating of "acceptable." Secondary – Annual mean wet-weather TSS concentration of 80 mg/l or less.*

Gibraltar	Trenton
Riverview	Wayne County
Romulus	Woodhaven
Taylor	

C. *Sediment in Frank and Poet Drain*

Target: Primary – macroinvertebrate Procedure 51 score of at least -4, or a rating of “acceptable.”

Secondary – Annual mean wet-weather TSS concentration of 80 mg/l or less.

Gibraltar	Taylor
Riverview	Trenton
Romulus	Wayne County
Southgate	Woodhaven

D. *Habitat and Flow Alterations in Smith and Silver Creeks*

**Note: These creeks are listed on the impaired waters list, but do not have a TMDL developed. While no additional stormwater management effort is required for these, the ADW partners will endeavor to meet the below targets that are used in drainages with existing TMDLs.**

Target: Primary – macroinvertebrate Procedure 51 score of at least -4, or a rating of “acceptable.”

Secondary – Annual mean wet-weather TSS concentration of 80 mg/l or less.

Flat Rock	Wayne County
Gibraltar	Woodhaven
Rockwood	

E. *Excessive bacteria (E. coli) in the Detroit River*

Targets: May-October – 300 *E. coli* per 100 ml daily maximum and 130 *E. coli* per 100 ml as a 30-day geometric mean. November-April – 1,000 *E. coli* per 100 ml daily maximum.

Allen Park	Southgate
Dearborn Heights	Taylor
Ecorse	Van Buren Township
Gibraltar	Wayne County
Grosse Ile Township	Westland
Inkster	Woodhaven
Lincoln Park	Woodhaven-Brownstown School
Melvindale	District
Riverview	Wyandotte
Romulus	

## II. PRIORITIZING AND IMPLEMENTATION BMPS

The MS4s in the Alliance of Downriver Watersheds have put forth substantial effort and resources to reduce the sources of impairments related to the TMDLs listed in the previous section. These partner organizations, along with non-MS4 entities have developed a number of general and specific plans to address watershed impairments. These plans direct the current and future project and program priorities. The suite of projects and programs already put in place contributed to significant impairment reduction, as evidenced by data collected through on-going monitoring (see [monitoring report](#) for

details, or in Appendix B for example).

To comply with NPDES stormwater permit requirements, the above-listed MS4s submit that the suite of Best Management Practices (BMPs) contained in the attached Priority Actions table represents each MS4's project priorities that will be implemented during the permit cycle to collectively make progress toward achieving each of the TMDL pollutant load reduction targets. Each MS4 has attached a table of BMPs that identifies the targeted TMDL pollutants (i.e. sediments, flow alterations or bacteria where relevant) and the priority of the BMP. In many cases, no additional prioritization is needed, as the activity is a general (G) stormwater treatment BMP and will be applied across the MS4 and watershed, and not specific to a particular drainage or impairment. For those BMPs that are area or pollutant specific, data from the monitoring program will be used to help establish priorities for implementation. In these cases, BMPs are classified as high (H), medium (M) or low (L) priority for each TMDL. The high priority BMPs will first be implemented in creeksheds or drainage areas that are determined (through monitoring) to be greater sources of the TMDL pollutant or impairment. Conversely, medium and low priority BMPs will be implemented in these TMDL-pollutant source areas after high priority BMPs are implemented.

### III. MONITORING PLAN

A summary of past monitoring results and conclusions related to TMDLs in the watershed is included in monitoring reports found on the [ADW Initiatives page](#). The most recent published report is included in Appendix B, but updated monitoring results will be found on the webpage above. The summaries provided are based primarily on data collected through HRWC's Water Quality Monitoring Program, which has been funded in part by MS4s. Currently the MS4s and other watershed partners plan to continue to support this program to seasonally monitor ADW tributaries for TMDL pollutants. However, for the purposes of NPDES stormwater permit compliance, the MS4s commit to the following Monitoring Plan.

1. MS4s will support the collection of water quality samples from sites that are located at or near major tributary mouths. Figure 1 shows a map of the original long-term monitoring sites. An additional site was added as an investigative site in 2016 and then converted to a long-term site thereafter, bringing the total number of long-term sites to nine. The added site is located on the Huron River at the Fort Street bridge crossing. A current map of all water quality monitoring sites is located at the [Chemistry and Flow Monitoring website](#).
2. Samples will be collected at least twice during the permit cycle, not including the data included from previous monitoring. Sampling years will be in year one and year four. At least one sampling event will take place at each of the nine sites. An effort will be made to sample water quality parameters during a representative (i.e. >0.25" and <1.5") wet-weather event. For these wet-weather events, samples will be collected during the rising period of the flow hydrograph or within 6 hours of the peak storm flow. Currently, sampling under the ADW monitoring program occurs much more frequently than this – twice per month, April through September each year, with additional sampling at 3-4 upstream investigative sites each year. Several wet-weather events are sampled during this schedule, plus an autosampler is used to sample multiple times during wet weather events from the beginning of the storm to after peak flow. The ADW plans to continue this monitoring regime, though it commits to twice during the permit cycle.

3. Samples will be collected following procedures identified in ADW's Monitoring Program QAPP (see Appendix A). Samples will be analyzed by the Ypsilanti Community Utility Authority Laboratory or other certified lab for the following concentrations: Total Phosphorus (TP), Total Suspended Solids (TSS), and *E. coli*.
4. Stream flow estimates will be obtained from existing stations during the dates and times water quality samples are collected.
5. The pollutant concentrations and stream flow estimates will be used to update pollutant loading models and estimate pollutant load reductions. These results will be summarized in a brief report to be shared with the public via HRWC and/or MS4 websites at least twice during the permit cycle.
6. Depending on the results from long-term monitoring sites, additional short-term investigative sites will be selected upstream in attempt to identify potential source areas. These sites will be sampled within an hour of sampling at the downstream site so that results can be compared and better define pollutant source locations. Results from this investigation will be shared with the appropriate contacts under the Illicit Discharge Elimination Program (see separate IDEP plan).
7. Any sites with sample results above the previously listed TMDL targets will be resampled to confirm and average results.
8. A plan for implementing BMPs in TMDL areas was developed and described in section II and a list of BMPs to be implemented by MS4s was included with each MS4's permit application. BMP implementation will begin within a year in these areas. If after implementation of high-priority BMPs TMDL targets continue to be exceeded or target parameter values increase in severity, MS4s will re-evaluate the plan and begin implementing additional high or medium-priority BMPs within a year after making this determination. BMPs will be selected for implementation according to the strategy described in section II.
9. Based on a review of year one and year four data and summary reports, BMP implementation will be reviewed and BMP implementation plans may be updated or revised to ensure progress toward achieving TMDL pollutant load reductions. BMPs that are employed will be evaluated using a before and after analysis of the parameter that is deemed impaired in a given TMDL. For bacteria TMDL areas, a sampling event with levels exceeding the single-sample *E. coli* standard will be compared to dry-weather sampling results (during warm-weather, productive months, or other conditions similar to original samples) after the BMP (or suite of BMPs) is deployed.

For sediment-based TMDLs, wet-weather TSS sample results from before and after BMP implementation will be compared. Ideally, multiple samples will be collected before and several years after BMPs are implemented. A before-after decrease in target parameters will be considered "progress" toward TMDL targets. If the after-implementation results are below target water quality standards, the BMPs will be considered successful at meeting the TMDL targets for the waterbody sampled and the MS4s in the contributing area (watershed). If multiple samples are collected, trend lines will be established to determine the degree of progress towards TMDL targets. Geometric means of qualified (i.e. meeting sampling condition

requirements) post-implementation results will be used for *E. coli*, and simple means will be used for TSS results. Ultimately, to delist an impairment, additional sampling will be needed, which is beyond the scope of MS4 permit requirements to comply with water quality standards.

In addition to this stormwater sampling plan, ADW partners currently collect macroinvertebrates three times a year at sites throughout the Watershed (see Figure 2), which helps track progress towards the primary target of biota (sediment) TMDLs. Improvements in macroinvertebrate diversity (i.e. Procedure 51) will ultimately be necessary for delisting biota impairments. Sampling protocols for macroinvertebrates are also included in Appendix A, and results are reported along with water quality results in summary reports on the [ADW Initiatives page](#). The most recent published complete report (2013) is included in Appendix B. Figure 2 illustrates the Fall 2014 status and trends of macroinvertebrate sampling sites.







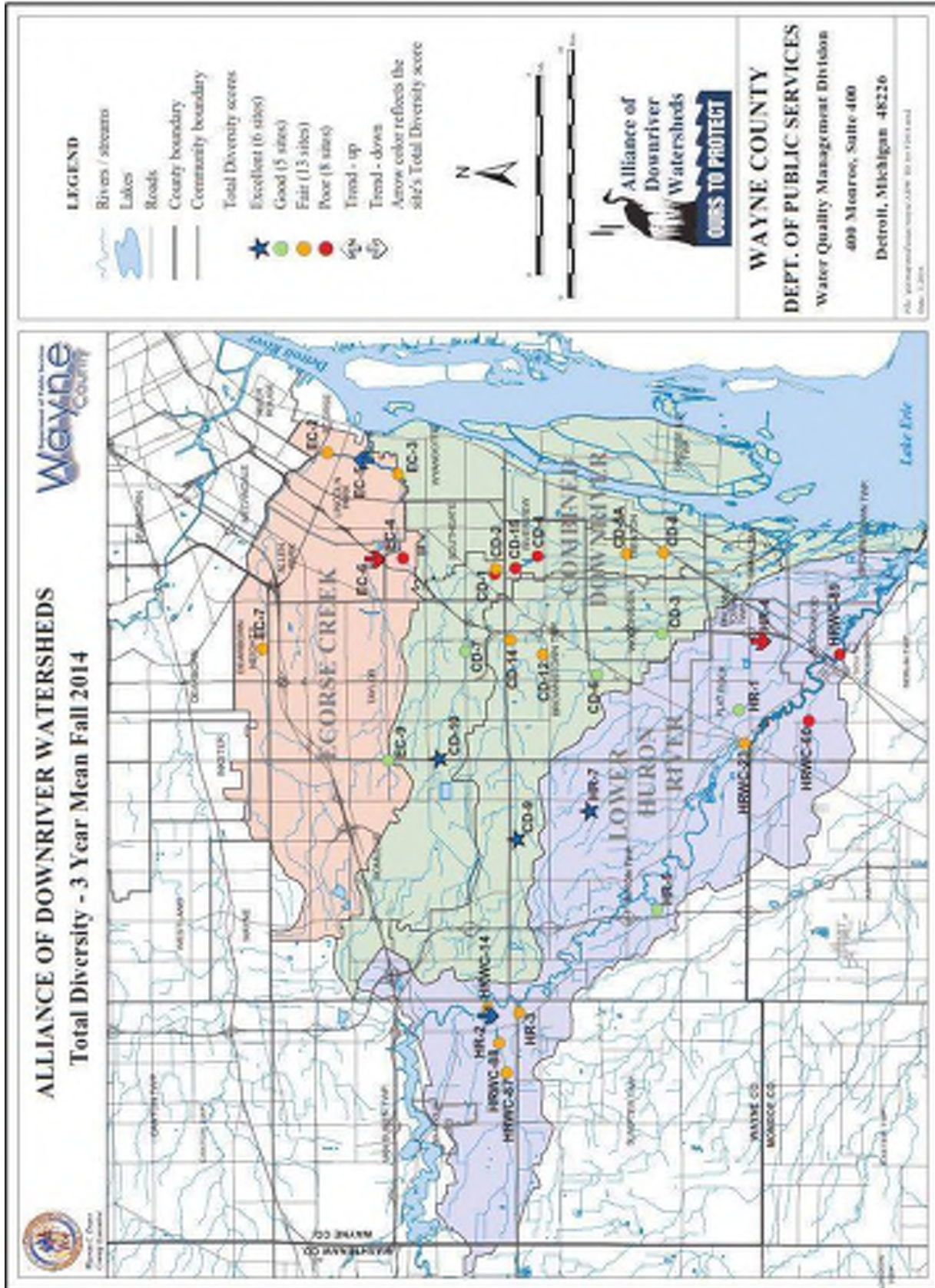


Figure 2. 2014 macroinvertebrate sampling locations and results in ADW.



**Water Resources Division**

**Municipal Separate Storm Sewer  
System (MS4) Program**

**Illicit Discharge  
Elimination Program  
(IDEP)**

**Compliance Assistance Document**



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## Overview

The MS4 individual permit application is designed to develop a Stormwater Management Program (SWMP) by prompting the applicant to describe the current or proposed structural or managerial best management practices (BMP) to meet the six minimum control measures and water quality requirements. The IDEP is one of the six minimum control measures and should be designed to detect and eliminate illicit discharges and connections to the applicant's regulated MS4. This compliance assistance document addresses the MS4 permit application and implementation requirements associated with the IDEP. The compliance assistance document identifies the key components relating to these requirements which are considered necessary in order to have a complete application and an approvable SWMP. Applicants may work collaboratively with watershed or regional partners on any or all BMPs during the permit cycle if approved as part of the IDEP.

An MS4 includes both open and enclosed drainage systems that are owned or operated by the applicant; solely convey stormwater; and discharge, either directly or via an MS4 owned or operated by another public body, to a surface water of the state. 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.

A water body cannot be both an MS4 and a surface water of the state. An MS4 is a conveyance designed to solely collect or convey stormwater. A surface water of the state has non-stormwater inputs such as groundwater, nonpoint source runoff, etc. Open county drains that are identified on a topographic map are usually a surface water of the state. The Michigan Water Quality Standards define surface waters of the state to include lakes, rivers, streams, open drains, and wetlands. Department of Environment Quality (DEQ) staff is available to provide assistance with identifying a surface water of the state.

