

## STORM WATER MANAGEMENT PROGRAM

### 1.0 Introduction

This Storm Water Management Program (SWMP) has been developed pursuant to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Municipal Separate Storm Sewer System (MS4) Storm Water Discharge Program for the City of River Rouge, Wayne County, Michigan (“City”). This SWMP has been updated to include additional information requested in the August 29, 2019 letter to the City from EGLE regarding the MS4 Permit Application and subsequent email and telephone communications between EGLE personnel and the City’s consultant, Rick P. Harding, Ph.D., Senior Principal with Integrated Environmental, Inc.

#### Storm Water Collection and Conveyance System Overview

The SWMP only applies to approximately two percent of the City’s sewer service area because the remaining portion of the City is serviced by a combined sewer system that discharges to the Wyandotte Wastewater Treatment Plant.

The following direct link shows a map of the Detroit urbanized area within which the City is located.

[https://www.michigan.gov/documents/deq/wb-stormwater-MS4-Detroit\\_248451\\_7.pdf](https://www.michigan.gov/documents/deq/wb-stormwater-MS4-Detroit_248451_7.pdf)

A map of the City’s separate storm sewer system and associated outfall covered by this SWMP is provided as Figure No. 1; and a detailed view of the catch basin locations within the separate storm sewer system is Provided as Figure No. 2.

As shown in Figure Nos. 1 and 2, the City’s storm water collection and conveyance system is very limited in areal coverage within a residential area of the City and there are no applicant-owned or operated facilities or City Public Schools with a discharge of storm water to surface waters of the State. The separate storm sewer system has one outfall at the Ironton Street Lift Station which discharges to the Detroit River via an outfall located underwater within the Nicholson Slip at the U.S. Steel property.

As noted herein, the City has educational outreach and employee training programs as well as performs routine cleaning of the streets and catch basins where storm water collects for conveyance to the subject outfall to the Detroit River. The City has and continues to surveil for and mitigate illicit discharges to the storm water collection and conveyance system and conducts

regularly scheduled monitoring of the quality of the storm water at the Ironton Street Lift Station prior to discharge to the Detroit River. The major components of this SWMP are the Public Education Program (PEP), Public Involvement and Participation Program (PIPP), Illicit Discharge Elimination Program (IDEP), Post Construction Storm Water Management Program, Construction Storm Water Run-Off Control Program, Pollution Prevention/Good Housekeeping for Municipal Operations Program, and Enforcement Response Procedure. These components are presented in Tab Nos. 1 through 7, respectively.

The City of River Rouge continues to evaluate storm water management within the City and surrounding area. As such, this SWMP is periodically modified to reflect changes identified to improve the storm water quality within the City.

## **2.0 Best Management Practices (BMPs) and Measureable Goals**

BMPs that have or will be implemented and the measurable goals for each BMP are included in Tab Nos. 1 through 7, where applicable.

## **3.0 Receiving Water Quality Status**

The Detroit River is brownish in color (i.e., turbid) with a visibility (i.e., site distance) of about two to three feet. Many forms of animals are found in and around the river. The river bottom is inconsistent at the banks where it is possible to see, in that, some areas are rocky with algae growth while others are silty/mucky with some vegetative growth. Some of the banks are in need of restoration while others have been restored and appear to be well established. Floating debris is common and the river bottom in the distressed bank areas are littered with debris. Occasionally, a sheen can be seen floating on the water.

## **4.0 Receiving Water Quality Stresses**

The City's separate storm sewer system discharges directly to the Detroit River. Stresses on the river may include commercial/industrial outfalls, public littering, soil and sediment, and turbidity, to name a few. At this time, the City is unaware of any specific point of contamination entry into the storm sewer collection and conveyance system.

## **5.0 Upcoming Activities**

The City will continue to educate its employees and the general public regarding the management of storm water quality. The City may periodically distribute storm water management informational flyers to each resident living in the drainage area of the storm sewer system based on the feedback received from the City employees and residents.

The City will continue to implement its catch basin marking program so the citizens will be aware of which catch basins and storm sewer inlets discharge water directly to the Detroit River; and the IDEP program.

The City's website will be modified as part of its PEP to include a section dedicated to storm water management so that the public is aware of the following: drainage areas where the storm water system is located within the City, including the Ironton Street Lift Station; this SWMP; how to minimize impacts to the Detroit River; what an illicit discharge is and how to report a suspected illicit discharge; preferred cleaning materials and procedures for car, pavement, and power washing; proper disposal of grass clippings, leaf litter and animal waste; and related information.

## **6.0 Notice of Drainage System Operators Nested within the Community Boundaries**

There has been no change in nested jurisdiction within the City limits as there are none within the City.

## **7.0 Nested Jurisdiction as Associated Permittee**

Consistent with the aforementioned, the City of River Rouge is solely named on the permit, as there are no nested jurisdictions within the City.

## FIGURES



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### Legend

- Storm Sewer
- City of River Rouge Boundary
- Drainage Area

Notes:

1. This figure was developed using Wayne County digital orthophoto quadrangles 1998 series downloaded from the following website:  
[http://www.mcgi.state.mi.us/imgdl/dogs\\_zip/1998\\_Series.htm/Wayne/index.html](http://www.mcgi.state.mi.us/imgdl/dogs_zip/1998_Series.htm/Wayne/index.html)
2. All features and locations are approximate.

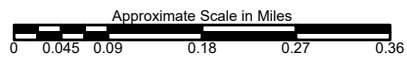
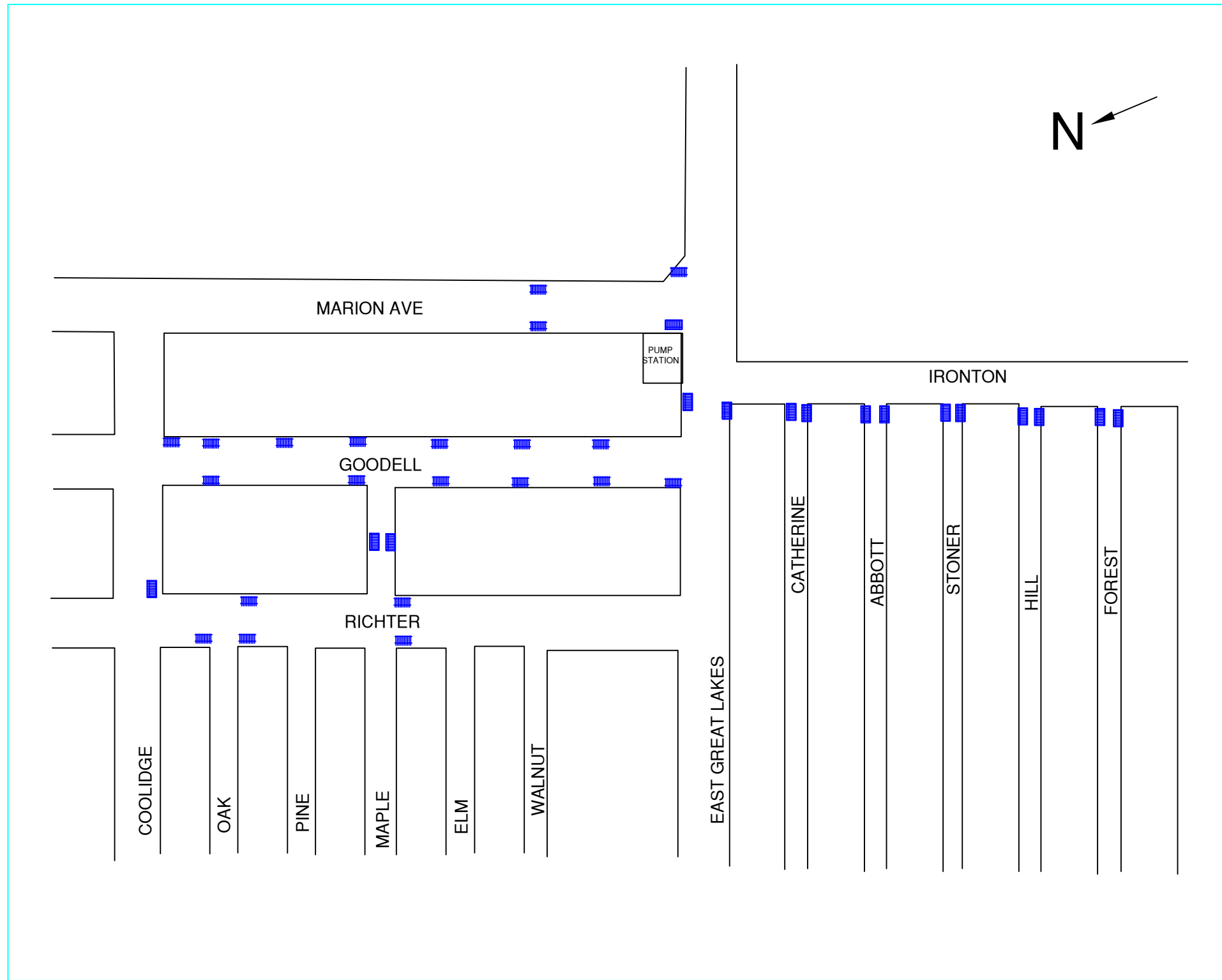




Figure No. 1	The City of River Rouge	Drawn By: M. Irvine Date: February 24, 2010	<b>INTEGRATED ENVIRONMENTAL, INC.</b> <i>Scientists Who Think Business™</i> <small>www.intenv.com</small>
	Separate Storm Water System	Reviewed By: J. McHugh Project No.: 123010	
Approved By: R. Harding Scale: As Shown		Port Huron 19849 Middlebelt Road Livonia, MI 48152 Tel: (248) 477-5021 Fax: (248) 477-6971	Port Huron 2425 Military Street Bldg. 2 Port Huron, MI 48060 Tel: (810) 987-8511 Fax: (810) 987-8517



**LEGEND:**

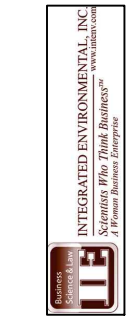
-  STORM WATER CATCH BASIN
-  RAILROAD TRACKS

**NOTES:**

1. THIS FIGURE WAS DEVELOPED USING THE FOLLOWING:
  - a. OBSERVATIONS MADE BY INTEGRATED ENVIRONMENTAL, INC. PERSONNEL ON OCTOBER 8, 2019; AND
  - b. HAND DRAWN SKETCHES PROVIDED BY THE CITY OF RIVER ROUGE DEPARTMENT OF PUBLIC WORKS ON OCTOBER 21, 2019.
2. THE LOCATIONS OF PROMINENT PHYSICAL FEATURES WERE NOT CERTIFIED BY A LICENSED LAND SURVEYOR AND WERE APPROXIMATELY DETERMINED USING THE ABOVE-NOTED OBSERVATIONS AND FIGURES. THIS INFORMATION SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHODS USED.