The application does not require the applicant to detect and eliminate illicit discharges directly to surface waters of the state (including an open county drain when it is also a surface water of the state). Note, however, that the application does not preclude the applicant from having a more expansive program if the applicant desires.

Privately owned and operated drainage systems that discharge directly to surface waters of the state do not have to be included in the IDEP. See Appendix A for an example of where IDEP activities are required.

An example of a surface water of the state is an open county drain that flows in the historical path of a stream.

The county drain receives inputs of groundwater, nonpoint source runoff, and stormwater runoff.

The county drain is identified on a topographic map and would be protected as a surface water of the state.

The IDEP should be designed to implement BMPs where the permittee owns and operates an MS4 in the regulated area identified on the 2010 urbanized area maps. These maps are available by going to <http://www.michigan.gov/deqstormwater> and clicking on MS4 Program / MS4 Compliance Assistance then clicking on the hyperlink under the heading MS4 Permits. All references to the applicant's MS4 in this compliance assistance document refer to the applicant's regulated MS4. An applicant that chooses to be responsible for permit requirements for another regulated MS4 should include BMPs to address both MS4s as part of the IDEP.

## Measurable Goals

Once a permit is issued, the permittee will be required to track implementation of the SWMP. Measurable goals are a means for assessing progress and effectiveness of the BMPs that, together, constitute the applicant's SWMP. The Application requires that a measurable goal be provided for each BMP. Measurable goals should be selected to fit each BMP and, as appropriate, each measurable goal should include a schedule for BMP implementation (month and years), including interim milestones and the frequency of the action. Properly selected measurable goals will incorporate a means to assess a BMP's progress towards reaching the goal. Although a measurable goal is required for each BMP, it doesn't mean that each BMP must have a unique measurable goal. Consideration should be given to ensure a selected measurable goal fits the targeted BMP, but it may be appropriate for some BMPs to share a common measurable goal.

Measurable goals may demonstrate: 1) specific actions, such as tracking implementation of the activity itself; 2) results, such as tracking behavioral change or quantifiable targets; and 3) the schedule to complete certain actions or targets. More information on developing measurable goals and measurable goals as they relate to the IDEP minimum control measure is available in the U.S. Environmental Protection Agency's (EPA) Measurable Goals Guidance for Phase II Small MS4s at <http://www.epa.gov/npdes/pubs/measurablegoals.pdf>.

## Finding and Eliminating Illicit Connections and Discharges

A program should be developed to find and eliminate illicit connections and discharges to the regulated MS4 from commercial, industrial, private educational, public, and residential sources.

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

The IDEP should include procedures and ordinances or other regulatory mechanism to meet the following requirements. The term "procedure" means a written process, policy or other mechanism describing how the applicant will implement the minimum requirements. The applicant is afforded flexibility in the formatting of the procedures and in the case of the IDEP requirements an applicant may choose to incorporate the various IDEP components into one procedure since many requirements build on one another.

## Storm Sewer System Map

The applicant should provide the location where an up-to-date storm sewer system map(s) is available. In accordance with the application, the map shall identify the following: the

regulated separate storm sewer system, the location of all outfalls and points of discharge, and the names and location of the surface waters of the state that receive the discharge from the applicant's regulated MS4 (for both outfalls and points of discharge). The maps are to be retained by the applicant and made available to the DEQ upon request. Storm sewer system information shall be maintained and updated as discharge points are identified or added.

A separate storm sewer system includes: roads, catch basins, curbs, gutters, parking lots, ditches, conduits, pumping devices, and man-made channels.

#### Example Application Requirement Response

- An example response would be to identify the Department of Public Works office as the location where the maps are available.
- The map requirement may be a series of maps which together identify the entire separate storm sewer system. Maps may include available diagrams, such as certification maps, road maps showing rights-of-way, as built-drawings, diagrams, or other hard copy or digital representation of the storm sewer system. Maps may be accompanied by narrative descriptions for portions of the system.
- When mapping discharge points, include enough detail for staff to easily locate discharge points. This may necessitate one general overview map and several detailed maps. Include the discharge point identification name/number on the maps. Narrative information about the discharge point can accompany the maps to allow the user to further understand the characteristics of the discharge point.

### **Field Observation Scope**

The applicant should develop a procedure to perform field observations (i.e., dry-weather screening) at outfalls and points of discharge during the permit cycle. The application affords two options for meeting this requirement: observe all outfalls and points of discharge during dry-weather or prioritize outfalls and points of discharge for observation during dry-weather to maximize implementation efforts during the permit cycle in areas with a high illicit discharge potential.

An applicant may choose to prioritize target areas during the permit cycle in an effort to maximize resources and implementation efforts in areas with a high illicit discharge potential. A procedure should be developed for prioritizing the MS4 for detecting non-stormwater discharges including identifying lower priority areas as part of the process. The procedure should document the process for selecting each priority area using the list below. A narrative description or map should be developed identifying the prioritized areas that will be targeted during the permit cycle.

- 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 onsite sewage disposal 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 water bodies identified in a Total Maximum Daily Load
- Priority areas applicable to the applicant not identified above

### Example Procedure

Applicants may choose to conduct a desktop analysis by ranking each sewershed or outfall/point of discharge as a high, medium, or low risk for illicit discharge potential. Based on the ranking, applicants can develop a procedure to investigate sewersheds or outfalls/points of discharge in the highest risk areas first to maximize implementation efforts during the permit cycle. The procedure would also include a plan for investigating medium and low risk areas, with a timeframe for implementation. To meet the requirement to identify the geographical location of each prioritized area, the applicant may delineate areas on its MS4 map and include a year for dry-weather screening.

Additional detail on performing a desktop analysis can be found in the Environmental Protection Agency guidance manual titled *Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessments* which is available [here](#).

## **Performing Dry-weather Screening**

Dry-weather screening is a term that includes a field observation followed by field screening and source investigation, as appropriate. An applicant should develop several procedures (or combine the procedures into one document) to identify the process of dry-weather screening during the permit cycle. The dry-weather screening requirements are described in the following table.

Field Observation	<p>Develop a procedure for performing a field observation at all outfalls and points of discharge in the priority areas or for the entire MS4 during dry-weather once during the permit cycle.</p> <p>A schedule should be included in the procedure for completing field observations during the permit cycle or more expeditiously if the applicant becomes aware of a non-stormwater discharge. It is recommended that field observations be performed at least 48 hours after any precipitation.</p>	<p>The following should be observed as part of a field observation:</p> <ul style="list-style-type: none"> <li>• Presence/Absence of flow</li> <li>• Water clarity</li> <li>• Color</li> <li>• Odor</li> <li>• Floatable materials</li> <li>• Deposits/Stains on the discharge structure or bank</li> <li>• Vegetation condition</li> <li>• Biology (e.g., bacterial sheens, algae, slimes)</li> </ul>
Field Screening	<p>Develop a procedure for performing a field screening if flow is observed at an outfall or point of discharge and the source is not identified during the field observation. If the illicit discharge is identified during the field observation then an applicant shall eliminate the illicit discharge.</p> <p>A schedule should be included for performing field screening.</p>	<p>Indicator parameters should be identified. Example indicator parameters include ammonia, fluoride, detergents, and pH.</p> <p>The purpose of indicator parameters is to assist with determining if an illicit discharge is present and gathering information regarding potential sources. Select a set of indicator parameters using the nature of historic problems and land use as a guide. An example list is available <a href="#">here</a>.</p>
Source Investigation	<p>Develop a procedure for performing a source investigation if the source of an illicit discharge is not identified by field screening.</p> <p>A schedule should be included for performing a source investigation.</p>	<p>A method for performing a source investigation should be included. The following are example methods:</p> <ul style="list-style-type: none"> <li>• Indicator parameter testing (chemical and bacterial sampling)</li> <li>• Dye testing (Department approval is required – see Appendix C)</li> <li>• Video testing</li> <li>• Smoke testing</li> <li>• Documented visual observation or physical indicators</li> <li>• Homeowner surveys and surface condition inspections for on-site sewage disposal systems</li> <li>• Drainage area investigations</li> </ul>

If an applicant chooses to dry-weather screen in priority areas, then a procedure should be developed for responding to non-stormwater discharges outside of the priority areas. The procedure should include a schedule for performing field observations, and follow-up field screening and source investigations, as appropriate, when the applicant becomes aware of the discharge.

## Illegal Dumping/Spills

Illegal dumping and accidental spills are significant sources of illicit discharges to an MS4. The applicant should develop a procedure for responding to illegal dumping and spills. The procedure should identify how spills will be contained and cleaned-up. The procedure should include a schedule for responding to complaints received, performing field observations and follow-up field screening and source investigations, as appropriate.

The potential for spills to contain oil and other highly polluting materials is significant. The Part 5 Rules identify threshold quantities for spillage of oil and certain polluting materials and the requirements when threshold quantities are exceeded. The applicant should develop a procedure 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 DEQ District Office, or if the notice is provided after regular working hours call the DEQ's 24-Hour Pollution Emergency Alerting System telephone number 800-292-4706.

## Working Collaboratively

The applicant may choose to work collaboratively to meet the dry-weather screening requirements by collaborating with the owner or operator of the downstream MS4 to identify responsibilities for dry-weather screening. Collaborative efforts can assist with maximizing available resources while still effectively eliminating illicit discharges. If this option is pursued, the applicant should submit as part of the procedure for performing field observations an interagency agreement with the owner or operator of the downstream MS4 identifying responsibilities and schedules for ensuring an illicit discharge is effectively eliminated if originating from the applicant's point of discharge. For more information and an example of an interagency agreement see Appendix B.

### Example Procedure

- To make regular progress towards the schedule, perform field screening at a rate of 20% of outfalls and points of discharge in the high priority areas per year with scheduled completion of all dry-weather screening within the 5-year permit cycle. For example, a city owns and operates 200 outfalls and points of discharge. The city identified 100 outfalls and points of discharge in the high priority areas. The schedule for performing field screening is 20 outfalls or points of discharge per year with a focus on screening in the same sewersheds first.
- Consider integrating dry-weather screening with other watershed or stream assessments.
- The scheduling of field screening and source investigations should be minimized due to the variable nature of an illicit discharge. Prior to starting a dry-weather screening field season, purchase field kits or develop a relationship with a contract laboratory to ensure timely analysis of sampling and testing efforts.
- Create a template for performing dry-weather screening to prompt staff to record specific information. Staff can then enter the data into a database to track illicit discharges and generate reports.



- Illicit discharge source identification can be completed in various manners including a combination of a desktop analysis and field verification. There are four basic types of investigations, which may be used independently or in combination.

MS4 Investigation	Field crews perform an investigation by either strategically inspecting or testing manholes or by moving systematically upstream or downstream within the storm drain network.
Drainage Area Investigation	An initial desktop analysis is performed to determine potential generating sites by reviewing land uses followed by inspections or testing in areas where the illicit discharge appears to be specific to a certain type of land use or generating site.
On-Site Investigation	Dye, video, or smoke testing can isolate segments of the storm drain network to allow for focused on-site investigations. Discharges of tracer dyes shall be authorized by the Department in accordance with Appendix C.
On-Site Sewage Disposal System Investigation	On-site investigations may be necessary in areas with the potential for failing septic systems and illegal dumping.

- Establish a schedule for staff assigned to emergency response activities to practice implementing the procedure for illegal dumping and spills.

## Equivalent Alternative Approaches

Applicants have the option of proposing an alternative approach to finding and identifying an illicit discharge that differs from the dry-weather screening requirements (i.e., field observations, field screenings and source identification) described above. When presenting an alternative approach, the applicant shall demonstrate how the approach provides an equivalent or greater level of protection as the dry-weather screening requirements.

## Eliminating illicit discharges

Once the field observation and potentially the field screening and source investigation is complete efforts should focus on responding to the illicit discharge with the requirement to effectively eliminate. The applicant should develop a procedure with response activities to implement once the source of the illicit discharge is identified. The procedure should include a schedule for requiring the elimination of illicit discharges and pursuing enforcement actions. The procedure should be encompassing of illegal spills/dumping.

### Example Procedure

A procedure is developed to identify response activities for various types of illicit discharges (e.g., illegal dumping, illicit sanitary connection, failing soil erosion measures, large quantity spill), what enforcement tools are available to address illicit discharges (e.g., ordinances, regulatory mechanisms, procedures), and information on HAZMAT first responders (local, county, state, private clean-up companies). A schedule for eliminating illicit discharges within 90 days of becoming aware of the discharge is developed and enforced through the use of various enforcement tools.



Once an illicit discharge has been detected or reported a log of the type of illicit discharge, identification information, elimination status, and enforcement actions completed is maintained. This can be as simple as a hard copy information log or a more complex geographical information system database.

## Training Staff

A training program is an important component to an effective IDEP. Applicants should develop a program to train staff employed by the applicant who are involved in illicit discharge-related activities. Training a wide range of staff at the appropriate level is an effective approach to increasing the potential for identifying illicit discharges. The application requires, at a minimum, training for existing staff at least once during the permit cycle and new hires within the first year of their hire date. It is recommended that staff is trained more than once per permit cycle. Training refreshers are recommended when IDEP related policies and procedures are updated, or in response to program evaluation findings.

Who should be trained?