**CITY OF RIVER ROUGE, MICHIGAN  
STORM SEWER CATCH  
BASIN LOCATIONS**



LIVONIA  
19845 Middlebelt Rd  
Livonia, MI 48152  
T: 248.477.5021  
F: 248.477.6971

DATE: 21-OCT-2019
PROJECT NO: 123010
SCALE: NOT TO SCALE
DRAWN BY: NMM
APPROVED BY: RPH
FIGURE NO: 2

**TAB NO. 1**

**Public Education Program (PEP)**



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## **PUBLIC EDUCATION PROGRAM (PEP)**

### **I. Introduction**

Pursuant to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Storm Water Discharge Permit No. MIS040000, the City of River Rouge (“City”) has developed this Public Education Program (PEP) to promote, publicize, and facilitate proper storm water management education. The PEP encourages public participation, demonstrates the impact of storm water pollution, and instructs the public on proper use and disposal of chemicals, animal waste, detergents and other forms of contamination to waters of the State.

The City is located on the Rouge and Detroit Rivers and this location has provided many unique opportunities for the City of River Rouge to highlight environmental issues. The City has historically depended on its proximity to the Rouge and Detroit Rivers for industry and recreation and will continue to depend on the rivers to provide a vital aspect of the community. Currently, the City offers many services to its residents that benefit both the community and environment (i.e., curb-side recycling, brush pickup, street sweeping, used oil recycling, household hazardous waste collection, etc.). The City also spends monies on construction projects to enhance the environment. The City recognizes that without continuing public support and education, the benefits realized by these types of projects are not fully realized.

This PEP is implemented by a number of City departments in conjunction with neighboring municipalities, county agencies, and community organizations, as appropriate. City departments involved in this program include, but are not limited to, Public Works, Planning, Purchasing, Recreation, Fire, the City Mayor, Attorney and Clerk’s offices. These participants use the Internet, brochures, newsletters, flyers, and/or public assemblies to distribute information and educate the public.

There are seven target categories of the PEP which are further explained in the following sections.

1. Promote public responsibility and stewardship in the permittee’s watershed.
2. Inform and educate the public about the connection of the Municipal Separate Storm Sewer System (MS4) to area water bodies and the potential impacts discharges can have on surface waters of the State.



3. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.
4. Promote preferred cleaning materials and procedures for car, pavement, and power washing.
5. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.
6. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter the MS4.
7. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, and motor vehicle fluids.

## **II. Targeted Participants**

The targeted program participants are as follows:

1. Friends of the Detroit River;
2. Persons living and working in the City;
3. Persons visiting the City;
4. Businesses and non-profit groups within the City.
5. School age children within the City; and
6. Commercial, industrial and institutional entities within the City.

## **III. Public Education Operative Elements**

1. Educate the public on the hazards associated with illicit discharges and improper disposal of waste, including pet waste. Information is made available through postings and flyers located at City-owned buildings, and the City's website to describe what illicit discharges are and how to report them. The information also includes the impacts that illicit discharges and improper waste disposal have on the storm water quality. Encourage the public to report illicit discharges or improper disposal of material into the City's separate storm water collection and conveyance system. Specifically, a resident can call the City

Department of Public Works (DPW) at (313) 842-6482 to report any illicit discharge into the storm water collection and conveyance system.

2. Education of the public on the location of the separate storm water drainage structures, the ultimate storm water discharge location to the Detroit River, and potential contaminants that could impact the storm water.

The City has implemented a program whereby catch basins that collect storm water which discharges directly to the Detroit River are painted yellow. Residents are notified of the markings through informational mailings sent to the residents, handouts, and/or other publications that are available to the public in the Community Center, River Rouge Recreation Center, River Rouge Public Library, River Rouge City Hall, and the City's website.

3. Education of the public on the availability, location and requirements of facilities for disposal or drop-off of household wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.
  - The City, in cooperation with Wayne County, provide information to residents, via the City website, detailing the location, times, and list of acceptable items (i.e., batteries, oil, aerosol cans, etc.) for disposal. It further lists specific items which cannot be dropped off at the City DPW for disposal. However, the City has provided for special pickups of non-general refuse items such as tires, refrigerators, freezers, etc.
  - The City, in cooperation with Wayne County, periodically has household hazardous waste collection days when residents can properly dispose of household chemicals not accepted as general refuse.
  - Organic debris such as wood, brush, leaves, and grass clippings are kept separate and picked up weekly by the City for composting as part of the regularly scheduled trash pickup.
  - Private commercial facilities are located within the community for sanitary waste disposal from recreational vehicles.
4. Education of the public concerning the impact of residential de-icers and acceptable application and disposal of pesticides, herbicides and fertilizers.

Information concerning the proper application of de-icers and fertilizers is provided to the residents via the City website and periodically a flyer is mailed to each City resident within the area serviced by the separate storm sewer collection and conveyance system. Educational information is made available to the public via the City's website outlining the proper way to use fertilizers, wash cars, compost, and dispose of household hazardous waste and chemicals.

5. Education of the public on the importance of minimizing the amount of residential or non-commercial washwater introduced into nearby storm water catch basins.
  - Information about the effects of wastes washed into the storm water collection and conveyance system is periodically mailed to the applicable residents as well as being posted on the City's website.
  - Storm water collection structures are identified with yellow paint to make the public aware that storm structures drain directly to the Detroit River without treatment.
6. Education of the public about the proper maintenance of septic sewer systems is not necessary because there are no septic systems present within the area of the storm water collection and conveyance system, and they are not permitted to be constructed within the City.
7. Education of the public concerning management of riparian lands to protect water quality is not required because the City storm water collection and conveyance system drainage area does not encompass any riparian lands.
8. Education of the public regarding their responsibility and stewardship concerning storm water.
  - a. Information regarding proper storm water practices is made available to the public in the form of flyers and/or displays at the River Rouge City Hall and other publicly-owned facilities. Additionally, the aforementioned information is available on the City's website.
  - b. City employees within the Department of Public Works receive training at least once during the permit cycle, and new employees receive training within the first year of employment, regarding storm water pollution prevention techniques and technologies.

The City of River Rouge continues to support and/or partner with the Wayne County Department of Environment to perform stream bank stabilization and demonstration projects, public distribution of information, or other storm water management related projects on a case-by-case basis. Information regarding these program projects is made available on the Wayne County or City website on a case-by-case basis.

9. Education of the role of native vegetation.

Information regarding the preservation and encouragement of native vegetation is addressed by materials present on the City website.

10. Education of commercial, industrial and institutional facilities.

There are no commercial, industrial or institutional facilities located within the area serviced by the storm water collection and conveyance system.

#### **IV. Priorities**

Since the overall objective of this program is to educate the public, the City will continue to augment its communications pertaining to proper management of storm water in response to changes in regulations and/or land use; experience with illicit discharges, if any; and public input and involvement. Specific priorities may emerge as a product of implementation of the PEP operative elements.

#### **V. Plan for Evaluating Impacts of the PEP**

The measurable goals for evaluation of the PEP by respective Best Management Practice are as follows:

- a) Education/Outreach for Residential Activities: The number of educational materials that were distributed to residents (there are no commercial or City facilities discharging storm water to other than the combined sewer system).
- b) Pet Waste Management: The number of educational materials provided to pet owners at least once per year.

- c) Geese Management at Belanger Park: The number of geese at the park on an annual basis.
  
- d) Proper Disposal of Household Hazardous Wastes: The number of pickup days per year at least on an annual basis.

**TAB NO. 2**

**Public Involvement and Participation Program (PIPP)**



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## **PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM**

### **I. Introduction**

Pursuant to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Storm Water Discharge Permit No. MIS040000, the City of River Rouge (“City”) developed this Public Involvement and Participation Program (PIPP) to encourage public input and participation in the development and implementation of the permit requirements.

As presented in the Public Education Program (PEP; see Tab No. 1), the City employs its website, brochures, newsletters, flyers and/or public forums to distribute information regarding the proper management of storm water and to encourage the participation of the public.

### **II. Targeted Participants**

The targeted program participants are as follows:

1. Friends of the Detroit River;
2. Persons living and working in the City;
3. Persons visiting the City;
4. Businesses and non-profit groups within the City;
5. School age children within the City; and
6. Commercial, industrial and institutional entities within the City.

### **III. Outline of Efforts for Public Involvement and Participation**

The entire Storm Water Management Program (SWMP) will be posted on the City’s website for public review and comment. As for the “Public Notification of the Requirement to Implement a SWMP,” the City Clerk notified the community of the requirement to implement the SWMP with additional notifications to the community to be published on an as-needed basis. Copies of the SWMP and related information is available to the public upon request from the Building Department and will be posted on the City’s website.

As for the City’s involvement with private organizations, the City has participated in the annual Detroit River Cleanup, organized by the Friends of the Detroit River.

Additionally, the City has and expects to continue to collaborate with Wayne County associated with the proper management of storm water by sharing pertinent information and communicating respective needs or support, as may be appropriate.

#### **IV. Program for Evaluating Impacts of Public Involvement and Participation**

The impacts of the PIPP will be evaluated based on the nature and extent of public participation during storm water activities aimed at protecting the receiving water, and the degree to which the PEP goals are determined to be effective.



**TAB NO. 3**

**Illicit Discharge Elimination Program (IDEP)**



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## **ILLICIT DISCHARGE ELIMINATION PROGRAM (IDEP)**

### **I. Introduction**

The City of River Rouge (“City”) will continue to work with Wayne County to address water quality issues should they arise. This Illicit Discharge Elimination Program (IDEP) is dependent on the cooperation of various organizations and departments within the City and surrounding communities [i.e., Wayne County, Michigan Department of Environment, Great Lakes, and Energy (EGLE), etc.]. As such, this IDEP describes the specific elements to be completed by the City and these other organizations as a product of respective legal standing and other factors.

This IDEP is designed to identify and eliminate illicit discharges to the storm water collection and conveyance system, recognizing that the Public Education Plan (PEP; see Tab No. 1) plays an essential role in reducing the likelihood of there being an illicit discharge.

As shown on Figure No. 1, the separate storm sewer system services only two percent or less of the City and has one outfall at the Ironton Street Lift Station which discharges to the Detroit River via an outfall located underwater within the Nicholson Slip at the U.S. Steel property.

### **II. Legal Basis**

Recognizing that there may be other applicable authorizations or obligations, City Ordinances No. 20-470 (amending Ordinance No. 04-442) and 09-457, and the Michigan Plumbing Code of 2017, provide the City with legal standing to investigate and eliminate illicit discharges to the storm water collection and conveyance system. The aforementioned further provide for the imposition of penalties on responsible parties to include fines and/or incarceration. In cases where the issue resides outside of the City’s jurisdiction, the City’s intent is to cooperate with the appropriate legal authority to assure effective address of the issue.

### **III. Detection, Part One: Locating Problem Areas**

1. As appropriate, sampling and other forms of data collection including visual observation are used to assess storm water quality and identify potential pollutant sources so that areas of concern within the subject storm water drainage pattern can be established for further assessment.

2. Designated City employees conduct monthly visual inspections of the storm sewer system and the Ironton Street Lift Station outfall to observe the following:
  - a. Presence/absence of flow;
  - b. Water clarity;
  - c. Deposits/stains on the interior walls;
  - d. Water color;
  - e. Odor;
  - f. Structural condition;
  - g. Floatable materials; and
  - h. Sheens, algae, and/or slime.
3. If any of the above noted are observed in the outfall, City personnel will have the outfall structure sampled for analytical testing.
4. In addition to reactive approaches already in-place, the City has completed mapping of the separate storm water collection and conveyance system. The mapping data is available in digital and hard copy format, therefore, allowing the City to more readily identify possible illicit connections. A hard copy of the map is available for the public to view at City Hall and an electronic copy is present on the City's website.
5. Visual inspection of the outfall for the storm system under the City's control will continue to be performed under a dry weather condition. Dry weather will be considered when there has been no precipitation or snow melt for at least two days.
6. Locations identified through visual screening, complaints, and water quality testing that require further analysis will be prioritized and revisited during dry weather periods. Potential polluting materials observed or suspected of being discharged from the outfall will be sampled and tested for the appropriate parameters.
7. Use of the Pollution Emergency Alert System [i.e., PEAS (800) 292-4706] allows 24-hour access for reporting suspicious discharges. This hotline is advertised within the community on the City's website. A release of a polluting material from the storm water collection and conveyance system to the Detroit River or groundwater will be reported to the EGLE Warren District Office or the Detroit Field Office during normal working hours if the release is in excess of the threshold reporting quantities in the Part 5 Rules. Should a reportable release as defined above be discovered during non-business hours, the release will be reported employing the EGLE 24-Hour Pollution Emergency Alerting System telephone number (800-292-4706).

#### **IV. Detection, Part Two: Finding the Source**

Upon discovery or notification by others of an act of illegal dumping/spills into the storm water collection and conveyance system, appropriate City personnel and/or their designate will respond as soon as practical but no later than 24 hours to evaluate the situation and implement mitigative measures as deemed appropriate at the source and/or outfall.

1. To evaluate the situation and implement mitigative measures as deemed appropriate at the source and/or outfall. The process of investigation and mitigation will proceed until the release is properly controlled and/or removed as deemed appropriate based on specific circumstances in the field, including at the source of the release or spill. Following mitigation of the release and source identification, appropriate enforcement action will ensue consistent with the aforementioned City Ordinances.
2. Evidence of illicit discharges such as visual observation of suspect material at the outfall will be investigated to identify the possible source(s) by back-tracking the pollution upstream through the drainage system. Supplementary sampling and testing, televising, trace dyes, and smoke are possible methods that will be used to locate the source of the contamination. The methods and materials used shall be approved by EGLE, as may be deemed appropriate.

#### **V. Removing/Correcting Illicit Connections**

1. Existing State laws, local ordinances, current plumbing codes and rules and regulations will be used to correct illicit discharges and connections. City ordinances or codes which need enhancement will be revised and presented to the City Council as soon as practical after it has been determined that the current code or ordinance is inadequate to meet the required goal.
2. With the assistance of City Administration, the City Attorney, the Department of Public Works, and the Building Department will administer the City's IDEP. Staff within these departments may be used to conduct illicit discharge surveys and enforcement of the applicable laws against violators, as may be deemed appropriate.

#### **VI. Sanitary Connections**

Residents and businesses within the City are currently serviced by the Downriver Utility Wastewater Authority sanitary sewer system where the combined sewer waste is treated at the

Wyandotte Wastewater Treatment Plant. Illicit discharges of sanitary sewerage to the storm sewer system will be eliminated as soon as practical following discovery.

## **VII. General Maintenance**

Sewer installations or repairs will continue to be completed to ensure compliance with the City's and other applicable requirements.

The City sweeps streets and, with cooperation from Wayne County, administers a Soil Erosion and Sedimentation Control Program consistent with Part 91.

## **VIII. General Awareness**

Information is made available to the public as noted previously in the City's PEP (see Tab No. 1).

## **IX. Implementation Schedule**

City employees have been trained to be observant for illicit discharges, proper inspection procedures for surveying an illicit connection, how to report illicit discharges, and to whom they should report them. These employees have been provided with a brief background as to the current storm water collection and conveyance system and why illicit discharges are important. New employees will be trained within one year of hire. Existing employees will receive additional training at least once during the permit cycle.

The City has identified which employees are responsible for organizing and compiling incoming data, following up and tracking complaints received, operation and maintenance of the existing storm sewers, enforcement of violations, and overall supervision and administration of the IDEP.

The existing City street sweeping, storm sewer maintenance, and storm sewer cleaning programs have been reviewed to identify effectiveness and to address deficiencies.

The only outfall for the City storm water collection and conveyance system located within the City is the Ironton Street Lift Station.

The City has also implemented the following, when necessary:

- Ongoing investigation of incoming complaints and tracking of repeat complaints, and violation locations to better address potential trouble areas.
- Monitoring and measuring the Best Management Practices (BMPs) goals as presented in the PEP (see Tab No. 1).
- Annual base samples of the Ironton Street Lift Station outfall have been collected during the previous permit cycle for future comparison. Each sample was analyzed for fecal coliform bacteria (i.e., E. Coli), ammonia, conductivity, pH, total phosphorus, oil and grease, and temperature.
- During year two- and four of the five-year permit cycle in response to a rain event of at least 0.25 inches, samples will be collected from the Ironton Street Lift Station and analyzed for fecal coliform. The aforementioned sample test results will be compared to the prior annual Ironton Street Lift Station sample findings to assess for changes over time indicative of the overall effectiveness of the current BMPs. Revisions to the BMPs will be made, if necessary, to assure achievement of the respective Total Maximum Daily Load (TMDL) value.
- Upon review of the biennial outfall sampling and analysis results, follow up investigations and upstream sampling of suspicious outfall discharges will be conducted to determine the source on an as needed basis.

The effectiveness of the IDEP will be evaluated by logging and tracking the following performance metrics on an annual basis: the number of illicit charges, the incidence of repeat violations and/or complaints pertaining to illicit discharges committed by respondents and non-respondents, the location of illicit discharges to identify potential diagnostic patterns to assist in mitigating repeat occurrences, and identifying the nature and extent of any and all discovered illicit discharges.

**TAB NO. 4**

**Post Construction Storm Water Management Program**



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## **POST CONSTRUCTION STORM WATER MANAGEMENT PROGRAM**

### **I. Introduction**

Pursuant to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Storm Water Discharge Permit No. MIS040000, the City of River Rouge (“City”) has developed this Post Construction Storm Water Management Program for new development and redevelopment projects to prevent or minimize adverse storm water quality impacts.

Currently, the City, in cooperation with Wayne County, regulates environmental impact from development according to Part 91 of Public Act 451 of 1994 for soil erosion and sedimentation control. The City has adopted the Wayne County standards related to the aforementioned, which cover development and redevelopment projects which disturb more than one acre or are within 500 feet of waters of the State. Additionally, developments are required to detain their storm water for regulated release. In most cases, these developments and redevelopments are required to treat their storm water to ensure the released water is free of sediment and contaminants to the maximum extent practical.

Public education is vital to an effective Post Construction Storm Water Management Program, and the Public Education Program includes address of construction related activities and their potential to impact storm water quality.

### **II. Outline of Efforts for Post Construction Storm Water Management**

- A development which will have an impact on the quality of the storm water leaving the site is required to treat and regulate the run-off in such a way that the impact will be minimized.
- Under current City ordinances and the laws referenced therein, a site will not be permitted to release storm water at a greater rate post-development than the rate prior to development. The development may use detention ponds, retention ponds, restrictive outfalls, or any other approved means to accomplish this goal.
- Proposed developments must be approved through the City Building Department prior to construction. Review of plans shall include analysis of design as it relates to acceptable engineering standards and requirements. The development will be required to meet the



minimum treatment volume standard and channel protection criteria as described in the Storm Water Discharge Permit.

- The Downtown Development Authority is currently working to provide a cleaner and sharper looking downtown area to encourage businesses and people to move back into existing buildings.
- Developments are encouraged to provide vegetative buffers and biological filters whenever practical.

### **III. BMPs and Measurable Goals**

- The City will continue to sweep streets resulting in less debris being potentially washed into the storm water collection and conveyance system. The goal will be expressed as the amount of debris removed which will be tracked on an annual basis.
- The City will continue to provide used oil recycling and yard waste pickup services for the City residences. Additionally, the City will continue to work with Wayne County to offer household hazardous waste disposal services. The goal will be expressed as the amount of waste removed which will be tracked on an annual basis.

### **IV. Legal Basis**

The City has adopted a storm water ordinance to address storm water management post construction for new developments. This ordinance requires a signed agreement with the developer/owners of the site for future operation and maintenance of the new storm system. This agreement becomes part of the recorded deed and stays with the land and is binding on subsequent owners. Records of program enforcement will be maintained in the file with the signed agreement. The City will make these records available to EGLE upon request.

**TAB NO. 5**

**Construction Storm Water Run-Off Control Program**



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## **CONSTRUCTION STORM WATER RUN-OFF CONTROL PROGRAM**

### **I. Introduction**

Pursuant to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Storm Water Discharge Permit No. MIS040000, the City of River Rouge (“City”) has developed this Construction Storm Water Run-Off Control Program for new development and redevelopment projects to prevent or minimize surface water quality impacts. This program is closely related to the City’s current Soil Erosion and Sedimentation Control Program which is under the oversight of the City Building Department and Wayne County.

In the event that a construction activity is located within the very limited area which is serviced by the storm water collection and conveyance system, the City requires that a construction permit be obtained from the City which conforms to the Part 91 requirements, if and when such are applicable. The City also receives and responds to complaints by members of the public relating to any construction storm water run-off material issues of fact.

In the unlikely event that soil, sediment or other pollutants as defined by Part 5 or other applicable regulation on a case-specific basis are discharged to the storm water collection and conveyance system, EGLE will be notified as required by applicable regulation.

At the time of construction permit issuance by the City whereby the subject construction activities meet the Permit-by-Rule requirements (i.e., a total earth disturbance of one or more acres and the site will have a point source discharge of storm water to waters of the State, either directly or through a separate storm sewer), the landowner or easement holder will be so notified.

### **II. Outline of Efforts for Construction Storm Water Run-Off Control**

A construction project over one acre or within 500 feet of waters of the State currently require a permit from the Wayne County Land Resource Management Division for soil erosion. All construction storm water permits are administered by Wayne County, therefore, all permit applications, permit issue dates and permit execution will be completed through Wayne County. The permits require a thorough plan review, including measures to be undertaken to protect the environment from soil erosion and to ensure that preliminary site plans allow space for future soil erosion and sedimentation controls, as applicable. This program is conducted in cooperation with Wayne County and EGLE.

Under current laws, sites are required to make use of detention ponds, retention ponds, restrictive outfalls, or any other means to reduce the effects of the development on the receiving waters. Future developments may be required by the City to install water treatment controls.

Vegetative buffers are highly recommended by the City for developments and the City works with the developer to build in phases, if possible, to reduce the amount of disturbed land at any one time. Developments are encouraged to provide vegetative buffers and biological filters, whenever practical.

Construction sites which have soil erosion permits are inspected bi-weekly and after every major precipitation event. The City also inspects sites which do not require soil erosion permits to ensure that they are not allowing sediment to move off of their sites.

Complaints regarding soil erosion issues are dealt with promptly by the City Building Department. The Building Department has worked closely with the property owners and in some cases, EGLE, to resolve issues of non-compliance.

Should a construction activity result in a deposit or imminent threat to deposit solids or other waste material into areas which will damage the environment, the Building Department will take immediate action to correct the situation as well as report the occurrence to EGLE and the permit issuing department of Wayne County as soon as practical.