- Staff or a representative that will participate in:
  - IDEP activities to find and eliminate illicit discharges and connections
  - Spill response and response to emergency IDEP situations
  - Ordinance/regulatory mechanism enforcement
- Staff or a representative that may have the opportunity to identify illicit discharges and connections in day-to-day activities
- Staff or a representative, such as building and engineering department staff, that have the opportunity to identify cross-connections and drainage issues in processes such as plan review
- Municipal officials who oversee IDEP related work, as appropriate

### Example Training Program

Who should be trained	Content of Training
<p>All municipal staff and consultants that have responsibility for any IDEP related program activities, including spill and IDEP related emergency response and observation of illicit discharges in the course of their daily work</p>	<ul style="list-style-type: none"> <li>• The definitions of illicit discharges, illicit connections, and sanitary seepage</li> <li>• The municipality's stormwater infrastructure, and where to obtain municipal storm sewer maps and/or electronic storm sewer datasets</li> <li>• Contact information to report illicit discharges to staff with emergency response responsibility</li> <li>• Common types of illicit discharges that occur in or are commonly associated with the local area</li> <li>• Recognition of naturally occurring phenomena and their sources (mineral deposits, bacterial sheens, slimes and films, bryozoans, pollen, blue-green algae, green algae, tannins and foams)</li> <li>• The municipal ordinance/regulatory mechanism/procedures, including the requirements and authority given to the municipality to eliminate illicit discharges</li> <li>• The authority of other agencies that may also be involved in local spill response</li> <li>• Illicit discharge preventative measures</li> </ul>

Who should be trained	Content of Training
Staff that will participate in the municipal program to find and eliminate illicit discharges	<ul style="list-style-type: none"> <li>• The IDEP investigation history for the municipality</li> <li>• Desktop analysis of illicit discharge potential within the municipality, including assessment of the highest priority investigation areas based on the prioritization criteria</li> <li>• Field observation planning and preparation for field work</li> <li>• Procedures for performing field observations, field screenings and source investigations</li> <li>• Methods for eliminating illicit discharges and the proper enforcement response</li> </ul>
Staff that will participate in enforcement of the IDEP ordinance/regulatory mechanism/procedures	<ul style="list-style-type: none"> <li>• The requirements and authority of the ordinance/regulatory mechanism</li> <li>• The process that will be used to prohibit and eliminate illicit discharges, including ordinance enforcement mechanisms</li> <li>• Tracking illicit discharge elimination status and enforcement actions</li> </ul>
Staff that has responsibility for IDEP related spill response and environmental emergency response	<ul style="list-style-type: none"> <li>• The municipal spill response protocols and responsibilities</li> <li>• The municipal authority during spill response</li> <li>• Protocols for release/spill reporting to other agencies, and response coordination with other agencies</li> <li>• Methods to prevent further migration of materials through a storm sewer system</li> <li>• Methods to prevent materials from entering storm sewer systems</li> <li>• Recordkeeping</li> <li>• Tracking illicit discharge elimination status and enforcement actions</li> <li>• A number of other regulations may also apply to spill and emergency situations.</li> <li>• These may require additional training and reporting related to spill response.</li> </ul>

### *Additional Training Topics*

Additional training topics for municipal staff and consultants may include:

- Safety issues associated with IDEP activities
- Training schedule during the term of the permit
- Conducting internal audits of the IDEP program
- Mock incidents for response practice
- Case history review
- Local and regional spill response debriefings – assessing what worked, what should be improved

## Evaluating IDEP Effectiveness

Overall IDEP effectiveness assesses how well implementation is working at the program level to determine the success of the program in detecting and eliminating illicit connections and discharges to the MS4. A procedure should be developed for evaluating and determining the overall effectiveness of the IDEP. The appropriate method of determining effectiveness will depend on the IDEP approach.

### Example Procedure

The procedure should focus on an effectiveness evaluation that provides results to meet permit requirements. The following are examples of evaluation methods:

- Evaluate the prioritization process to determine if efforts are being maximized in areas with high illicit discharge potential
- Evaluate the effectiveness of using different detection methods
- Evaluate the number of discharges and/or quantity of discharges eliminated using different enforcement methods
- Evaluate ambient water quality monitoring data to measure changes in the receiving water
- Evaluate program efficiency and staff training frequency

### Resources

- Wayne County Illicit Connection and Discharge Elimination Training Program. Contact Wayne County at 734-326-4483
- EPA Illicit Discharge Detection and Elimination Resources  
<http://water.epa.gov/polwaste/npdes/swbmp/Illicit-Discharge-Detection-and-Elimination.cfm>
- EPA Emergency Management Program Guidance  
<http://www.epa.gov/emergencies/programs.htm>
- Part 5 Rules- Spillage of Oil and Polluting Materials  
[http://www.michigan.gov/deq/0,1607,7-135-3313\\_23420---,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_23420---,00.html)

## IDEP Ordinance or Other Regulatory Mechanism Requirement

The applicant is required to develop an ordinance or other regulatory mechanism to effectively prohibit illicit discharges into the applicant's regulated MS4 to be implemented and enforced during the permit cycle. Examples of non-ordinance regulatory mechanisms include internal policies or procedures.

Factors that influence the appropriateness of an ordinance or other regulatory mechanism are whether or not the applicant has ordinance authority and the potential for illicit discharges. A combination of an ordinance and other regulatory mechanism may also be appropriate. In addition, as long as the IDEP requirements are fully addressed, the requirements may be distributed throughout a combination of several ordinances and/or regulatory mechanisms. The following table provides likely scenarios for the applicability of ordinance and other regulatory mechanisms.

<ul style="list-style-type: none"> <li>• <b>Cities and villages</b></li> <li>• <b>Townships with a more complex MS4</b> (e.g., a township that owns or operates roads)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>County agencies</b></li> <li>• <b>Townships with a regulated MS4 limited to township-owned property</b></li> <li>• <b>Public institutions</b> (e.g., school systems and universities)</li> </ul>
Primary Legal Authority: Ordinance	Primary Legal Authority: Regulatory Mechanism
Secondary Legal Authority: Policies and procedures for staff to implement IDEP activities	

The ordinance or regulatory mechanism shall include the following application requirements for the regulated MS4:

- (1) Prohibit non-stormwater discharges (see exceptions below)
- (2) Regulate the contribution of pollutants
- (3) Prohibit illicit discharges, including illicit connections and direct dumping/disposal
- (4) Establish the authority to investigate, inspect, and monitor suspected illicit discharges
- (5) Require and enforce elimination of illicit discharges and connections

### Options to Exclude Prohibiting Certain Non-stormwater Discharges

Applicants may choose to exclude prohibiting the discharges or flows from the following categories of non-stormwater discharges as part of the ordinance or other regulatory mechanism requirement.

1. **Firefighting Activities** – Applicants have the option to exclude prohibiting the discharges or flows from firefighting activities to the MS4 as part of the ordinance or other regulatory mechanism and require that these discharges or flows only be addressed if they are identified as significant sources of pollutants to waters of the State. For example, an applicant should require that discharges or flows to the MS4 from firefighting activities cease as soon as the emergency is over. Discharges or flows from firefighting training activities should be treated using BMPs to ensure there are no discharges of pollutants during the training.
2. **Non-Stormwater Categories** – Applicants have the option to exclude prohibiting the discharges and flows from the following list of non-storm water discharges as part of the ordinance or other regulatory mechanism provided that they are identified as not being a significant contributor to violations of Water Quality Standards. Identifying a discharge or flow as a significant contributor is completed on a case-by-case basis and is dependent on many factors, including the type of pollutant, amount discharged, and impacts to surface waters of the state.

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

These discharges shall not be authorized. Authorization to discharge these non-stormwater discharges would be in conflict with the ordinance/regulatory mechanism requirement above to prohibit non-stormwater discharges.

## Contaminated Groundwater

Uncontaminated groundwater infiltration and seepage into an MS4 is identified above as a discharge or flow that does not need to be prohibited provided the uncontaminated groundwater is not a significant contributor to violations of Michigan Water Quality Standards. If an applicant chooses to allow this option, a procedure should be established to determine whether or not groundwater infiltrating or seeping into the MS4 is contaminated. Appendix C includes a flowchart and narrative description to assist with developing a procedure. The flowchart provides the framework for determining whether groundwater infiltration/seepage is contaminated and options for eliminating the groundwater infiltration/seepage if it is contaminated.

An applicant may be the responsible party for a Part 201 cleanup site or Part 213 leaking underground storage tank (LUST) site or may be aware of a Part 201 cleanup site or Part 213 LUST site infiltrating or seeping into the applicant's MS4. In December 2010 Part 201 was amended, specifically the criteria associated with the generic groundwater surface water interface (GSI) criteria. It is important to note that the illicit discharge definition applies at the point of infiltrating or seeping into the regulated MS4 while the GSI criteria are applied at the outlet to surface waters of the state. An MS4 permittee shall apply the ordinance or regulatory requirement to eliminate illicit discharges prior to infiltrating/seeping into the MS4 in accordance with the permit requirement.

### Example Implementation

- An applicant may use an existing ordinance/regulatory mechanism or multiple ordinances/ regulatory mechanisms as the primary legal authority as long as the

application requirements are met. Supplemental documents may also be used to further support the primary legal authority, such as adopting standard plumbing or Michigan building codes to further support ordinance language; using existing ordinances, such as planning or zoning ordinances; and adopting the county's environmental health codes. If the MS4 is owned or operated by a drain commissioner the existing Drain Code, PA 40 of 1956 and Chapter 18, section 280.423, is applicable where discharge of certain sewage and waste matter is prohibited.

- Develop an all-encompassing ordinance to fulfill the requirements above. Applicants may want to collaborate with other municipalities to develop consistent ordinance or other regulatory mechanism language and legal authority.

## Progress Reporting

Once a permit is issued, the permittee will be required to track implementation of the SWMP. For the IDEP, in addition to evaluating its effectiveness, a permittee shall provide documentation of the actions taken to eliminate illicit discharges. If an illicit discharge has been identified, but not yet eliminated, a schedule for eliminating the illicit discharge shall be identified.

For illicit discharges identified under an interagency agreement coming from other participating owners/operators of the MS4, the permittee performing dry-weather screening at the discharge points to surface waters of the state shall provide documentation of the notifications to the other participating operators and the information given to them with the notifications.

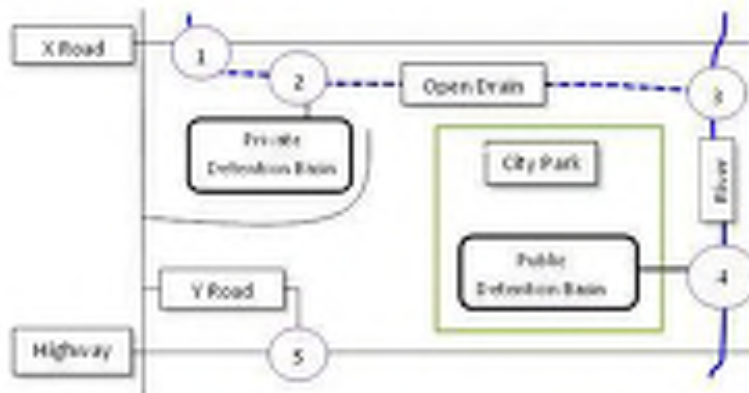
### Example Implementation

The following are examples of activities that when fully tracked provide enough details to describe IDEP implementation efforts.

- Number of discharge points observed for dry-weather screening
- Number of illicit discharges identified
- Location of the illicit discharge into the permittee's MS4 and the receiving water
- Documentation of the illicit discharge notification and information provided with the notification if the illicit discharge does not originate within the permittee's MS4
- Number of illicit discharges corrected. If an illicit discharge is not corrected provide a schedule for elimination.

If implementing an IDEP as part of an interagency agreement, each responsible permittee shall keep detailed records of progress/implementation that shall be provided to the DEQ.

## Appendix A



The map above was created to assist with determining where dry-weather screening may be performed as part of the approved IDEP. As noted in the overview on page one of this compliance assistance document, a determination needs to be made as to whether an open water body is defined as an MS4 or surface water of the state. The following facts apply to the map:

- The open drain is owned and operated by a drain commissioner. The designated county drain is a surface water of the state throughout the open and enclosed portions since it is marked as blue on a topographic map and does not solely convey stormwater.
- X and Y roads are city or county-owned roads served by open and enclosed separate storm sewers that solely convey stormwater.
- The highway is owned and operated by the Michigan Department of Transportation (MDOT).

### Location 1

The MS4 serving X road first discharges to the open drain (surface water of the state). The city or county should consider performing dry-weather screening at this location as part of the IDEP.

### Location 2

The detention pond is privately owned and therefore not a part of the MS4. Dry-weather screening is not required at this location.

### Location 3

The open county drain is a surface water of the state discharging to a river that is also a surface water of the state. There are no MS4s involved with this location and therefore dry-weather screening is not required.

### Location 4

The detention pond is owned and operated by an MS4 permittee. The detention pond first discharges to the river. Dry-weather screening should be considered at this location as part of the IDEP.

### Location 5

The MS4 serving Y road first discharges to MDOT's MS4. This location is considered a "point of discharge" or the location where one MS4 discharges to an MS4 owned or operated by another public body. Dry-weather screening should be considered at this location as part of the IDEP.



## Appendix B – Example of a Collaborative Dry Weather Screening Agreement

*Each participating applicant should fill in the specific details for the italicized placeholders below and include this document in their application. Delete remaining italicized text.*

**Application/Permit Requirement:** Procedures for performing field observations at all outfalls and points of discharge in the priority areas

**Best Management Practice:** Collaborative IDEP for performing field observations at all outfalls and points of discharge in the priority areas

**Responsible Applicants/Permittees:** [List MS4 owners/operators Participating] certify a commitment and participation in this collaborative IDEP.

**Method of Implementation:** [List Responsible MS4 owners/operators] (responsible applicants/permittees) have agreed to work collaboratively to perform dry-weather screening at all outfalls and points of discharge in the priority areas [Define the scope of the regulated MS4s and direct discharges to surface waters of the state] (see attached map). If an illicit connection or discharge is detected, the responsible permittees will work collaboratively to identify and eliminate the source.