### **III. Best Management Practices and Measurable Goals**

The City has established Best Management Practices (BMP) such as the following: administering the Soil Erosion and Sedimentation Program; and updating of ordinances, as necessary, to allow the program to progress and be administered more effectively. BMP goals include less enforcement issues resulting in legal action, passing of EGLE audits, and/or reduced complaints. An effective program will result in cleaner sites, better water quality at the discharge point of the site, and increased public support.

As appropriate, new and innovative storm water protection ideas will be provided to the contractor/developer prior to permit approval for soil erosion. The City will recommend use of new technologies which have been tested and found to work for these new sites. Incorporation of these recommendations into the proposed development will signify the program is working.

**TAB NO. 6**

**Pollution Prevention/Good Housekeeping for Municipal Operations**



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## **POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

### **I. Introduction**

Pursuant to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Storm Water Discharge Permit No. MIS040000, the City of River Rouge (“City”) has developed this Pollution Prevention/Good Housekeeping for Municipal Operations Plan for City property, equipment and handling of wastes.

There are no City-owned or operated facilities or storm water structural controls such as a collection and conveyance system with a discharge of storm water to surface waters of the State.

The Belanger Park site located along the Detroit River does experience some storm water sheet flow from the paved parking and drive area located near the boat launch. The remainder of the park is vegetated including between the parking lot and the Detroit River bulkhead shoreline fishing area. The City prohibits occupancy by dogs (there is also signage at the Park stating such) and access is controlled with a custodian office and gate. Additionally, the City has a contract with a vendor, Goodbye Geese, to mitigate the presence of geese by using dog hazing.

The City currently performs the services required to maintain the City infrastructure. This includes maintenance of the utilities, equipment, parks, and buildings. Employees and contractors will receive training on a periodic basis to show how each of their duties can affect storm water quality. This training will address soil erosion and sedimentation control, proper use and storage of de-icers and chemicals, proper disposal of waste products, affects of pollution to aquatic life, and proper procedures for reporting problem areas.

The area served by the storm water collection and conveyance system is residential and there are no plans to construct any new City-owned or operated facilities or new structural storm water controls. However, should such construction be proposed, the water quantity will be designed and implemented in accordance with the post-construction storm water run-off control performance standards and long-term operation and maintenance requirements.

As described in detail below, the City engages in the following activities to minimize the introduction of pollutants into the storm water collection and conveyance system: street cleaning and sweeping whereby the materials are collected by the respective equipment being employed; resurfacing and repair of the streets located within the subject area being serviced by the storm water collection and conveyance system; parking of vehicles is not allowed in the subject area;

salting of roads is not allowed; and any construction related activities to be performed where pollutants may be introduced into the storm sewer collection and conveyance system are controlled pursuant to applicable City and/or Wayne County permits and requirements including those of Part 91.

## **II. Outline of Efforts for Pollution Prevention/Good Housekeeping for Municipal Operations**

The Ironton Street Lift Station Outfall will be visually inspected on a monthly basis. Analytical testing, as discussed in the Illicit Discharge Elimination Program (IDEP), will occur when there appears to be an illicit discharge. Any water quality issues will be addressed by the IDEP.

There are approximately 37 catch basins associated with the City's storm water collection and conveyance system. The catch basins and sewer are inspected and cleaned at least on an annual basis using a Vac-truck and plugs or equivalent methodology employed to assure that accumulated pollutants will not be inadvertently discharged to the Detroit River. Any materials extracted from the catch basin cleaning are properly evaluated based on knowledge and/or testing prior to dispositioning. Should another catch basin be constructed, it will be added to the inventory for inspection and cleaning.

The effectiveness of the program will be linked to the effectiveness of the other aspects of the Storm Water Management Program. Sections of sewer requiring frequent heavy cleaning will result in an investigation into the cause which may lead to increased street sweeping, public education, or other corrective actions such as installation of filters. The effectiveness of these efforts will be measured on an ongoing basis through storm water outfall analysis. If water quality decreases, then the IDEP will be implemented with the goal of reducing Total Suspended Solids (TSS) by 25%, as compared to annual loading from run-off with no suspended solids controls. These structures will be inspected every five years unless conditions require more frequent inspection. The inspections will be recorded and maintained for future reference.

The storm water catch basins drain to the City owned Ironton Street Lift Station that discharges to the Detroit River via an outfall located on U.S. Steel property. The lift station is visually inspected on a monthly basis and any debris is removed on an as-needed basis.

Debris cleaned from the sewers or structures is taken to the City Department of Public Works (DPW) building and properly disposed of by the City contracted refuse company, at an approved facility.

Maintenance of City vehicles and equipment is done off-site and/or by outside vendors. There are no catch basins tied into the storm sewer from the Department of Public Works building. Equipment and vehicle wash water is directed into the catch basin which flows to the sanitary sewer to be treated at the Wyandotte Waste Water Treatment Plant. Most vehicles are parked inside or under a covered area at night.

During the spring, summer and fall months (weather dependent), the City completes street sweeping twice a month utilizing City-owned street sweeping equipment. Debris cleaned from the streets is taken to the City DPW building and properly evaluated based on knowledge and/or testing prior to disposal by the City contracted refuse company, at an approved facility.

During the fall months the City provides curbside removal of leaf debris. The material is transported to the City DPW building and disposed of by the City contracted refuse company at an approved composting facility.

The City maintains the painting of the storm water catch basins under the Public Education Program. In addition, the Building Department changed their standard details for all storm structures in 2007. New covers will either have a fish emblem, storm sewer stamp, or other marking to indicate that the structure drains to a surface water. The labels will reinforce that these structures drain directly to the Detroit River without treatment and no waste should be dumped into them.

The City currently contracts a qualified licensed individual to administer fertilizers and pesticides for the City. As noted in the SWMP, the separate storm water collection and conveyance system only applies to approximately two percent of the City's sewer service area because the remaining portion of the City is serviced by a combined sewer system that discharges to the Wyandotte Wastewater Treatment Plant. Also, the limited storm water collection and conveyance system is located within a residential area of the City and there are no applicant-owned or operated facilities or City Public Schools with a discharge of storm water to surface waters of the State.

In the event that fertilizers and pesticides are applied by the City within the area served by the storm water collection and conveyance system, the chemicals will be used sparingly and applied in such a way to prevent material storm water quality degradation.



**TAB NO. 7**

**Enforcement Response Procedure**



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**CITY OF RIVER ROUGE**

**MUNICIPAL SEPARATE STORM SEWER SYSTEM ENFORCEMENT**

**RESPONSE PROCEDURE**

**DATE: 13-JAN-2020**

**I. POLICY:**

This policy is to establish the City of River Rouge Municipal Separate Storm Sewer System Enforcement Response Procedure.

**II. BACKGROUND:**

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Discharge Permit Application requires a procedure for Enforcement Response to address violations of the ordinances or regulatory mechanism identified in the Storm Water Management Program.

**III. PROCEDURE:**

Each ordinance/regulatory mechanism within this jurisdiction includes an enforcement response to violations of the ordinance. The ordinances referenced in this application are attached to this Enforcement Response Procedure and are as follows: City of River Rouge Storm Water Management Ordinance Number 09-457; and City of River Rouge Ordinance Number 20-470 (amending Ordinance No. 04-442).

As applicable ordinances are completed and/or updated and are passed by the governing body, the enforcement mechanism will be conveyed to the EGLE NPDES Permit Contact.

In addition to the enforcement mechanisms noted in ordinances, additional tracking of instances of noncompliance occurs and includes the following information:

- 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; and
- Date Violation Resolved.

**CITY OF RIVER ROUGE**

**MUNICIPAL SEPARATE STORM SEWER SYSTEM ENFORCEMENT**

**RESPONSE PROCEDURE**

**DATE: 13-JAN-2020**

The timeframe to notify a responsible party of a violation to an applicable requirement pursuant to the MS4 Permit is two business days. Corrective actions are implemented as soon as practical with resolution within 30 calendar days.

The Enforcement Response Procedure is applicable to the entire SWMP.

Any questions regarding this policy and procedure should be directed to the City of River Rouge Department of Public Works.

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

This procedure shall be reviewed at least on an annual basis by the City and modified, if deemed appropriate.

# ORDINANCE NO. 09-457

## City of River Rouge Stormwater Management Ordinance

An Ordinance to provide for the regulation and control of stormwater runoff, which results in protecting the City of River Rouge's waterways and sensitive areas in the community. This ordinance is intended to protect sensitive areas and local waterways, but at the same time allowing the designer the flexibility in protecting these resources.

### ARTICLE I. TITLE, FINDINGS,

#### PURPOSE

##### **Section 1.01 Title**

This ordinance shall be known as the "City Of River Rouge's Stormwater Management Ordinance" and may be so cited.

##### **Section 1.02 Findings**

The City of River Rouge finds that:

- Water bodies, roadways, structures, and other property within, and downstream of the City of River Rouge are at times subjected to flooding.
- Land development alters the hydrologic response of watersheds, resulting in increased stormwater runoff rates and volumes, increased flooding, increased stream channel erosion, increased sediment transport and deposition, and increased nonpoint source pollutant loading to the receiving water bodies and the Great Lakes.
- Stormwater runoff produced by land development contributes to increased quantities of water-borne pollutants.
- Increases of stormwater runoff, soil erosion, and nonpoint source pollution have occurred as a result of land development, and have impacted the water resources of the Rouge River and Detroit River Watersheds.
- Increased stormwater runoff rates and volumes, and the sediments and pollutants associated with stormwater runoff from future development projects within the City of River Rouge will, absent proper regulation and control, adversely affect the City of River Rouge's water bodies and water resources, and those of downstream municipalities.
- Stormwater runoff, soil erosion, and nonpoint source pollution can be controlled and minimized by the regulation of stormwater runoff from development.
- Adopting the standards, criteria and procedures contained in this ordinance and implementing the same will address many of the deleterious effects of stormwater runoff.
- The constitution and laws of Michigan authorize local units of government to provide stormwater management services and systems that will contribute to the protection and preservation of the public health, safety, and welfare and to protect natural resources.

### Section 1.03 Purpose

It is the purpose of this ordinance to establish minimum stormwater management requirements and controls to accomplish, among others, the following objectives:

- A. To minimize increased stormwater runoff rates and volumes from identified land development;
- B. To minimize nonpoint source pollution;
- C. To protect public health, safety and welfare by requiring stormwater management whenever new, expanded or modified developments are proposed.
- D. To provide for cost-effective and functionally-effective stormwater management, and to reduce the need for future remedial projects.
- E. To recognize private responsibility to incorporate stormwater management systems into the early stages of site planning and design.
- F. To ensure that all stormwater conveyance and detention facilities will be properly maintained.
- G. To minimize the deterioration of existing watercourses, culverts and bridges, and other structures;
- H. To encourage water recharge into the ground where geologically favorable conditions exist;
- I. To maintain the ecological integrity of stream channels;
- J. To minimize the impact of development upon streambank and streambed stability;
- K. To control non-stormwater discharges to stormwater conveyances and reduce pollutants in stormwater discharges;
- L. To preserve and protect water supply facilities and water resources by means of controlling increased flood discharges, stream erosion, and runoff pollution;
- M. Recognizing that significant adverse surface and/or groundwater impacts may result from development, it is the intent of this article to require development design and control mechanisms to ensure that stormwater runoff does not result in a short-term and/or long-term threat to the public health, safety and welfare in the city, and in downstream areas.
- N. To reduce the adverse impact of changing land use on water bodies and, to that end, this ordinance establishes minimum standards to protect water bodies from degradation resulting from changing land use where there are insufficient stormwater management controls;
- O. To ensure that storm drain drainage or stormwater BMPs are adequate to address stormwater management needs within a proposed development, and for protecting downstream landowners from flooding and degradation of water quality. The procedures, standards, and recommendations set forth in this Ordinance and the State of Low Impact Development Manual for Michigan are designed for these purposes; and
- P. To ensure that all stormwater facilities necessary for a proposed development will have an appropriate governmental unit responsible in perpetuity for performing maintenance or for overseeing the performance of maintenance by a private entity, such as a property owners' association.

## **Section 1.04 Construction of Language**

For purposes of this Ordinance, the following rules of construction apply:

- A. Particulars provided by way of illustration or enumeration shall not control general language.
- B. Ambiguities, if any, shall be construed liberally in favor of protecting natural land and water resources.
- C. Words used in the present tense shall include the future, and words used in the singular number shall include the plural, and the plural the singular, unless the context clearly indicates the contrary.
- D. Terms not specifically defined in this Ordinance shall have the meaning customarily assigned to them.
- E. Considering that stormwater management in many cases requires sophisticated engineering design and improvements, some of the terms of this Ordinance are complex in nature. Effort has been made to simplify terms to the extent the subject matter permits. In addition, assistance and examples will be provided by or on behalf of the City of River Rouge as needed for the interpretation and understanding of this Ordinance.

## **ARTICLE II: DEFINITIONS**

### **Section 2.01 Definition of Terms**

The following terms, phrases, words, and derivatives shall have the meaning defined below:

Applicant. Any person proposing or implementing the development of land.

BMP or "Best Management Practice". A practice, or combination of practices and design criteria that comply with the Michigan Department of Environmental Quality's Guidebook of BMPs for Michigan Watersheds, and Low Impact Development Manual for Michigan, or equivalent practices and design criteria that accomplish the purposes of this Ordinance (including, but not limited to minimizing stormwater runoff and preventing the discharge of pollutants into stormwater) as determined by the Building Department and/or Environmental Consultants.

Building Department – Shall mean the Building Department for the City of River Rouge.

City. Shall mean the City of River Rouge

Conveyance facility. A storm drain, pipe, swale, or channel.

Design Engineer. The registered professional engineer responsible for the design of the stormwater management plan.

Detention. A system which is designed to capture stormwater and release it over a given period of time through an outlet structure at a controlled rate.

Developed or Development. The installation or construction of impervious surfaces on a development site that require, pursuant to state law or local ordinance, the City approval of a site plan, site condominium, special land use, planned unit development, rezoning of land, land division approval, private road approval, or other approvals required for the development of land or the erection of buildings or structures; provided, however, that for the purposes of Article II only, developed or development shall not

include the actual construction of, or an addition, extension, or modification to, an individual single-family or a two-family detached dwelling.

Engineered Site Grading Plan. A sealed drawing or plan and accompanying text prepared by a registered engineer or landscape architect which shows alterations of topography, alterations of watercourses, flow directions of stormwater runoff, and proposed stormwater management and measures, having as its purpose to ensure that the objectives of this Ordinance are met.

Grading. Any stripping, excavating, filling, and stockpiling of soil or any combination thereof and the land in its excavated or filled condition.

Impervious Surface. Surface that does not allow stormwater runoff to slowly percolate into the ground.

Infiltration. The percolation of water into the ground, expressed in inches per hour.

Maintenance Agreement. A binding agreement that sets forth the terms, measures, and conditions for the maintenance of stormwater systems and facilities.

Offsite Facility. All or part of a drainage system that is located partially or completely off the development site which it serves.

Peak Rate of Discharge. The maximum rate of stormwater flow at a particular location following a storm event, as measured at a given point and time in cubic feet per second (CFS).

Plan. Written narratives, specifications, drawings, sketches, written standards, operating procedures, or any combination of these which contain information pursuant to this Ordinance.

Retention. A holding system for stormwater, either natural or man-made, which does not have an outlet to adjoining watercourses or wetlands. Water is removed through infiltration and/or evaporation processes.

Runoff. That part of precipitation, which flows over the land.

Sediment. Mineral or organic particulate matter that has been removed from its site of origin by the processes of soil erosion, is in suspension in water, or is being transported.

Storm Drain. A conduit, pipe, swale, natural channel, or man-made structure which serves to transport stormwater runoff. Storm drains may be either enclosed or open.

Stormwater BMP. Any facility, structure, channel, area, process or measure which serves to control stormwater runoff in accordance with the purposes and standards of this Ordinance.

Stormwater Plan. Drawings and written information prepared by a registered engineer, registered landscape architect, or registered surveyor which describe the way in which accelerated soil erosion and/or stormwater flows are proposed to be controlled, both during and after construction, having as its purpose to ensure that the objectives of this Ordinance are met.

Swale. Defined contour of land with gradual slopes that transport and direct the flow of stormwater.

Watercourse. Any natural or manmade waterway or other body of water having reasonably well defined banks. Rivers, streams, creeks, brooks, and channels, whether continually or intermittently flowing, as well as lakes and ponds are watercourses for purposes of stormwater management.

Watershed. An area in which there is a common outlet into which stormwater ultimately flows, otherwise known as a drainage area.

Wetlands. Land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support wetland vegetation or aquatic life and is commonly referred to as a bog, swamp, or marsh, as defined by state law.

### **ARTICLE III. GENERAL PROVISIONS**

#### **Section 3.01 Applicability**

These procedures and standards set forth in this Ordinance and the BMP design information found in the State of Low Impact Development Manual for Michigan provide minimum standards to be complied with by developers and in no way limit the authority of the City to adopt or publish and/or enforce higher standards as a condition of approval of developments.

Except for those activities expressly exempted by Section 3.02, every development requiring a site plan review in the City shall have either:

- 1) a Stormwater Plan and detailed construction plans for stormwater BMPs, or
- 2) an Engineered Site Grading Plan.

The applicability of these plans is dependent on the type of activity, as listed below. No development or preparation for development on a site shall occur unless and until an application has been submitted and approved for a Stormwater Plan or Engineered Site Grading Plan.

#### **A. Requirement for a Stormwater Plan**

A Stormwater Plan shall be submitted and reviewed in accordance with requirements of Article IV. Approval of final development plans, site plans, and final preliminary subdivision and condominium plans shall not be granted prior to approval of the Stormwater Plan. The following types of developments and earth changes require a Stormwater Plan:

1. Land development proposals subject to site plan review requirements in the City Zoning Ordinance.
2. Subdivision plat proposals.
3. Site condominium developments pursuant to the Condominium Act, PA. 59 of 1978 as amended; MCLA 559. 101 et. seq.
4. Any development on property divided by land division where more than three parcels of less than one acre are created.
5. Any proposal to mine, excavate, or clear and grade, compact, or otherwise develop one acre or more of land for purposes other than routine single-family residential landscaping and gardening, or any proposal within 500 feet of the top of the bank of an inland lake or stream.
6. Development projects of federal, state, and local agencies and other public entities subject to the City NPDES Permit for Municipal Separate Storm Sewer Systems.
7. Maintenance of a stormwater basin constructed prior to the effective date of the regulations of which this subsection is a part.



8. For developments and earth changes not listed above or specifically exempted in Section 3.02, a Stormwater Plan shall be submitted and reviewed in accordance with the requirements of Article V unless otherwise determined by the Building Department.

### **B. Requirement for an Engineered Site Grading Plan**

An Engineered Site Grading Plan shall be submitted and reviewed in accordance with requirements of Article VI. The Engineered Site Grading Plan shall be approved by the Building Department prior to the issuance of any building permit. The following types of new construction of single-family housing units require an Engineered Site Grading Plan:

1. Development on acreage parcels (lot splits) for which a Stormwater Plan is not required.
2. Development on platted subdivision lots.
3. Development on site condominium lots.

### **Section 3.02 Exemptions**

- A. Notwithstanding the requirements of Section 3.01, neither a Stormwater Plan nor an Engineered Site Grading Plan shall be required for activities protected by the Right to Farm Act 93 of 1981.
- B. Routine single-family residential landscaping and/or gardening which conforms to the Stormwater Plan or Engineered Site Grading Plan approved by the City, and which does not otherwise materially alter stormwater flow from the property in terms of rate and/or volume.
- C. Development on one single-family lot, parcel, or condominium unit where the Building Department determines that, due to the size of the site, or due to other circumstances, the quantity, quality, and/or rate of stormwater leaving the site will not be meaningfully altered.
- D. The installation or removal of individual mobile homes within a mobile home park. This exemption shall not be construed to apply to the construction, expansion, or modification of a mobile home park.
- E. Plats that have received preliminary plat approval and other developments with final land use approval prior to the effective date of this Ordinance, where such approvals remain in effect.

## **ARTICLE IV. STORMWATER PLAN REQUIREMENTS**

### **Section 4.01 Pre-application Conference**

A pre-application conference shall be held with the City prior to the submittal of a Stormwater Plan and before any alterations to the land. The purpose of the pre-application conference is to provide information about plan submittal requirements, and City and other applicable regulations.

### **Section 4.02 Contents of Stormwater Plan**

#### **A. Plan Presentation**

1. Through plans, illustrations, reports, and calculations, the Stormwater Plan shall display the required information specified in Section 4.02.D.
2. The Stormwater Plan must be sufficiently detailed to specify the type, location, and size of stormwater management facilities, using preliminary calculations. Detailed construction drawings are not required at the Stormwater Plan review stage.
3. If it is proposed to develop a parcel in two or more phases, the Stormwater Plan shall be

prepared and submitted for the total project.

#### B. Plan Preparation

The Stormwater Plan shall be prepared by a registered civil engineer. Other persons and professionals may assist in the preparation of the plan.