The responsible applicants/permittees have agreed that [List Primary Applicant/Permittee] will be the primary contact for performing the field observations. Additional permittees not included with this agreement, but who own or operate storm sewer systems within this regulated MS4 area include, but are not limited to, [List Permittees].

The [Primary Applicant/Permittee] will take responsibility for performing field observations at all outfalls and points of discharge in the priority areas at least once during the permit cycle. The [List Primary Applicant/Permittee] agrees to complete this task no later than [Insert date not to exceed five years]. The [List Primary Applicant/Permittee] may choose to complete this task using a consultant or internal staff.

At the time of application for all responsible applicants/permittees, outfalls and points of discharge in the priority areas will be identified, given a unique ID and the owner/operator identified by the responsible permittees. If unknown outfalls or points of discharge are identified in the field, they will be noted and observed by the [List Primary Applicant/Permittee]. The Primary Applicant/Permittee will make a determination about the ownership of previously-unknown outfalls or points of discharge. Dry-weather flow from private drainage systems will be reported to the DEQ. Outfalls or points of discharge that are found to be associated with orphan drains will be reported to the DEQ and local health department for further follow-up, if required.



Dry-weather screening will be completed in accordance with the prioritized areas identified for the purpose of maximizing the detection and elimination of illicit discharges [Insert or attach prioritized areas as a narrative description or map]. Dry-weather screening will be completed, at a minimum of 48 hours after any precipitation, and include observations of the receiving water characteristics, discharge pipe characteristics and flows. The observations will include: presence/absence of flow; water clarity, color, odor and floatable materials; deposits/stains on the discharge structure or bank; vegetation condition of receiving water; structural condition of discharge pipe; and biology, such as bacterial sheens, algae, and slimes; and staining of the banks and unusual vegetative growth.

If flow is observed from the outfall or point of discharge, then the responsible applicants/ permittees commit to do one of the following:

1. If by observation it is obvious that an illicit discharge is present and the source is obvious, the [Primary Applicant/Permittee] will document the observations and source for follow-up by the responsible permittees. The [Primary Applicant/Permittee] will notify the responsible permittees in writing within 10 days of detection and provide all applicable observation information, including the date and location where the illicit discharge was detected and the obvious source. The illicit discharge will be eliminated.
2. If flow is observed and the source is not obvious, the [Primary Applicant/Permittee] will conduct a field screening of the dry-weather flow to analyze the discharge for the following indicator parameters: [Insert indicator parameters]. Field screening will be conducted at a minimum of two times within two-weeks of the initial observation to determine if flow is intermittent or constant. The [Primary Applicant/Permittee] will notify the responsible permittees in writing within 30 days of detection and given all applicable field information, including the date and location where the illicit discharge was detected. All responsible permittees where the illicit discharge was detected will perform dry-weather screening of their outfalls and points of discharge in the jointly-operated MS4 within 13 months of detection, unless the illicit discharge is eliminated or identified in a portion of the MS4 not influenced by discharges from the responsible permittee's outfalls or points of discharge.

***Optional:*** The [Primary Applicant/Permittee] will perform dry-weather screening of all outfalls or discharge points within the jointly-operated MS4 where the illicit discharge was detected within 13 months of detection, unless the discharge is eliminated or identified in a portion of the MS4 not influenced by discharges from the responsible permittee's outfalls or discharge points. The [Primary Permittee] will provide all applicable information to the responsible permittees for illicit discharge elimination.

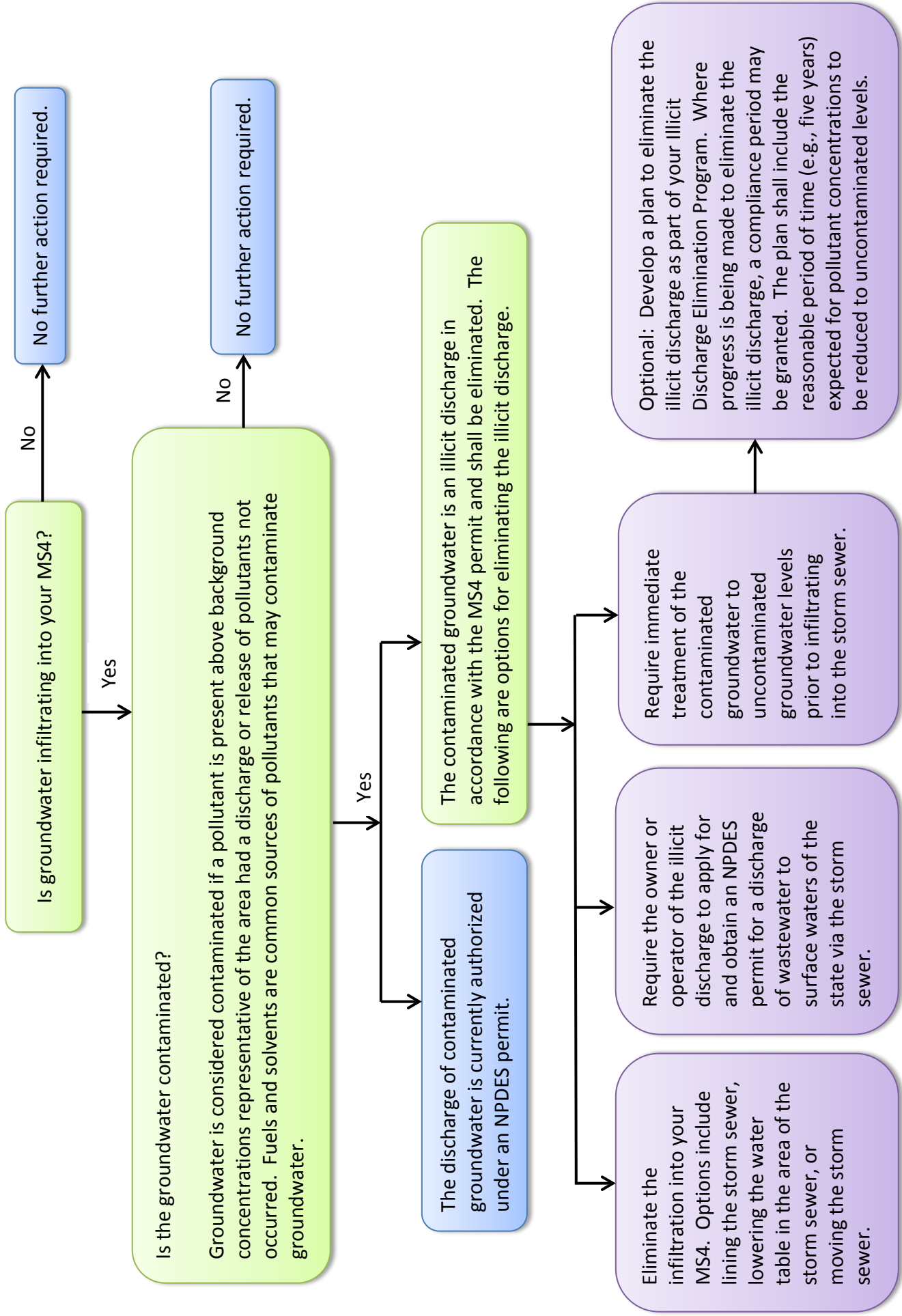
If an illicit discharge is detected, but the source has not been identified, the source will be confirmed by the [responsible applicants/permittees OR primary applicant/permittee] by performing a source investigation. The source investigation includes the following activities: [Insert activities, such as indicator parameter sampling, which may include chemical and bacterial sampling; dye testing; video testing; smoke testing; documented visual observation or physical indicators; homeowner surveys and surface condition inspections for on-site sewage disposal systems; and drainage area investigations].

The responsible permittee with legal authority to eliminate the illicit discharge and pursue enforcement will follow their ordinance and procedures for the expeditious response to and elimination of each identified illicit discharge.

If it is determined that the potential source is coming from an MS4 that is not a party to this agreement then that non-participating MS4 permittee will be notified within 10 days of discovery of the suspected illicit discharge and where applicable all parties will work together to address the problem. If the illicit discharge continues to enter the responsible permittee's MS4, then the responsible permittee will use its legal authority to eliminate the illicit discharge and pursue enforcement action against the non-participating MS4 permittee.

Schedule: Complete by [Insert same date from above]

## Appendix C - Options for Eliminating an Illicit Discharge of Contaminated Groundwater into your MS4



## Illicit Discharges of Contaminated Groundwater to a Regulated MS4

Illicit discharges to regulated MS4s are prohibited and the permittee is required to eliminate the illicit discharge to comply with permit requirements. This document will focus on when an NPDES permit may be appropriate.

### Questions to consider regarding the illicit discharge:

- Is the contaminated groundwater entering the MS4?
- If yes, how has this been documented?
- What are the parameters of concern?
- Has the owner of the MS4 been notified?
- Is there an existing clean-up plan in place that will eliminate the illicit discharge to the MS4 in the next 5 years (e.g. a permit cycle)?

### Options for eliminating illicit discharges to the MS4:

- Prohibit the discharge into the storm sewer (options include lining it, lowering the water table in the area of the storm sewer or moving the storm sewer)
- Treat on-site to uncontaminated groundwater levels
- Apply for and obtain an NPDES permit for the discharge to surface waters of the state via the storm sewer system

### NPDES Permit considerations for illicit discharges to MS4s

- Has the groundwater plume been adequately characterized with respect to pollutants and how the plume intersects the MS4?
  - Natural attenuation in the groundwater can be a plan in some cases when there is a clean-up effort in place and Technology-Based Effluent Limits (TTBELs) won't be more restrictive.
- The NPDES compliance point for the TTBEL/Water Quality Based Effluent Limits (WQBELs) should be representative of the discharge prior to mixing with in the MS4 unless otherwise allowed by the MS4 for WQBELs.
  - Note that water quality requirements must ensure that Water Quality Standards are met in waters of the state; therefore, consistent and reliable dilution available from the storm water/infiltration into the MS4 upstream of surface waters of the state can be considered. Seasonal variation should be addressed.
- The NPDES permit must ensure that TTBELs are specified and that more stringent WQBELs are achieved if applicable.
- The treatment-based requirements should be based on effluent guidelines if promulgated, or previous DEQ decisions for a class of discharges under Best Professional Judgment (BPJ). If these are not available, a new case-specific BPJ decision under 40 CFR 125 should be made and appropriate conditions established. Such conditions could include effluent limits, operational conditions, and/or appropriate Best Management Practices.
- Ensure the discharge of the pollutant will not jeopardize the structural integrity of the MS4.

## Appendix D – Tracer Dye Authorization

In compliance with the provisions R323.1097 of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), the Department of Environment Quality has regulatory jurisdiction over projects involving the application of tracer dyes to surface waters of the state.

An entity is authorized to apply tracer dyes to surface waters of the state by following the provisions under the appropriate certification. The certifications are as follows:

1. For applications or discharges of tracer dyes appearing on the Acceptable Michigan Tracer Dye List to surface waters of the state, coverage under the General Rule 97 Certification of Approval Authorizing Tracer Dyes in Surface Waters is necessary. This process is initiated by submittal of a Notification of Intent by the applicant. Upon acknowledgement from the Department that a Notification of Intent has been received, the applicant is authorized to commence tracer dye study in compliance with the certification. Acknowledgement of receipt of the Notification of Intent can be determined at [www.michigan.gov/deq](http://www.michigan.gov/deq) or by contacting Ms. Renee Comage at 517-241-8714 or by e mail at [comager@michigan.gov](mailto:comager@michigan.gov).
2. For any application or discharge of tracer dyes to waters of the state that is not authorized by a General Rule 97 Certification of Approval, an Individual Rule 97 Certification of Approval is necessary. Upon receipt of approval by the Department, the applicant is authorized to commence treatment under the individual Rule 97 approval.

Additional information on tracer dye studies can be found at [www.michigan.gov/deq](http://www.michigan.gov/deq). On the left side of the screen, click on “Water,” followed by “Rule 97 Certifications,” then “Tracer Dye Studies.” This website includes the Acceptable Michigan Tracer Dye List and Notification of Intent.