#### C. Scale for Mapping

The Stormwater Plan shall be drawn to a scale as, 1" = 50'

#### D. Required Information

1. The location by means of a small location map, drawn to a scale no less than 1" = 2000'.
2. Zoning classification of petitioner's parcel and all abutting parcels.
3. The location and description of all on-site features and all adjacent off-site features within 50 feet, and all other off-site features that may be impacted in determining the overall requirements for the development. This includes:
  - a. Existing site topography with contours at two-foot intervals or less based on the NAVD88 datum.
  - b. Adjoining roads and developments
  - c. Railroads
  - d. High tension power lines or underground transmission lines
  - e. Cemeteries
  - f. Parks
  - g. Natural and artificial watercourses, wetlands and wetland boundaries, environmental feature boundaries, floodplains, lakes, bays, existing stormwater storage facilities, conveyance swales (natural or artificial) with identification of permanent water elevations
  - h. Location of woodlands
  - i. Designated natural areas
  - j. Any proposed environmental mitigation features
  - k. Drains, sewers, and water mains
  - l. Existing and proposed easements
  - m. A map, at the U.S.G.S. scale, showing the drainage boundary of the proposed development and its relationship with existing drainage patterns
  - n. Boundaries of any off-site drainage area contributing flow to the development
  - o. Any watercourse passing through the development, along with the following:
    - i. Area of upstream watershed and current zoning
    - ii. Preliminary calculations of runoff from the upstream area for both the 100-year and two-year 24-hour design storms, for fully developed conditions according to the current land use plan for the area
  - p. Soil borings may be required at various locations including the sites of proposed retention/detention and infiltration facilities, and as needed in areas where high groundwater tables or bedrock near the surface exist
  - q. Proposed site improvements including lot divisions and building footprints
  - r. Preliminary stormwater BMP information including:

- i. Location of all stormwater BMPs
- ii. Identification of stormwater quality and quantity treatment facilities and method of stormwater conveyance
- iii. Preliminary sizing calculations for stormwater quality and quantity, including preliminary estimates of runoff volume captured by BMPs, (e.g., infiltration losses,) for treatment facilities
- iv. Preliminary tributary area map for all stormwater management facilities indicating total size and average runoff coefficient for each subarea
- v. Analysis of existing soil conditions and groundwater elevation and bedrock depth (including submission of soil boring logs) as required for proposed retention and infiltration facilities
- s. Preliminary landscaping plan for stormwater BMPs
- t. Preliminary easements for stormwater management facilities
- u. Required natural features setbacks
- v. Drinking water wells, public wellheads, Wellhead Protection Areas (WHPAs), underground storage tanks, and brownfields
- w. Any areas of unique geological formations (i.e., karst areas)

#### **Section 4.03 Standards for Stormwater Management Approval Plan**

All developments requiring a Stormwater Plan shall be designed, constructed, and maintained to prevent flooding, minimize stream channel impacts, protect water quality, and achieve the purposes of this Ordinance, as stated above. The City has adopted performance standards to meet the objectives of managing the quantity and quality of stormwater runoff from a site as detailed below.

Designers may select any combination of stormwater BMPs which meet the performance standards provided the selections:

- (1) comply with the requirements identified in this Ordinance;
- (2) comply with other local, county, state, or federal requirements; and
- (3) do not conflict with the existing local stormwater management and watershed plans.

The particular facilities and measures required on-site shall take into consideration the natural features, upland areas, wetlands, and watercourses on the site; the potential for on-site and off-site adverse stormwater impacts, water pollution, and erosion; and the size of the site.

##### **A. On-Site Stormwater Management**

- 1. Natural topography and site drainage shall be preserved and site grading shall be minimized to the maximum extent reasonably achievable considering the nature of the development.
- 2. The preferred conveyance strategy is to transport wherever possible untreated and treated runoff in conveyance facilities open to the atmosphere (e.g. swales, vegetated buffer strips, energy-dissipating structures, etc.), rather than through enclosed pipes, so as to decrease runoff velocity, allow for natural infiltration, allow suspended sediment particles to settle, and to remove pollutants.
- 3. Watercourses shall not be deepened, widened, dredged, cleared of vegetation, straightened, stabilized,

or otherwise altered without applicable permits or approvals from the City, relevant county agencies and the applicable State of Michigan Department(s).

4. The following volume/channel protection criteria shall be met:
  - (a) No net increase in runoff from storm events up to the two-year, 24-hour event from presettlement conditions unless local information and analysis is available that determines that less than two-year is adequate.
  - (b) This volume shall be retained on-site through infiltration within 72 hours, through storage and reuse, through evapotranspiration, or a combination. This does not preclude the use of off-site volume controls in accordance with section 4.07 to achieve volume control for storm events that are the same or greater.
  - (c) Retaining this volume meets water quality criteria described in Number 6 below.
  - (d) Those granted a waiver shall detain the runoff from storm events up to the one-year, 24-hour event and release over 24 hours.
5. The following peak rate/flood control criteria shall be met:
  - (a) The peak discharge rate from all storms up to the 100-year, 24-hour event shall not be greater than presettlement discharge rates. Where the runoff volume is not increased from the presettlement condition, the peak rate corresponding to the same storms is considered controlled.
  - (b) If specific watershed conditions require additional peak rate control, the community can a) restrict the peak discharge from the 100-year, 24 hour event to a fixed release rate of <X> cfs/acre; or b) require additional runoff volume reduction up to the <X> year, 24-hour storm.
6. The following water quality criteria shall be met:
  - (a) Water quality criteria are met when retaining the volume control criteria.
  - (b) For those areas not retaining the volume criteria, the site shall be designed to remove 80 percent of Total Suspended Solids from the stormwater runoff through a combination of BMPs. These BMPs include, but are not limited to:
    - Constructed wetlands/wetland forebays
    - Retention ponds/extended detention ponds
    - Filters (sand-peat, underground sand, perimeter sand filter, organic sand, pocket sand filter, gravel, others)
    - Grassed/vegetated swales and channels
    - Vegetated filter strips
    - Other bioretention BMPs
7. Under certain conditions, the City, upon recommendation by the Building Department, may impose the following additional restrictions on stormwater discharges:
  - a. Peak discharge may be further restricted when it can be shown that a probable risk to downstream structures or unique natural areas exists or that existing severe flooding problems could be further aggravated.
  - b. Measures shall be imposed to protect against ground or surface water pollution where the nature of the soils or bedrock underlying a stormwater management structure constitutes substantial risk of contamination, such as might be the case in limestone formations. Special provisions to be followed in these cases will be provided by the Building Department.
  - c. Where groundwater yields are very low or where a groundwater supply already is heavily

used, the City may require that the entire volume of the two-year, 24-hour rainfall event be retained and infiltrated. If substantial irrigation needs are anticipated, portions of stored stormwater may be reused for irrigation purposes.

8. The Runoff Curve Number Method, sometimes referred to as TR55, shall be used for estimating runoff volumes. The presettlement conditions shall be based solely on woods or meadow. All disturbed pervious areas that are not restored according to the stormwater credits (Sec. 4.03.B.) shall be assigned a curve number that reflects a "fair" hydrologic condition as opposed to a "good" condition. Other methodologies are acceptable with the review and approval of the Building Department.
9. The NRCS Unit Hydrograph Method shall be used for calculating the peak rate of runoff for presettlement conditions and undisturbed areas. Other methodologies are acceptable with the review and approval of the Building Department.
10. *Rainfall Frequency Atlas of the Midwest* (Huff and Angel, 1992) shall be used for all applicable stormwater calculations. Other rainfall sources are acceptable with the review and approval of the Building Department.

### **B. Stormwater Credits for Onsite Stormwater Management**

As set forth in the State of Low Impact Development Manual for Michigan, it is the intent of the City to maximize use of preventive nonstructural Best Management Practices (BMPs) and certain structural BMPs. The following nonstructural and structural BMPs provide a quantitative stormwater benefit and credits which are described in Table H.1. These include:

- Minimize Soil Compaction
- Protection of Existing Trees (part of Minimize Total Disturbed Area)
- Soil Restoration
- Native Revegetation
- Riparian Buffer Restoration

Table H.1  
**BMP Credits**

<b>BMP</b>	<b>Credit</b>
Minimize Soil Compaction and Soil Restoration	Areas (acres) complying with the requirements of these BMPs can be assigned a Curve Number (CN) reflecting a "good" condition instead of "fair" as required for other disturbed pervious areas. For example, lawn areas with B soils would be given a CN of 61 instead of 69; lawns with C soils a CN of 74 instead of 79.
Protection of Existing Trees (part of Minimize Total Disturbed Area)	Trees protected under the requirements of this BMP can be assigned a Curve Number (CN) reflecting a woods in "good" condition for an area of 800 square feet per tree or the entire area of the tree canopies protected, whichever is greater.

Native Revegetation and Riparian Buffer Restoration	Proposed trees and shrubs to be planted under the requirements of these BMPs can be assigned a Curve Number (CN) reflecting a woods in "good" condition for an area of 200 square feet per tree or the estimated tree canopy, whichever is greater. For shrubs, an area of 25 square feet per shrub.
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*In using and crediting these BMPs, applicants must meet the review criteria located within the discussion of each BMP (Chapters 6 and 7).*

### **C. Waiver from the Volume Control Criteria for On-site Stormwater Management**

A waiver from retaining the volume criteria must be based on demonstration by the applicant on the items listed below, which could include that existing soil, bedrock, water table, and/or other natural constraints are pervasive at the site, such that presettlement conditions generate substantially increased volumes of stormwater runoff before the proposed development occurs. Furthermore, such presettlement site constraints would also make infiltration-oriented best management practices to be used for volume control extremely difficult or potentially a hazard to apply at the site.

Waivers shall be submitted with the Stormwater Plan. Those submissions granted a waiver shall meet the standards set forth in Section 4.03.A. 4(d), 5(b), and 6(b). To be considered for a waiver, the applicant must submit the following:

- 1) **Extent of site area with seasonal high water table (less than two feet to water table):** As extent of site areas with seasonal high water table increases, presettlement runoff volume increases, and feasibility for volume/infiltration BMPs decreases, given the inability of infiltration to occur when water table is high.
- 2) **Extent of site area with less than two feet to bedrock:** As extent of site areas with shallow depth to bedrock increases, presettlement runoff volume increases, and feasibility for volume/infiltration BMPs decreases, given the inability of infiltration to occur.
- 3) **Extent of site area with less than 0.25 inch/hour permeability:** Sites with extremely "heavy" soils in situ, regardless of soil survey designations, indicate greater presettlement runoff volumes with lesser infiltration volumes. Soil permeability must be tested onsite. Preferred permeability rate after recommended soil testing should be 0.25 inch per hour (can be reduced to 0.10 inch per hour or projects where low density is being proposed and large site areas are available for infiltration). Sites entirely classified as Hydrologic Soil Group (HSG) D may be assumed to be infeasible without recommended soil testing. Soil testing shall be based on the soil infiltration testing protocol included in the State of Low Impact Development Manual for Michigan.
- 4) **Extent of the site area constrained by foundation or required setbacks:** Setbacks must be established between infiltration stormwater BMPs and the following structures:
  - Basement foundations (50 feet up gradient, 10 feet down gradient),
  - On-site septic systems/drainfields (50 feet),
  - Wells (100 feet), and
  - Other building elements, which could be affected by infiltration systems.
- 5) **Extent of size of site:** Practically speaking, the larger the site, the more flexibility and opportunity

for accommodating runoff volume/infiltration BMPs, all else being equal; as site size increases, waiver requirements grow more stringent. Size of site relates also to the extent of proposed building/impervious area. The more intense (defined both in terms of building coverage and total impervious area) the proposed building program, the more difficult accommodating the required runoff volume becomes.

#### D. Special Provisions for "Hot Spot" Land Uses for On-site Stormwater Management

For all those projects involving land uses considered to be high pollutant producers or "hot spots" (see Table H.2 e.g., vehicle service and maintenance facilities, vehicle salvage yards and recycling facilities, vehicle and equipment cleaning facilities, fleet storage areas for buses, trucks, etc., industrial/commercial or any hazardous waste storage areas or areas that generate such wastes, industrial sites, restaurants and convenience stores, any activity involving chemical mixing or loading/unloading, outdoor liquid container storage, public works storage areas, commercial container nurseries, and some high traffic retail uses characterized by frequent vehicle turnover), additional water quality requirements may be imposed by the Building Department in addition to those included in water quality criteria in order to remove potential pollutant loadings from entering either groundwater or surface water systems. These pre-treatment requirements are included in Tables H.2 and H.3.

Table H.2  
**Pre-Treatment Options for Stormwater Hot Spots**

<b>Stormwater Hot Spots</b>	<b>Minimum Pre-Treatment Options</b>
Vehicle Maintenance and Repair Facilities	A, E, F, G
Vehicle Fueling Stations	A, D, G
"Fast Food" Restaurants	B, C, D, I, K
Convenience Stores	B, C, D, I, K
Outdoor Chemical Mixing or Handling	G, H
Outdoor Storage of Liquids	G
Commercial Nursery Operations	I, J, L
Other Uses or Activities Designated by Appropriate Authority	As Required

Table H.3  
**Minimum Pre-Treatment Options**

	<b>Minimum Pre-Treatment Options</b>
A	Oil/Water Separators / Hydrodynamic Separators
B	Sediment Traps/Catch Basin Sumps
C	Trash/Debris Collectors in Catch Basins
D	Water Quality Inserts for Inlets

<b>Minimum Pre-Treatment Options</b>	
E	Use of Drip Pans and/or Dry Sweep Material under Vehicles/Equipment
F	Use of Absorbent Devices to Reduce Liquid Releases
G	Spill Prevention and Response Program
H	Diversion of Stormwater away from Potential Contamination Areas
I	Vegetated Swales/Filter Strips
J	Constructed Wetlands
K	Stormwater Filters (Sand, Peat, Compost, etc.)
L	Stormwater Collection and Reuse (especially for irrigation)
M	BMPs that are a part of a Stormwater Pollution Prevention Plan (SWPPP) under a NPDES Permit

#### **Section 4.04 Plan Submission**

- A. Three (3) copies of the Stormwater Plan required under Section 5.01 shall be submitted to the City for initial staff review and pre-application conference.
- B. For developments subject to site plan review, the applicant shall submit the same number of copies of the Stormwater Plan as required for site plan review at the time that the preliminary site plan is submitted.
- C. For developments subject to subdivision plat review, the applicant shall submit the same number of copies of a Stormwater Plan as required for plat review at the time that the tentative preliminary plan is submitted.
- D. For other earth changes or activities subject to Stormwater Plan requirements, the plan shall be submitted to the City before construction drawings are submitted.
- E. Compliance with the requirements of this Ordinance does not eliminate the need for the proprietor to obtain required permits and approvals from county and state agencies.
- F. Compliance with the requirements of this Ordinance does not eliminate the need for the proprietor to comply with other applicable City ordinances and regulations.
- G. Upon submission of a Stormwater Plan, as provided above, such plan shall be forwarded to the engineering and environmental consultants for review and recommendation to the Planning Commission. If the site plan, subdivision plat, or other earth change plan is revised, then the Stormwater Plan shall also be revised and re-reviewed by the engineering and environmental consultants to ensure continued compliance with all other applicable ordinances.

#### **Section 4.05 Review Procedures**

- A. All Stormwater Plans, including waiver submissions, shall receive engineering and environmental review.
  1. If the proposed plan is not sufficient as originally submitted, the Building Department will notify the applicant in writing, setting forth the reasons for withholding a recommendation for approval, and will state the changes necessary to obtain approval.
- B. Planning Commission Review
  1. The Planning Commission shall, following recommendation by the City staff and consultants,



review Stormwater Plans, including waiver submissions in conjunction with the submitted site plan or subdivision plat.

2. If the Planning Commission determines that all of the required information has not been received, the proprietor may request that the matter be tabled to allow for the submittal of the required information.
3. If all the required information has been received, the Planning Commission shall recommend approval, recommend approval with conditions, or recommend denial of the Stormwater Plan, including waiver submissions. Recommendations for action on the Stormwater Plan can be part of the recommendation for action on the site plan or subdivision plat.

#### C. City Council Review

1. The City Council shall, following recommendation by the Planning Commission review the Stormwater Plan, including waiver submissions in conjunction with the submitted site plan or subdivision plat.
2. The City Council shall approve, approve with conditions, or deny approval of the Stormwater Management Plan.
3. If the plan is approved, the City will require the following as a condition of approval:
  - a. Before approval of the final plan, copies of all necessary Wetland, Floodplain, Inland Lakes and Streams, Erosion Control or other needed state, federal, or local permits relating to stormwater management have been provided by the applicant for the City file.
  - b. A satisfactory agreement that assures long-term maintenance of all drainage improvements will be in place before submission of the final plan. Documentation of maintenance agreement will be supplied to the City and approved by the City Council.
  - c. The applicant will post cash or a letter of credit in an amount not less than 10 percent of the cost of the stormwater facilities for projects of less than \$100,000 or five percent of the cost for projects over \$100,000. This deposit will be held for one year after the date of completion of construction and final inspection of the stormwater facilities, or until construction on all phases in the development are completed, whichever time period is longer.
  - d. This deposit will be returned to the applicant (in the case of cash) or allowed to expire (in the case of a letter of credit), as provided above, provided all stormwater facilities are clean, unobstructed, and in good working order, as determined by the Building Department.
  - e. Reproducible mylars and electronic files (in AutoCAD format) of the as-built storm drains and stormwater BMPs will be submitted by the applicant or his/her engineer to the City along with the final plan, or upon completion of system construction. The mylars are to be of quality material and three mils in thickness.
  - f. Complete development agreements (including deed restrictions) must be submitted for the City review and approval prior to recording.

#### **Section 4.06 Review Fees**

The City Council shall establish application fees and escrow requirements by resolution. Fees and escrow account payments shall be sufficient to cover administrative and technical review costs anticipated to be incurred by the City including the costs of on-site inspections.

## **Section 4.07 Off-Site Stormwater Management**

### **A. Requirements**

1. In lieu of on-site stormwater BMPs, the use of off-site stormwater BMPs and storm drains may be proposed. Off-site stormwater BMPs shall be designed to comply with the requirements specified in Section 4.03 and all other standards provided by this Ordinance that are applicable to on-site facilities.
2. Off-site stormwater management areas may be shared with other landowners, provided that the terms of the proposal are approved by the City Council and City Attorney. Approval hereunder shall not be granted for off-site stormwater BMPs unless the applicant demonstrates to the City, following recommendation by the City staff and/or its consultants, that the use of off-site stormwater management areas shall protect water quality and natural resources to an equal or greater extent than would be achieved by the use of on-site stormwater management areas.
3. Adequate provision and agreements providing for maintenance and inspection of stormwater management facilities shall be made, and the documents, in recordable form, recorded instrument, including an access easement, approved by the City.
4. Accelerated soil erosion shall be managed off-site as well as on-site.

### **B. Performance Guarantees, Inspections, Maintenance, and Enforcement**

1. All provisions for performance guarantees shall apply to off-site stormwater conveyance and detention.

## **Section 4.08 Revision of Plan**

If it becomes necessary to alter a development or earth change proposal after the Stormwater Plan has been approved, a revised Stormwater Plan must be submitted, reviewed, and approved in accordance with the procedure set forth above. All requirements and standards for Stormwater Plans shall apply.

## **Section 4.09 Drains Under the Jurisdiction of the Drain Commissioner**

- A. Drainage districts will not be altered when designing development drainage, except as provided under Section 433 of Act 40, Public Act 1956 as amended.
- B. Existing county drain easements will be indicated on the plans as well as the final plan and will be designated as "Wayne County Drain" as applicable. County drain easements prior to 1956 were not required by statute to be recorded immediately; therefore, it may be necessary to check the permanent records of the Drain Office to see if a drain easement is in existence on the subject property.
- C. A permit will be obtained from the Wayne County Drain Commissioner's Office prior to tapping or crossing any county drain. The permit must be obtained prior to final plan approval.
- D. Proposed relocations of county drains will be processed through the office of the Wayne County Drain Commissioner.

## **ARTICLE V. STORMWATER BMP CONSTRUCTION PLANS**

### **Section 5.01 Submittal, Review and Approval Procedures Requirements**

- A. The applicant will submit three (3) copies of final construction plans for stormwater BMPs with a letter of transmittal submitted to the City with the final site plan/subdivision plan review. Construction or building permits shall not be issued until approval of the construction plans.

The construction plans shall be drawn to a scale no smaller than 1" = 50', and on sheets no larger than 24" x 36". The scales used shall be standard engineering scales and shall be consistent throughout the plans. When plans have been completed with computer aided design technology, locations should be geo-referenced and a copy of the electronic file shall also be provided. The construction plans shall include:

1. Proposed stormwater management facilities (plan and profile).
  2. Proposed storm drains including rim and invert elevations.
  3. Proposed open channel facilities including slope, cross section detail, bottom elevations, and surface material.
  4. Final sizing calculations for stormwater quality and quantity treatment facilities and stormwater conveyance facilities.
  5. Storage provided by one (1) foot elevation increments.
  6. Tributary area map for all stormwater management facilities indicating total size and average runoff coefficient for each sub-area.
  7. Analysis of existing soil conditions and groundwater elevation (including submission of soil boring logs) as required for proposed retention and infiltration facilities.
  8. Details of all stormwater BMPs including but not limited to:
    - i. Outlet structures.
    - ii. Overflow structures and spillways.
    - iii. Riprap.
    - iv. Manufactured treatment system.
    - v. Underground detention cross section and product details.
    - vi. Cross section of infiltration and/or bioretention facilities.
  9. Final landscaping plan and details.
  10. Final easements for stormwater management facilities.
  11. Maintenance plan and agreement.
- B. Construction drawings and engineering specifications shall be subject to review and approval by the Building Department to ensure that the construction plan conforms with the approved Stormwater Plan and that adequate storm drainage will be provided and that the proposed stormwater management system provides adequately for water quantity and quality management to ensure protection of property owners and watercourses both within the proposed development and downstream.
- C. A construction permit shall not be issued unless the detailed engineering drawings and specifications meet the standards of this Ordinance, applicable City ordinances, engineering standards and practices, and any applicable requirements of other government agencies. Additionally, the following information is required to be submitted:
1. A soil erosion permit under "The Michigan Soil Erosion and Sedimentation Control Act", P.A. 451, Part 91 Public Acts of 1994 as amended, will be obtained from the appropriate agency prior to any construction.
  2. For developments that will result in disturbance of five or more acres of land, a complete Notice of Coverage must be submitted to the Michigan Department of Environmental Quality, Water

Bureau, to have the discharge deemed authorized under a National Pollutant Discharge Elimination System permit.

3. The applicant will make arrangements acceptable to the City for inspection during construction and for final verification of the construction by a registered professional engineer prior to approving Certificate of Occupancy.
4. Review of construction plans by the City will not proceed until site plan approval has been granted.
5. Approval of construction plans by the City is valid for one calendar year. If an extension beyond this period is needed, the applicant will submit a written request to the City for an extension. The City may grant one year extensions of the approval, and may require updated or additional information if needed. The City action under this provision may be taken administratively provided that no changes to the plans and/or standards have occurred. In the event one or more such changes have occurred, the City action under this provision shall be taken by the final reviewing body.
6. For site condominiums, complete Master Deed documents (including "Exhibits" drawings) must be submitted for the City review and approval prior to recording.