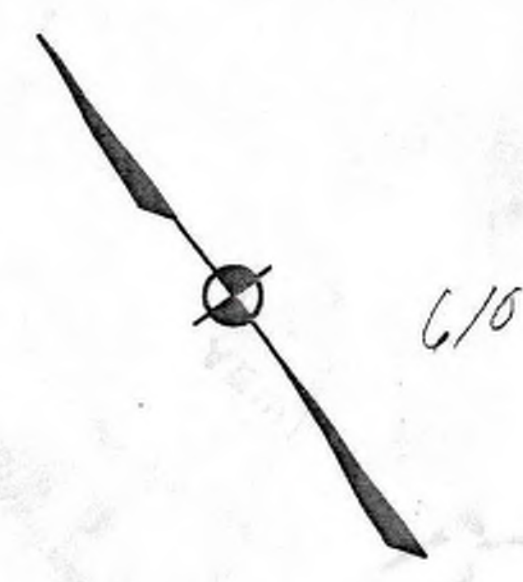
MATCH LINE SEE SHEET 3

- LEGEND**
- 15" SANITARY SEWER & SIZE
  - 15" STORM SEWER & SIZE
  - SANITARY MANHOLE
  - STORM MANHOLE
  - CATCH BASIN
  - DIRECTION OF FLOW
  - H.P. HIGH POINT
  - ⑤ MANHOLE NUMBER
  - DISTRICT BOUNDARY
  - A DISTRICT DESIGNATION
  - (with slash) COULD NOT LOCATE
  - /// ABANDONED SEWER



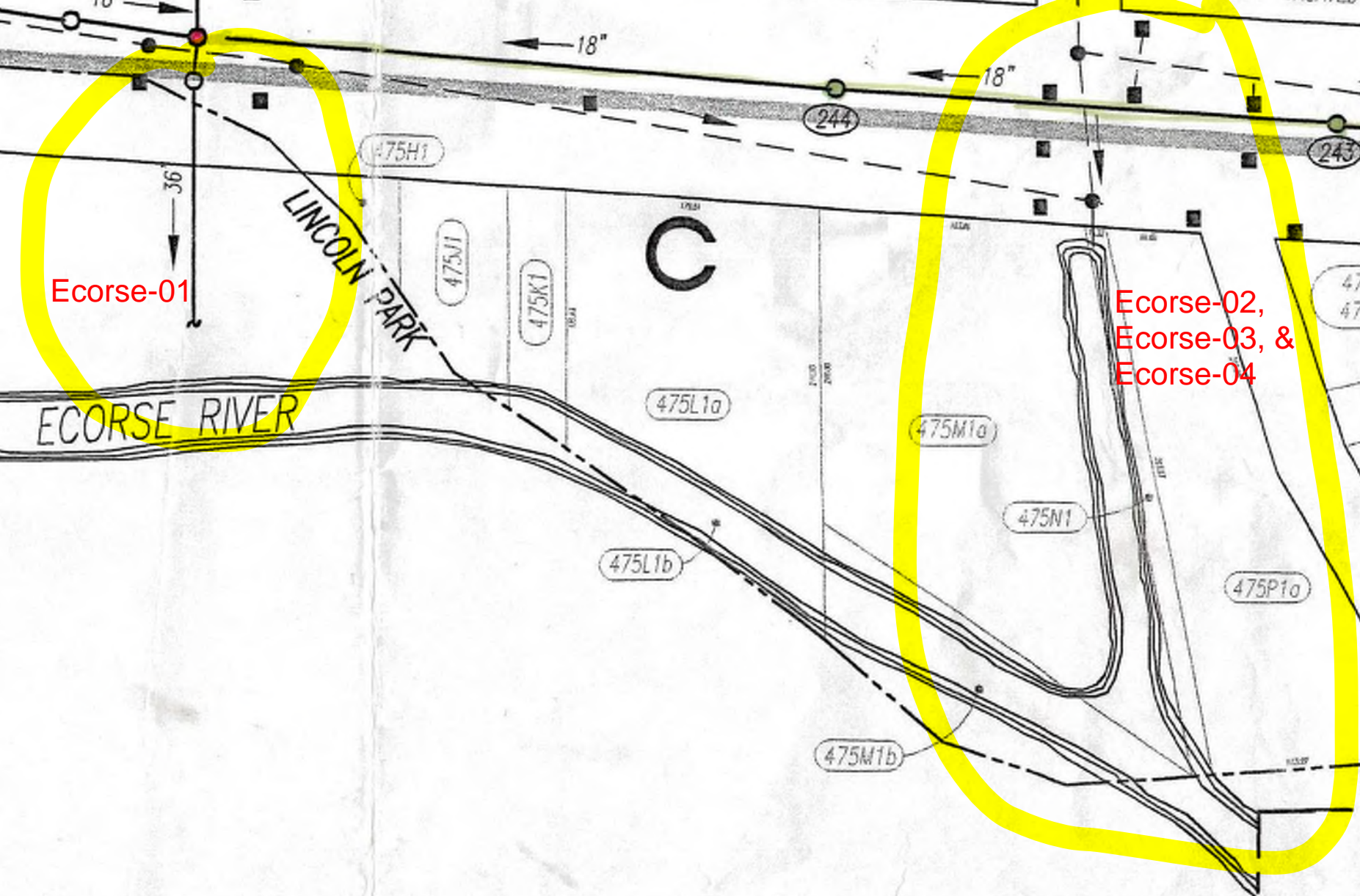
DISTRICT	AB	DISTRICT	C
M.H.	247	M.H.	14
SANITARY SEWERS		SANITARY SEWERS	
8"	22,110'	8"	325'
10"	800'	10"	2,025'
12"	4,430'	12"	33"
18"	2,340'		
24"	2,090'		
33"	240'		
36"	70'		

NOTE 1  
THIS SEWER IS MAINTAINED BY THE CITY OF LINCOLN PARK



REVISION	DATE	Tucker, Young, Jackson, Tull INC.
		CONSULTING ENGINEERS
		565 Larned, Suite 300
		Detroit, Michigan 48226 313/963-8012

CITY OF ECORSE  
WAYNE COUNTY, MICHIGAN  
SCALE: 1" = 100'  
SANITARY AND STORM SEWER SYSTEMS  
SHEET 6



6104

CITY OF DETROIT

CITY OF

LINCOLN PARK

ECORSE RIVER

Ecorse-02,  
Ecorse-03, &  
Ecorse-04

MATCH LINE SEE SHEET 9

MATCH LINE SEE SHEET 7

MATCH LINE SEE SHEET 4

MATCH LINE SEE SHEET 7



MATCH LINE SEE SHEET 6

MATCH LINE SEE SHEET 7

LEGEND

- 15" SANITARY SEWER & SIZE
- 15" STORM SEWER & SIZE
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN
- DIRECTION OF FLOW
- H.P. HIGH POINT
- ⑨ MANHOLE NUMBER
- DISTRICT BOUNDARY
- A DISTRICT DESIGNATION
- CNL COULD NOT LOCATE
- //// ABANDONED SEWER

DISTRICT

DISTRICT	C	D
M.H.	111	29

SANITARY SEWERS

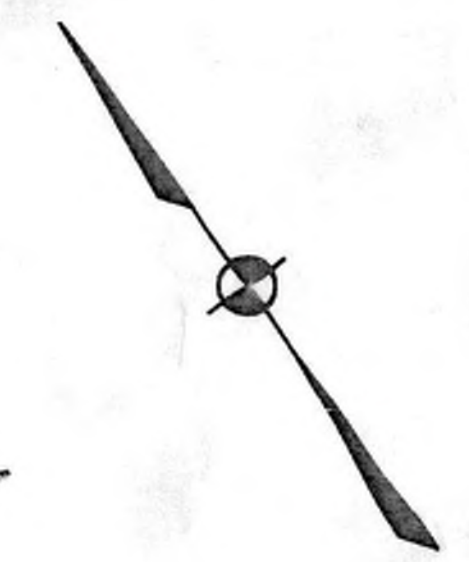
8"	20,350'	
10"	1480'	2480'
12"	1550'	2300'
15"	2580'	
18"	410'	
24"	1490'	1000'
33"	2130'	



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CITY OF ECORSE  
WAYNE COUNTY, MICHIGAN  
SCALE: 1" = 100'

SANITARY AND STORM  
SEWER SYSTEMS  
SHEET 9



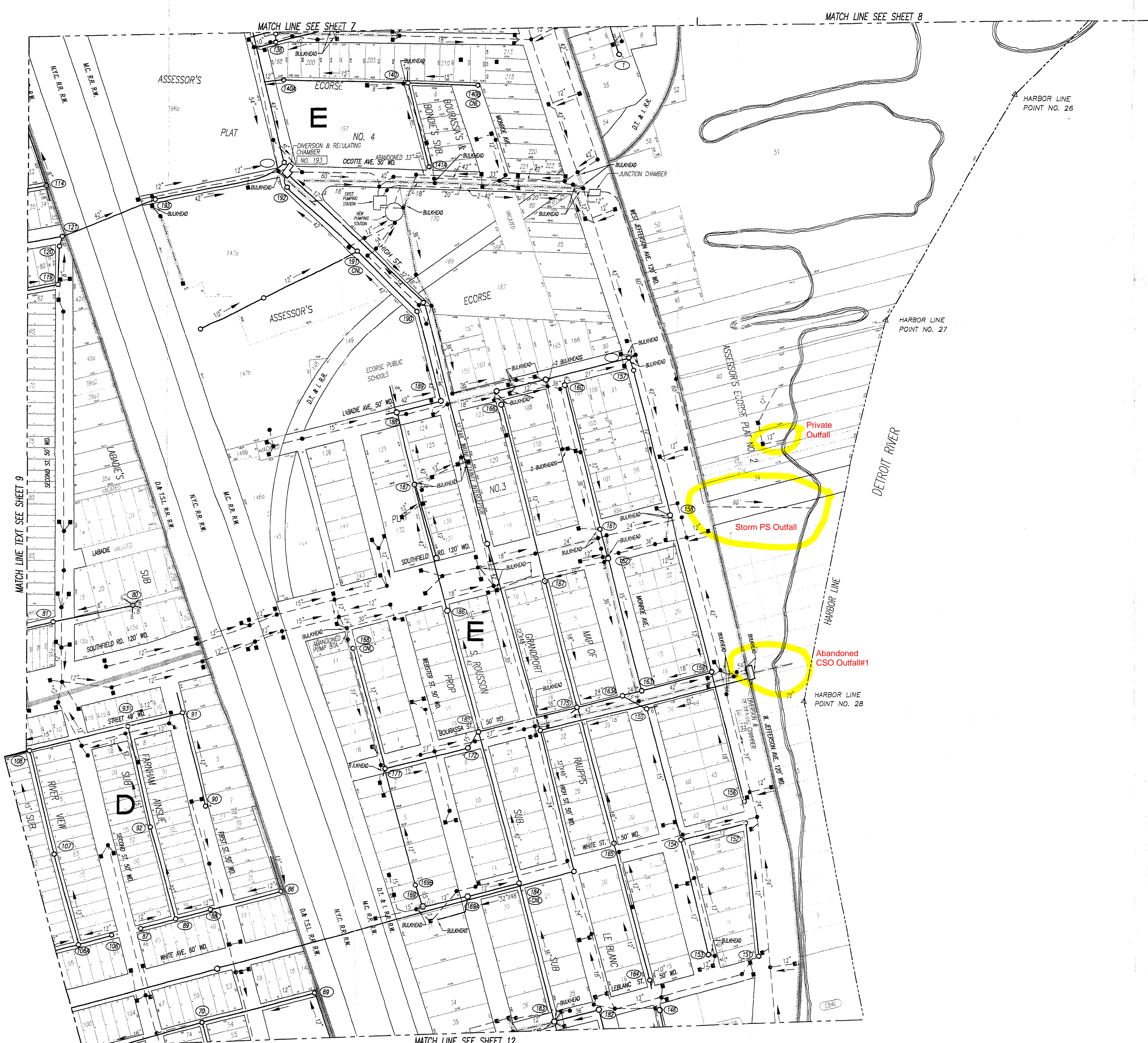
MATCH LINE SEE SHEET 11

MATCH LINE SEE SHEET 12

Ecorse-05

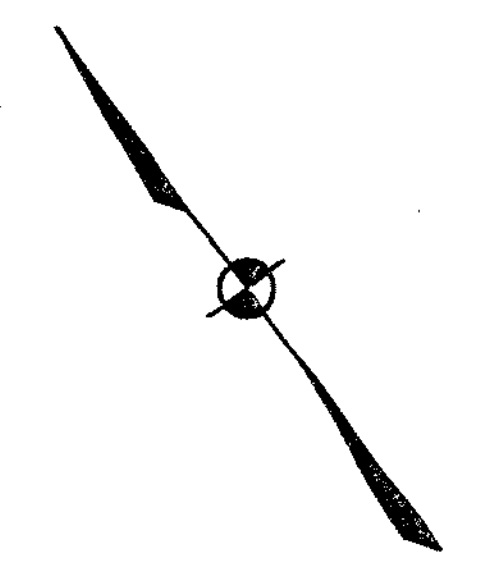
Ecorse-12





- LEGEND**
- 18" SANITARY SEWER & SIZE
  - 15" STORM SEWER & SIZE
  - SANITARY MANHOLE
  - STORM MANHOLE
  - CATCH BASIN
  - DIRECTION OF FLOW
  - H.P. HIGH POINT
  - ③ MANHOLE NUMBER
  - DISTRICT BOUNDARY
  - A DISTRICT DESIGNATION
  - (with slash) COULD NOT LOCATE
  - ABANDONED SEWER

DISTRICT	C	D	E	F
M.H.	6	14	44	1
SANITARY SEWERS				
8"				
10"	600'		420'	
12"			4650'	110'
15"		2060'	1630'	
18"			730'	
21"			340'	
24"			190'	
33"	80'			
36"			610'	
42"			3150'	



610

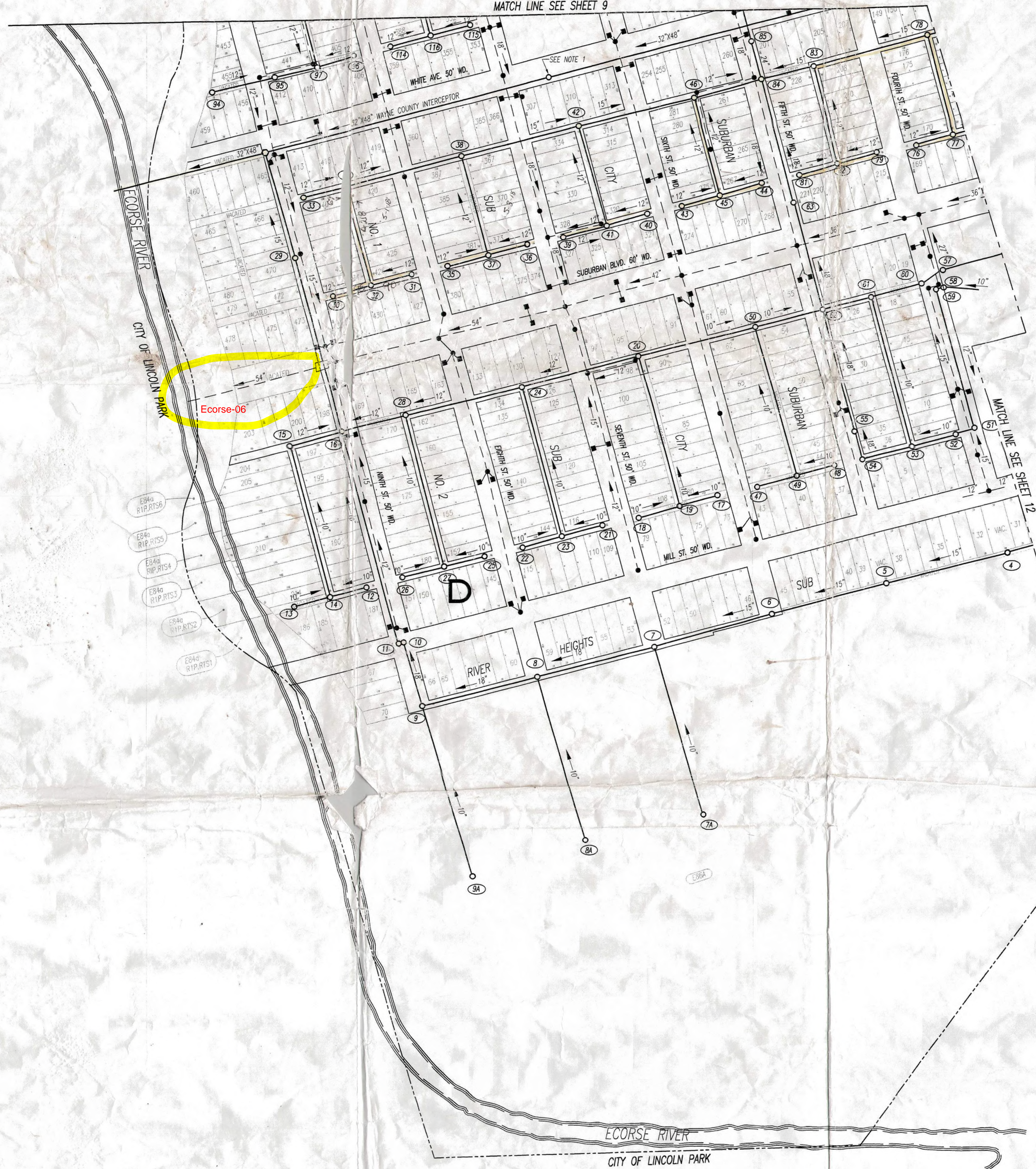
REVISION	DATE	

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Jackson, Tull INC.**  
CONSULTING ENGINEERS  
565 Larned, Suite 300  
Detroit, Michigan 48226 313/963-0812

**CITY OF ECORSE**  
WAYNE COUNTY, MICHIGAN  
SCALE: 1" = 100'  
**SANITARY AND STORM  
SEWER SYSTEMS**  
SHEET 10



MATCH LINE SEE SHEET 9

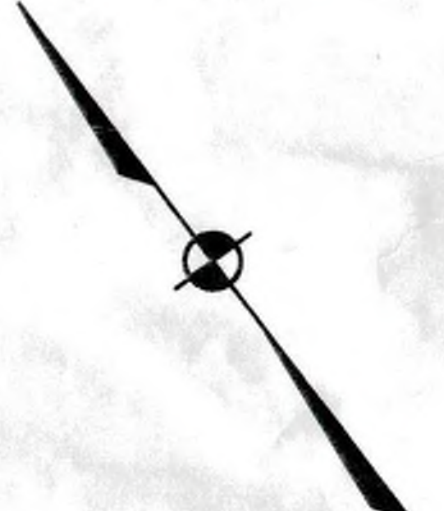


LEGEND

- 15" SANITARY SEWER & SIZE
- 15" STORM SEWER & SIZE
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN
- DIRECTION OF FLOW
- HP HIGH POINT
- ⑨ MANHOLE NUMBER
- DISTRICT BOUNDARY
- A DISTRICT DESIGNATION
- (X) COULD NOT LOCATE
- ////// ABANDONED SEWER

DISTRICT	D
M.H.	78
SANITARY SEWERS	
10"	5290'
12"	4670'
15"	2640'
18"	2140'
24"	130'

NOTE 1  
LOCATION OF TIDE FLEX CHECK VALVE  
RIM 581.58 INVERT 556.08

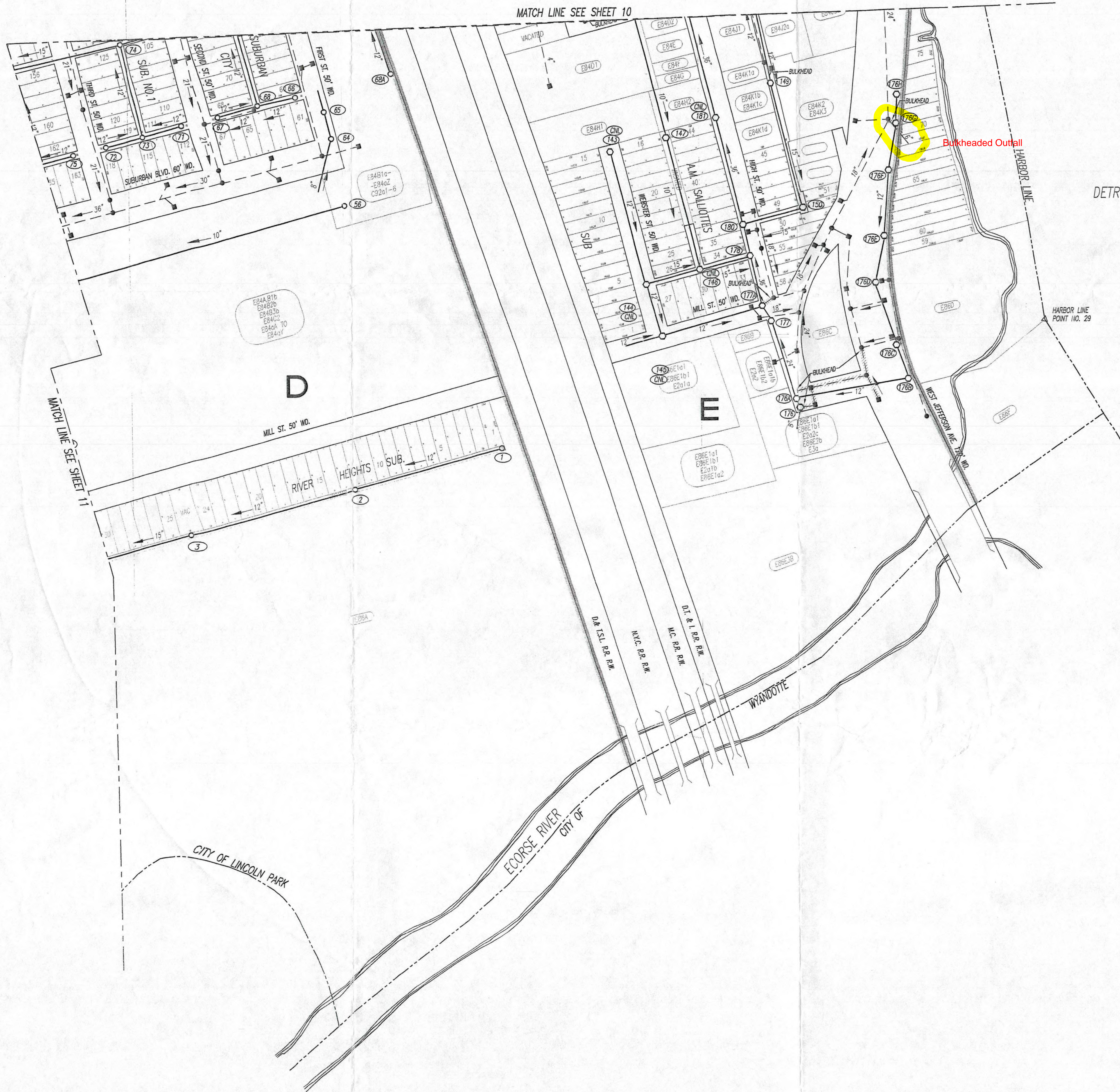


REVISION	DATE	<p>Tucker, Young, Jackson, Tull INC. CONSULTING ENGINEERS</p> <p>565 Larned, Suite 330 Detroit, Michigan 48226 313/963-0812</p>

CITY OF ECORSE  
WAYNE COUNTY, MICHIGAN  
SCALE : 1" = 100'

SANITARY AND STORM  
SEWER SYSTEMS  
SHEET 11





- LEGEND**
- 15" SANITARY SEWER & SIZE
  - 15" STORM SEWER & SIZE
  - SANITARY MANHOLE
  - STORM MANHOLE
  - CATCH BASIN
  - DIRECTION OF FLOW
  - H.P. HIGH POINT
  - ⑨ MANHOLE NUMBER
  - DISTRICT BOUNDARY
  - A DISTRICT DESIGNATION
  - (with CN) COULD NOT LOCATE
  - //// ABANDONED SEWER

DISTRICT	D	E
M.H.	15	24
SANITARY SEWERS		
8"	200'	40'
10"	620'	600'
12"	1690'	1950'
15"	600'	700'
24"		250'
33"		200'
36"		770'



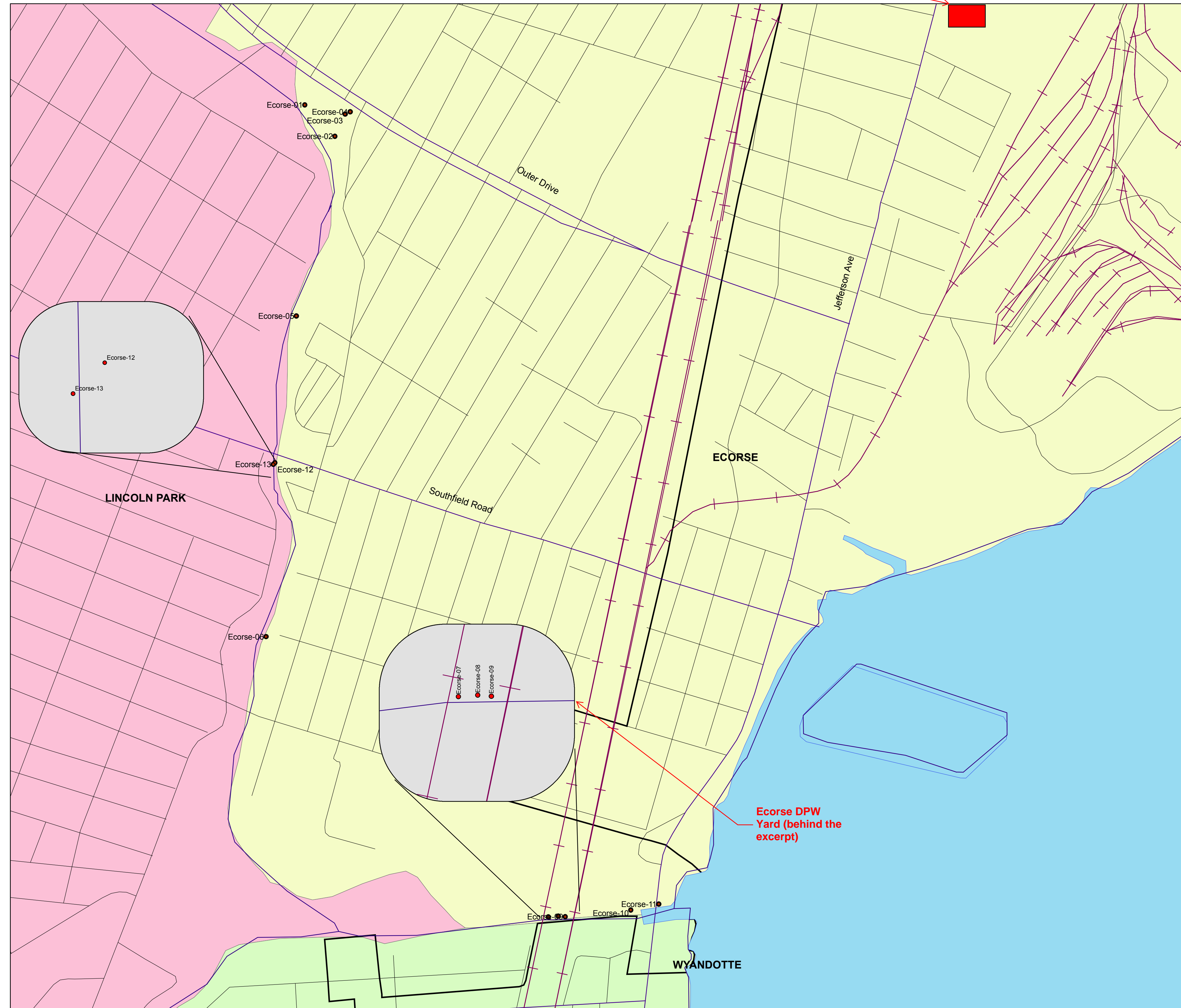
REVISION	DATE

**Tucker, Young, Jackson, Tull INC.**  
CONSULTING ENGINEERS  
565 Larned, Suite 300  
Detroit, Michigan 48226 313/463-0812

**CITY OF ECORSE**  
WAYNE COUNTY, MICHIGAN  
SCALE : 1" = 100'  
**SANITARY AND STORM SEWER SYSTEMS**  
**SHEET 12**



Figure 1-Outfall Locations in the City of Ecorse  
Ecorse Creek Watershed



**Legend**

- Outfalls City of Ecorse
  - Railroad
  - County Road
  - Local Road
  - State Road
  - Stream
  - Detroit River
  - Ecorse Creek Watershed
- TOWN NAME**
- ALLEN PARK
  - DEARBORN
  - DEARBORN HEIGHTS
  - DETROIT
  - ECORSE
  - INKSTER
  - LINCOLN PARK
  - MELVINDALE
  - RIVER ROUGE
  - ROMULUS
  - SOUTHGATE
  - TAYLOR
  - WESTLAND
  - WYANDOTTE
- ecorse\_only\_wgeo



0 0.4 Miles

***CITY OF ECORSE,  
MICHIGAN***

***ZONING ORDINANCE***

**Effective: April 13, 2004**

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## **ARTICLE 12.00**

# **SITE PLAN REVIEW PROCEDURES AND RELATED STANDARDS**

### **Section 12.001 INTENT AND SCOPE OF REGULATIONS**

It is the purpose of this Article to provide standards and requirements for site plan submissions for land uses and structures within the City and establish procedures for the submission and review of site plans as authorized by Section 4 (d) of the Michigan Public Act 207 of 1921, as amended.

### **Section 12.002 SITE PLAN PROCEDURES AND STANDARDS**

#### **a. Site Plan Review**

##### **1. Site Plan Required**

Except as provided in the Section 12.002 (a)(2), the development of any new use, the construction of any new structures, any change of an existing use of land or structure that impacts any requirement of these regulations, and all other building or development activities shall require site plan approval prior to construction and/or occupancy pursuant to this Article. For example, site plan review is required for any of the following activities:

- a. Erection, moving, relocation, or conversion of a building or structure to create additional floor space, other than a single family dwelling.
- b. Any development that would, if approved, provide for the establishment of more than one (1) principal use on a parcel, such as, a single family site condominium or similar project where a single parcel is developed to include two (2) or more sites for detached single family dwellings.
- c. Development of non-residential uses or multiple families uses in a single-family districts.
- d. Any change in land use or change in the use of a structure that potentially affects compliance with the standards set forth within these regulations.
- e. The development or construction of any accessory uses or structures, except for uses or structures that are accessory to a single family dwelling.
- f. Any use or construction for which submission of a site plan is required by any provision of these regulations.
- g. Establishment of any regulated use.

**2. Site Plan Not Required**

Notwithstanding the Section 12.002 (a)(1), site plan approval is not required for the following activities, however, payment of any or all applicable bonds is required for issuance of a building permit.

- a. Construction, moving, relocating or structurally altering a single or two-family home, including any customarily incidental accessory structures.
- b. Excavating, filling, or otherwise removing soil, provided that such activity is normally and customarily incidental to single family uses described in this subsection for which site plan approval is not required.
- c. A change in the ownership of land or a structure.
- d. A change in the use of a structure to a similar use allowed by right in the zoning district in which it is located, provided that no modification to the site is proposed or required by the standards of the regulations and that the site maintains full and continuing compliance with these regulations.

**b. Required Information on Site Plans**

The following information shall be included on all site plans, where applicable:

**1. Application Form**

The application form shall contain the following information:

- a. Applicant's name and address.
- b. Name and address of property owner, if different from applicant.
- c. Common description of property and complete legal description including the parcel tax identification (Sidwell) number(s).
- d. Total gross and net acreage of the site.
- e. Existing zoning.
- f. Proposed use of land and name of proposed development, if applicable.
- g. Proposed buildings to be constructed, including square feet of gross floor area.
- h. Proof of property ownership.
- i. Names, addresses, and telephone numbers of engineers, attorneys, architects, and other professionals associated with the project.
- j. Any additional information required by this Ordinance or additional guidelines adopted by the City Planning Commission.

**2. Descriptive and Identification Data**

Site plans shall consist of an overall plan for the entire development, drawn to a scale of not less than one inch equals twenty feet (1" = 20') for property less than

one (1) acre, one inch equals thirty feet (1" = 30') for property larger than one (1) acre, and one inch equals fifty feet (1" = 50') for property larger than three (3) acres. Sheet size shall be at least twenty-four (24) inches by thirty-six (36) inches. The following descriptive and identification information shall be included on all site plans:

- a. Applicant's name and address, and telephone number.
- b. Title block indicating the name of the development.
- c. Scale.
- d. North point.
- e. Dates of submission and revisions (month, day, year).
- f. General location map drawn to scale with north point.
- g. Legal and common description of property, including parcel identification (Sidwell) number(s).
- h. The dimensions of all lots and property lines, showing the relationship of the site to abutting properties. If the site is a part of a larger parcel, the plan should indicate the boundaries of total land holding.
- i. A schedule for completing the project, including the phasing or timing of all proposed developments, if applicable.
- j. Identification and seal of an architect, engineer, land surveyor, licensed community planner or landscape architect who prepared plan.
- k. Written description of proposed land use.
- l. Zoning classification of applicant's parcel and all abutting parcels.
- m. Proximity to driveways serving adjacent parcels.
- n. Proximity to major thoroughfare(s).
- o. Notation of any variances that have or must be secured.
- p. Net acreage (minus rights-of-way) and total acreage, to the nearest one-tenth (1/10) acre.
- q. Any additional information required by guidelines adopted by the City Planning Commission.

### 3. Site Data

- a. **Front, side, and rear setback** dimensioned from minimum location(s).
- b. Existing lot lines, building lines, structures, parking areas, and all existing improvements on the site and on all parcels within one hundred (100) feet of the site.
- c. Topography on the site and within one hundred (100) feet of the site at two (2) foot contour intervals, referenced to a U.S.G.S. benchmark.
- d. Proposed site plan features, including buildings, roadway widths and names, and parking areas.
- e. Dimensions and centerline of existing and proposed roads and road rights-of-way, along with a declaration of jurisdiction for each.
- f. Acceleration, deceleration, and passing lanes, where required.
- g. Proposed location of driveway entrances and on-site driveways with dimensioned minimum and maximum widths.
- h. Typical cross-section of proposed roads and driveways, if applicable.



- i. Location of existing drainage courses and drains, open or enclosed and with elevations and/or inverts.
- j. Location of existing or proposed underground improvements such as storage tanks, culverts, and water gates.
- k. Location of sidewalks within the site and within the right-of-way.
- l. Exterior lighting locations and method of shielding.
- m. Trash receptacle locations and method of screening, if applicable.
- n. Transformer pad location(s) and method of screening, if applicable.
- o. Parking spaces, including delineated handicap spaces, typical dimensions of spaces, indication of total number of spaces, drives, and method of surfacing.
- p. Information needed to calculate required parking in accordance with Zoning Ordinance standards.
- q. The location of lawns and landscaped areas, including required landscaped greenbelts. The percentage of the site used for open space.
- r. Landscape plan, including location, size, type and quantity of proposed shrubs, trees and other live plant material. A maintenance plan for landscaping shall be stated on the plan.
- s. Location, sizes, and types of existing trees five (5) inches or greater in diameter, measured at one (1) foot above grade, before and after proposed development.
- t. Cross-section of proposed berms.
- u. Location, description, and County Registrar of Deeds filing identification of all easements for public right-of-way, utilities, access, shared access, and drainage.
- v. Designation of fire lanes.
- w. Delineation of dedicated loading/unloading area.
- x. The location of any outdoor storage of materials and the manner by which it will be screened.
- y. Any additional information required by guidelines adopted by the City Planning Commission.
- z. Number of employees during times of peak operation or usage.
- aa. Building capacity and/or total number of persons where appropriate

#### 4. **Building and Structure Details.**

- a. Location, height, and outside dimensions of all proposed buildings or structures.
- b. Indication of the number of stores and number of commercial or office units contained in the building.
- c. Building floor plans.
- d. Total floor area.
- e. Proposed usable floor area.
- f. Location, size, height, and lighting information of all proposed signs.
- g. Proposed fences and walls, including typical cross-section and height above the ground on both sides.

- h. Architectural elevations of building facades and walls, drawn to a scale of one (1) inch equals four (4) feet, or another scale approved by the City Engineer and adequate to determine compliance with the requirements of these regulations. Elevations of proposed buildings shall indicate type of building materials, roof design, dimensions of projections and architectural features, canopies, awnings and overhangs, screen walls and accessory buildings, and any outdoor or roof-located mechanical equipment, such as air conditioning units, heating units, and transformers and related screening. The City Engineer may permit photographs in lieu of evaluations for existing buildings where minor or no change to the facade is proposed.
- i. Any additional information required by guidelines adopted by the City Planning Commission.

#### 5. Information Concerning Utilities, Drainage, and Related Issues

- a. Schematic layout of existing and proposed sanitary sewers connections, water mains, water service leads; hydrant locations that service the site; and, the location and size or capacity of gas, electric, cable TV, telephone lines, and proposed building leads (if structures are not single family residences).
- b. Location and size or capacity of exterior drains, catch basins, retention/detention areas, culverts and other facilities designed to collect store, or transport storm or waste water. The point of discharge for all drains and pipes must be specified on the site plan. Compliance with City discharge standards must be noted.
- c. Indication of site grading, drainage patterns, and proposed contours.
- d. Soil erosion and sedimentation control measures.
- e. Proposed finish grades on the site, including the finish grades of all buildings, driveways, walkways, and parking lots.
- f. Listing of types and quantities of hazardous substances and polluting materials that will be used or stored on-site at the facility in quantities greater than twenty-five (25) gallons per month.
- g. Areas to be used for the storage, use, loading/unloading, recycling, or disposal of hazardous substances and polluting materials, including interior and exterior areas.
- h. Location of underground storage tanks.
- i. Delineation of areas on the site that are known or suspected to be contaminated, together with a report on the status of site cleanup.
- j. Any additional information required by guidelines adopted by the City Planning Commission.

#### 6. Information Concerning Residential Development

- a. The number, type 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. Lot coverage calculations.
- d. Floor plans of typical buildings with square feet of floor area.

- e. Garage and carport locations and details, if proposed.
- f. Details of the pedestrian circulation system.
- g. Location and names of roads and internal drives with an indication of how the proposed circulation system will connect with the existing adjacent roads. The plan must indicate whether proposed roads are intended to be private or dedicated to the public noting appropriate jurisdictions.
- h. Community building location, dimensions, floor plans, and architectural elevations, if applicable.
- i. Swimming pool fencing detail, including height and type of fence, if applicable.
- j. Location and size of recreation open areas.
- k. Indication of type of recreation facilities proposed for recreation area.
- l. Any additional information required by guidelines adopted by the City Planning Commission.

**7. Additional Information**

**a. Information Related to Condominium Development**

The following information shall be provided with all site plans that include a development involving condominium ownership:

- 1). Condominium documents, including the proposed master deed, condominium bylaws, restrictive covenants, and easements.
- 2). Condominium subdivision plan requirements, as specified in Section 66 of Public Act 59 of 1978, as amended, and Rule 401 of the Condominium Rules promulgated by the Michigan Department of Commerce, Corporation and Securities Bureau.

**b. Items Not Applicable**

If any of the items listed are not applicable to a particular site, the following must be provided on the site plan:

- 1). A statement of each item considered not applicable.
- 2). The reason(s) why each listed item is not considered applicable.

**c. Other Data That May Be Required**

Any additional information required by guidelines adopted by the City Planning Commission must also be supplied. Other data may be required if deemed necessary by the Planning Commission, or City Engineer to determine compliance with provisions in these regulations. Such information may include traffic studies, market analysis, environmental assessment and evaluation of the demand on public facilities and services.



**c. Standards for Site Plan Approval**

The following criteria shall be used as a basis upon which site plans will be reviewed and approved:

**1. Adequacy of Information**

The site plan shall include all required information in sufficiently complete and understandable form to provide an accurate description of the proposed uses and structures.

**2. Site Design Characteristics**

Elements of the site design shall be harmoniously and efficiently organized in relation to topography, the size and type of parcel, the character of adjoining land uses, and the type and size of buildings. The site shall be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted by these regulations.

**3. Site Appearance**

Landscaping, earth berms, fencing, signs, walls, structures and other site features shall be designed and located on the site so that the proposed development is aesthetically pleasing and harmonious with nearby existing or future developments.

**4. Compliance with District Requirements**

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 set forth in the Schedule of Regulations (Article 8.00), unless otherwise provided in these regulations.

**5. Privacy**

The site design shall provide 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 uses.

**6. Emergency Vehicle Access**

All buildings or groups of buildings shall be so arranged as to permit convenient and direct emergency vehicle access.

7. **Ingress and Egress**

Every structure or dwelling unit shall be provided with adequate means of ingress and egress via public streets and walkways.

8. **Pedestrian Circulation**

The site plan shall provide a pedestrian circulation system that is insulated as completely as is reasonably possible from the vehicular circulation system.

9. **Parking**

The intended use shall provide sufficient parking facilities as specifically required by Article 14 (General Provision) of this Ordinance.

10. **Vehicular and Pedestrian Circulation Layout**

The arrangement of public and common ways for vehicular and pedestrian circulation shall respect the pattern of existing or planned streets or pedestrian ways in the vicinity of the site. The width of streets and drives shall be appropriate for the volume of traffic they will carry. In order to insure public safety and promote efficient traffic flow and turning movements, the applicant may be required to limit street access points or construct a secondary access road.

11. **Drainage**

Appropriate measures shall be taken to insure that the removal or drainage of surface water will not adversely affect adjoining properties or the capacity of the public drainage system. Provisions shall be made for a feasible storm drainage system, the construction of storm water collection, storage and transportation facilities, and the prevention of erosion. Surface water on all paved areas shall be collected at intervals so that it will not obstruct vehicular or pedestrian traffic and will not create nuisance ponding in paved areas. Final grades may be required to conform to existing and future grades of adjacent properties. Grading and drainage plans shall be subject to review by the City Engineer.

12. **Soil Erosion and Sedimentation**

The proposed development shall include measures to prevent soil erosion and sedimentation during and upon completion of construction, in accordance with current Wayne County Roads and City engineering standards.

13a. **Exterior Lighting**

Exterior lighting shall be designed so that it is deflected away from adjoining properties, visual glare is minimized, and so that it does not impede vision of drivers along adjacent streets.

**13b. Public Services**

Adequate services and utilities, including water, sewage disposal, sanitary sewer, and storm water control services, shall be available or provided, and shall be designed with sufficient capacity and durability to properly serve the development.

**14. Screening**

Off-street parking, loading and unloading areas, outside refuse storage areas, and other storage areas that are visible from adjacent homes or from public roads, shall be screened by walls or landscaping of adequate height. All walls must be solid and constructed of masonry and shall be subject to the approval of the code official and cannot be located in required setbacks without written authorization from the code official.

**15. Danger from Fire and Hazards**

The level of vulnerability to injury or loss from incidents involving fire and hazardous materials or processes shall not exceed the capability of the City to respond to such incidents so as to prevent injury and loss of life and property. In making such an evaluation, the City shall consider the location, type, characteristics, quantities, and use of materials or processes in relation to the personnel, training, equipment and materials, and emergency response plans and capabilities of the City.

Sites that include significant storage of flammable or hazardous materials or waste, fuels, salt, or chemicals shall be designed to prevent spills and discharges of polluting materials to the surface of the ground, groundwater, and public sewer system.

**16. Health and Safety Concerns**

Any use in any zoning district shall comply with applicable federal, state, county, and local health and pollution laws and regulations with respect to noise; dust, smoke and other air pollutants; vibration; glare and heat; fire and explosive hazards; gases; electromagnetic radiation; radioactive materials; and, toxic and hazardous materials.

**17. Sequence of Development**

All development phases shall be designed in logical sequence to insure that each phase will independently function in a safe, convenient and efficient manner without being dependent upon subsequent improvements in a later phase or on other sites.



**d. Site Plan Applications**

**1. Submission of Site Plan for Review by Planning Commission**

In order to initiate formal review by the Planning Commission, the applicant is required to submit the following materials to the City Engineer:

- a. Three (3) completed and signed copies of an application for Site Plan Review;
- b. Fifteen (15) individually folded copies of the site plan;
- c. Evidence that the plan has been submitted for review to all affected jurisdictions, including but not limited to Wayne County Roads, Wayne County Department of Public Works, the Wayne County Health Department, Michigan Department of Environmental Quality (MDEQ), U.S. Army Corps of Engineers, and the Michigan Department of Transportation (MDOT). If review is not submitted, a statement of a date certain for submission or the reasons why their review is not applicable must be provided.
- d. The required review fee.

These materials must be submitted to the City Engineer in sufficient time to allow review by City staff and consultants prior to the Planning Commission meeting at which the review will occur. The City Engineer shall determine what is "sufficient time," based on the scope and complexity of the proposal.

**2. Distribution of Plans**

Upon submission of all required application materials and following completion of all items required by this Ordinance and any other site plan review guidelines adopted by the Planning Commission, the proposed site plan shall be placed on the next open Planning Commission agenda. The site plan and application shall be distributed by the City Engineer to appropriate City officials and the City Planner for review. If deemed necessary by the City Engineer, the plans may also be submitted to the City Engineer for review.

**e. Review and Action**

**1. Initial Review**

The Planning Commission may hold informal workshop and formal regular or special meetings. The first meeting at which a site plan proposal is considered may be a workshop called for that purpose or at a regular or special meeting of the Planning Commission. The Planning Commission shall review the reports of the appropriate City staff and consultants and discuss the findings and recommendations with the applicant.

**2. Request for Revisions**

Upon review of the site plan proposal, the Planning Commission may require the applicant to revise the plans or supply additional information. The applicant shall submit any revised plans for review prior to formal action being considered. All review fees must be paid prior to any review. It shall be the applicant's responsibility to consult with City staff and consultants during any revision process. Action on the site plan shall remain tabled until the next regular Planning Commission meeting following submission of a substantially complete plan.

**3. Public Hearing**

Generally, a public hearing on a site plan for a permitted use in a zoning district is not required. A public hearing shall be required on any site plan involving use(s) subject to special land use approval per Section 14.00xx or planned development per Section 7.004 (b) 1. After payment of appropriate fees, a public hearing may be set for a regular or special meeting of the Planning Commission. No public hearing may be held before the Planning Commission has had an opportunity to review the plan.

**4. Submission of Plans for Final Review**

Fifteen (15) individually folded copies of the revised site plan shall be submitted for review in advance of a meeting according to a processing schedule adopted by the Planning Commission. The City Engineer shall distribute the revised plan to the appropriate reviewing parties.

**5. Final Action**

The Planning Commission is authorized to take the following final action on a site plan, subject to guidelines in the Zoning Ordinance:

- Approval;
- Approval with conditions;
- Denial; or
- Table the site plan.

**a. Approval**

Upon determination that a site plan is in full compliance with the standards and requirements of these regulations and other applicable City regulations and laws, including those of section 14.006 of this Ordinance (Performance Standards), approval shall be granted.

b. Approval with 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. Conditions may include the requirement to obtain variances or obtain approvals from other agencies. For example, as a condition of approval, the Planning Commission may delegate the responsibility for final approval of engineering and other technical issues to the City Engineer or other appropriate staff or consultants. If a plan is approved subject to conditions, the applicant shall submit a revised plan with a revision date, indicating full compliance with the required conditions.

The Planning Commission may require that the applicant re-submit the site plan for final approval by the Planning Commission after conditions have been met. The Planning Commission may waive its right to review the revised plan, and delegate authority to the City Engineer to review and approve a revised site plan on the Commission's behalf after required conditions have been addressed. The Planning Commission may require that the City Engineer secure a favorable recommendation from the City Planner and/or City Engineer prior to the revised plan being considered approved.

c. Denial

Upon determination by the Planning Commission that a site plan does not comply with the standards and regulations set forth in these regulations, or that the submittal requires extensive revision to comply with standards and regulations, approval of the site plan shall be denied.

d. Tabling

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

6. Recording of Site Plan Review Action

Each action taken with reference to a site plan review shall be duly recorded in the minutes of the Planning Commission. The grounds for action taken upon each site plan shall also be recorded in the minutes.

After the Planning Commission has taken final action on a site plan, the Planning Commission secretary shall clearly mark three (3) copies of the application and final site plans APPROVED or DENIED, as appropriate, with the date that action was taken. One (1) marked copy will be returned to the applicant and the City will keep the other two (2) copies on file.



**7. Procedure After Site Plan Approval**

**a. Building Permit**

Following final approval of the site plan by the Planning Commission, the applicant may apply to the City for a building permit. The issuance of a building permit shall be subject to the review of construction plans by the Building Department, and, if deemed necessary by the Building Official, the City Engineer. It shall be the responsibility of the applicant to obtain all applicable City, county, or state permits prior to issuance of a building permit.

**b. Approval Expiration**

Site plan approval becomes null and void if substantial construction has not commenced within twelve (12) months following the final approval of the site plan by the Planning Commission, or if construction has not been completed within twelve (12) months after it commenced following the issuance of a building permit. In such a case, the applicant shall file a new application. Review by the Planning Commission of the new application and site plan shall be required.

**c. Approval Extensions**

Upon written request of the applicant, prior to the expiration of a previously granted approval, the Planning Commission may review the circumstances surrounding a failure to meet the required deadlines. The Planning Commission may grant an extension of up to twelve (12) months to an approval, if it finds that the approved site plan continues to adequately represent current conditions on and surrounding the site and that the site plan conforms to the standards of the City regulations in effect at the time of the applicant's request for an extension.

**d. Application for Certificate of Occupancy**

Following building construction and completion of site work, the applicant may apply to the City for a certificate of occupancy or a temporary certificate of occupancy from the Building Official in accordance with the procedures set forth Section 16.003. It shall be the applicant's responsibility to obtain the required certificates prior to any occupancy of the property.

**e. Site Maintenance After Approval**

It shall be the responsibility of the owner of a property for which site plan approval has been granted to maintain the property in accordance with the approved site design on a continuing basis until:

- the property is razed;
- new zoning regulations supersede the regulations upon which site plan approval was based; or
- a new site design is approved following Planning Commission review.

Any property owner who fails to maintain an approved site plan in full compliance with approvals granted by the Planning Commission according to the provisions of these regulations, shall be deemed in violation of the use provisions of these regulations and shall be subject to the penalties stated in Section 18.008.

**8. Revocation**

The Planning Commission may revoke an approved site plan if construction on the site is not completed or is not progressing in a manner consistent with the approved plans. In such a case, the site plan shall be placed on the agenda of a Planning Commission meeting for a public hearing. The City Engineer shall cause written notice to be provided to the applicant at least ten (10) days prior to the meeting and shall publish notice of said hearing no later than five (5) days prior to the date and time. The notice shall reduce all alleged inconsistencies and violations to writing. The City Engineer, the Building Official, other appropriate City staff, the applicant, and other interested persons shall be allowed to present information and testimony to the Planning Commission at the hearing. If the Planning Commission finds that an inconsistency or violation of the approved site plan exists at the time of the hearing, then, by a majority vote of attending members, the Planning Commission may revoke the approval of the site plan and order the site returned to its original condition by a date certain. Failure to comply with such an order shall be deemed a violation of the use provisions of these regulations and shall be subject to the penalties stated herein including possible forfeiture of all or a portion of the applicants bond.

**9. Modification to Approved Plan**

A previously approved site plan may be subsequently modified, subject to the following requirements:

**a. Review of Minor Modifications to Site Plans**

Minor modifications to an approved site plan may be reviewed and approved by the City Engineer consistent with the minimum information requirements for a sketch plan as stated in Section 12.002 (e)(10), provided that the requested modifications meet the definition of a minor modification and do not include any one (1) of the following items:

- a request for a variance;

- a special land use;
- a planned development plan; or
- the continuation of a nonconforming use or structure.

Minor modifications that require a variance, special land use, planned development, or continuation of a nonconforming use or structure shall be subject to review and approval by the Planning Commission.

1). Minor Modification Defined

Minor modifications are changes that do not substantially affect the character or intensity of the use, vehicular or pedestrian circulation, drainage patterns, the demand for public services, or the vulnerability to hazards. Examples of minor modifications include:

- An addition to an existing building that does not increase or decrease the floor space by more than twenty-five percent (25%) or three thousand (3,000) square feet, whichever is less.
- Re-occupancy of a building by a similar use permitted by these regulations.
- Changes to building height that do not add an additional floor.
- Additions or alterations to the landscape plan or landscape materials.
- Relocation or re-sizing utility supply lines or service connections.
- Relocation or screening of the trash receptacle.
- Alterations to the internal parking layout of an off-street lot in which the total available spaces is unchanged.

Construction of a new building or structure, adding or deleting parking spaces, constructing additional stories or the introduction of additional curb cuts onto a public road are examples of modifications that are not considered minor.

2). Determination of Minor Modification

The City Engineer shall determine if the proposed modifications are minor in accordance with the guidelines in this Section. In order to make a determination, the City Engineer may solicit comments and recommendations from the City Attorney, City Planner, City Engineer, and public safety officials, as deemed necessary.

b. Modifications Not Deemed "Minor"

If the City Engineer does not deem the modifications minor, then review and approval of the changes by the Planning Commission shall be required. Planning Commission review shall be required for all site plans that involve:



- a request for a variance;
- a special land use;
- a discretionary decision such as a planned development plan; or
- the continuation of a nonconforming use or structure.

City Council review and approval shall be required for modifications to a site plan that originally required City Council approval.

c. **Recording of Action**

Each action related to modification of a site plan shall be duly recorded in writing on a copy of the approved plan, and shall be kept on file in the office of the City Engineer. The City Engineer shall have the authority to require a new site plan for the purposes of clarity. The Planning Commission shall be advised of all minor site plan modifications approved by the City Engineer and such modifications shall be noted on the site plan and in the minutes of the Planning Commission.

10. **Required Information for Sketch Plans**

The following information shall accompany or be included on all sketch plans:

- a. An application form containing information as required in Section 6.002 (B)(1) shall be prepared and submitted with the sketch plan.
- b. Sketch plans shall consist of an overall plan for the building and site or part of a site related to the building. The plan shall be drawn to a scale of not less than one inch equals twenty feet (1" = 20') for property less than one (1) acre, one inch equals thirty feet (1" = 30') for property larger than one (1) acre, and one inch equals fifty feet (1" = 50') for property larger than three (3) acres. Sheet size shall be at least twenty-four (24) inches by thirty-six (36) inches.

The following description and identification information shall be included on all sketch plans:

1. Scale and north point.
2. Name, address, and telephone number of the applicant and the person preparing the drawing.
3. Zoning classification of the subject site.
4. Property boundary lines and dimensions; if more than one (1) lot is included in the site, the lot lines of each lot shall be indicated.
5. Front, side, and rear setbacks dimensioned from the minimum location(s).
6. Existing and proposed driveways and edges of all existing and proposed paved surfaces, as required.
7. Parking spaces for the use, at the size required by this Ordinance.

8. The outline and dimensions of all existing and proposed exterior building walls on the site.
9. All exterior site improvements or modifications proposed in conjunction with the use described on the sketch plan including, but not limited to, building construction, new pavement, landscaping, trash receptacle, and site clearing.
10. A written description of the proposed use(s).
11. A floor plan describing the use of all interior floor space.