### **Section 5.02 As-Built Certification**

An as-built certification for stormwater BMPs must be provided to the City prior to final approval of the development. The certification should include the following:

- A. A plan view of all detention basins, retention basins, and/or sediment forebays detailing the proposed and final as-built elevation contours. Sufficient spot elevations should be provided on each side of the basin, the bottom of the basin, and along the emergency spillway(s).
- B. Detention basin, retention basin, and/or sediment forebay calculations along with corresponding volumes associated with the as-built elevations. The proposed volume and final as-built volume should be indicated.
- C. Final as-built invert elevations for all inlet pipes and all associated outlet structure elevations, riser pipe hole sizes, and number of holes should be included. Invert elevations of the final outlet pipe to the receiving water and elevation of the final overflow structure should also be provided.
- D. The side slopes of all stormwater basins should be identified and must meet minimum safety requirements.
- E. The certification should be signed and sealed by a registered professional engineer or landscape architect.

## **ARTICLE VI. ENGINEERED SITE GRADING PLANS**

### **Section 6.01 Contents of Engineered Site Grading Plans**

- A. Three (3) copies of Engineered Site Grading Plans for a development shall be submitted by the proprietor to the City, provided, however, if and to the extent the same information has been previously submitted as required under a separate ordinance requirement, then, the applicant shall provide copies of the previous submission, together with new information required hereunder which has not been previously submitted.
- B. The Engineered Site Grading Plan shall include the following information subject to the exception specified in sub-paragraph A, above:

1. A plan showing the layout of the area intended to be developed will be submitted by the applicant or their representative. This plan will be prepared under the direction of, and sealed by, a registered professional engineer or a registered land surveyor, and shall fit on a sheet of paper that does not exceed 24" by 36", drawn to a standard engineering scale not less than 1" = 50'.
2. The legal property description and a north indicator.
3. Existing grades on a 50-foot grid to a minimum of 50 feet beyond the site property line and sufficient intermediate grades to determine such things as ditches, swales, adjacent pavement, buildings, and other pertinent features.
4. Location of any watercourses, wetlands, woodlands, environmental feature setback areas (as specified in the Zoning Ordinance), lakes, and ponds on the site.
5. Existing easements.
6. Existing utilities, manholes, and culverts.
7. Road rights-of-way, existing and proposed.
8. Proposed topography of the site.
9. Location and description of any existing and proposed stormwater management and soil erosion control measures.
10. Flow direction(s) of stormwater runoff onto and from the site before and after development, including the direction of overland flow.
11. Proposed elevations shall be underlined or boxed in to differentiate from existing elevations. It is expected that all elevations shall be in hundredths of a foot.
12. A location map.
13. The general stormwater management scheme for the proposed development indicating how stormwater management will be provided and where drainage will outlet.
14. A description of the off-site outlet and evidence of its adequacy. If no adequate watercourse exists to effectively handle a concentrated flow of water from the proposed development, discharge will be reduced to sheet flow prior to exiting the site, and cannot exceed the allowable outlet rate defined in the Engineering Design Standards. Additional volume controls may be required in such cases and/or acquisition of rights-of-way from downstream property owners receiving the stormwater flow.
15. Any on-site and/or off-site stormwater management facilities and appropriate easements, dedicated to the entity that will be responsible for future maintenance.
16. Any drainage originating outside of the development limits that flows onto or across the development. (In general, drainage from off-site shall not be passed through on-site stormwater BMPs).
17. Any natural watercourses and county drains that traverse or abut the property.

## **Section 6.02 Review Procedures and Standards**

A. The following standards shall be met by applicant:

1. The increased volume of water discharged from a development shall not create adverse impacts to downstream property owners, wetlands and watercourses (e.g., flooding; excessive soil saturation;

crop damage; erosion; degradation in water quality or habitat).

2. Natural topography and site drainage shall be preserved and site grading shall be minimized to the maximum extent reasonably achievable considering the nature of the development.

3. Watercourses shall not be deepened, widened, dredged, cleared of vegetation, straightened, stabilized, or otherwise altered without applicable permits or approvals from the City, relevant county agencies and the applicable State of Michigan Department(s).

B. The following review procedures shall be in place:

1. Engineered Site Grading Plans shall be subject to review and approval by the Building Department to assure compliance with this Ordinance.

2. Engineered Site Grading Plans shall be reviewed and approved by the Building Department prior to the issuance of a building permit.

3. Construction Plans shall be reviewed by the City Engineering Consultant, Environmental Consultant and Building Department to ensure that the construction plan conforms with the approved Stormwater Plan.

## **ARTICLE VII PERFORMANCE GUARANTEES, EASEMENTS, AND MAINTENANCE**

### **Section 7.01 Applicability of Requirements**

Requirements of this Article concerning performance guarantees, easements, and maintenance agreements shall apply to proprietors required to submit a Stormwater Plan to the City for review and approval.

### **Section 7.02 Performance Guarantees**

The applicant shall post an acceptable form of an irrevocable letter of credit. The performance guarantee shall be an amount determined by the City. Required performance guarantees shall be provided to the City after the Stormwater Plan, but prior to the initiation of any earth change.

After determination by the Building Department for site plans and for site condominiums and subdivisions, that all facilities are completed in compliance with the approved Plan, the posted performance guarantee remaining shall be released.

### **Section 7.03 Stormwater Management Easements**

A. Necessity of Easements

Stormwater management easements shall be provided in a form required by the applicable approving body of the City and the City Attorney, and recorded as directed as part of the approval of the applicable City body to assure (1) access for inspections; (2) access to stormwater BMPs for maintenance purposes; and (3) preservation of primary and secondary drainageways which are needed to serve stormwater management needs of other properties.

B. Easements for Off-site Stormwater BMPs

The proprietor shall obtain easements assuring access to all areas used for off-site stormwater management, including undeveloped or undisturbed lands.

C. Recording of Easements

Easements shall be recorded with the Wayne County Register of Deeds according to county requirements.

D. Recording Prior to Building Permit Issuance

The applicant must provide the City Clerk with evidence of the recording of the easement prior to final subdivision plat or condominium approval or other applicable final construction approval.

**Section 7.04 Maintenance Bond**

A. A maintenance bond shall be provided to the City.

B. The maintenance bond shall be provided for a period of two years commencing from the date of final approval of the Stormwater Plan.

**Section 7.05 Maintenance Agreement**

A. Purpose of Maintenance Agreement

The purpose of the maintenance agreement is to provide the means and assurance that maintenance of stormwater BMPs shall be undertaken.

B. Maintenance Agreement Required

1. A maintenance agreement shall be submitted to the City, for review by the Building Department and City Attorney, for all development, and shall be subject to approval in accordance with Stormwater Plan. A formal maintenance plan shall be included in the maintenance agreement.
2. Maintenance agreements shall be approved by the City Council prior to final subdivision plat or condominium approval, as applicable, and prior to construction approval in other cases.
3. A maintenance agreement is not required to be submitted to the City for Chapter 18 Drains that will be maintained by the Wayne County Drain Commission.

C. Maintenance Agreement Provisions

1. The maintenance agreement shall include a plan for routine, emergency, and long-term maintenance of all stormwater BMPs, with a detailed annual estimated budget for the initial three years, and a clear statement that only future maintenance activities in accordance with the maintenance agreement plan shall be permitted without the necessity of securing new permits. Written notice of the intent to proceed with maintenance shall be provided by the party responsible for maintenance to the City at least 14 days in advance of commencing work.
2. The maintenance agreement shall be binding on all subsequent owners of land served by the stormwater BMPs and shall be recorded in the office of the Wayne County Register of Deeds prior to the effectiveness of the approval of the City Council.
3. If it has been found by the City Council, following notice and an opportunity to be heard by the property owner, that there has been a material failure or refusal to undertake maintenance as required under this ordinance and/or as required in the approved maintenance agreement as required hereunder, the City shall then be authorized, but not required, to hire an entity with qualifications and experience in the subject matter to undertake the monitoring and maintenance as so required, in which event the property owner shall be obligated to advance or reimburse payment (as determined by the City) for all costs and expenses associated with such monitoring and maintenance, together with a reasonable administrative fee. The maintenance agreement required under this Ordinance shall

contain a provision spelling out this requirement and, if the applicant objects in any respect to such provision or the underlying rights and obligations, such objection shall be resolved prior to the commencement of construction of the proposed development on the property.

## **ARTICLE VIII SEVERABILITY**

### **Section 8.01 Severability**

If any section, clause, provision or portion of this Ordinance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this Ordinance shall remain in force and effect.

## **ARTICLE IX ENFORCEMENT**

### **Section 9.01 Sanctions for Violations**

- A. Any person violating any provision of this ordinance shall be responsible for a municipal civil infraction and subject to a fine of not less than \$1,000 for a first offense, and not less than \$2,500 for a subsequent offense, plus costs, damages, expenses, and other sanctions as authorized under Chapter 87 of the Revised Judicature Act of 1961 and other applicable laws, including, without limitation, equitable relief; provided, however, that the violation stated in Section 9.02 shall be a misdemeanor. Each day such violation occurs or continues shall be deemed a separate offense and shall make the violator liable for the imposition of a fine for each day. The rights and remedies provided for in this section are cumulative and in addition to any other remedies provided by law. An admission or determination of responsibility shall not exempt the offender from compliance with the requirements of this ordinance.

For purposes of this section, "subsequent offense" means a violation of the provisions of this ordinance committed by the same person within 12 months of a previous violation of the same provision of this ordinance for which said person admitted responsibility or was adjudicated to be responsible.

The City is authorized to issue municipal civil infraction citations to any person alleged to be violating any provision of this Ordinance.

- B. Any person who neglects or fails to comply with a stop work order issued under Section 9.02 shall, upon conviction, be guilty of a misdemeanor, punishable by a fine of not more than \$500 or imprisonment in the county jail for not more than 93 days, or both such fine and imprisonment, and such person shall also pay such costs as may be imposed in the discretion of the court.
- C. Any person who aids or abets a person in a violation of this ordinance shall be subject to the sanctions provided in this section.

### **Section 9.02 Stop Work Order**

Where there is work in progress that causes or constitutes in whole or in part, a violation of any provision of this Ordinance, the City is authorized to issue a Stop Work Order so as to prevent further or continuing violations or adverse effects. All persons to whom the stop work order is directed, or who are involved in any way with the work or matter described in the stop work order shall fully and promptly comply



therewith. The City may also undertake or cause to be undertaken, any necessary or advisable protective measures so as to prevent violations of this ordinance or to avoid or reduce the effects of noncompliance herewith. The cost of any such protective measures shall be the responsibility of the owner of the property upon which the work is being done and the responsibility of any person carrying out or participating in the work, and such cost shall be a lien upon the property.

### **Section 9.03 Failure to Comply; Completion**

In addition to any other remedies, should any owner fail to comply with the provisions of this Ordinance, the City may, after the giving of reasonable notice and opportunity for compliance, have the necessary work done, and the owner shall be obligated to promptly reimburse the City for all costs of such work.

### **Section 9.04 Emergency Measures**

When emergency measures are necessary to abate and/or moderate a nuisance, to protect the public safety, health and welfare, and/ or to prevent the loss of life, injury or damage to property, the City is authorized to carry out or arrange for all such emergency measures. Property owners shall be responsible for the cost of such measures made necessary as a result of a violation of this Ordinance, and shall promptly reimburse the City for all of such costs.

### **Section 9.05 Cost Recovery for Damage to Storm Drain System**

A discharger shall be liable for all costs incurred by the City as the result of causing a discharge that produces a deposit or contains polluting material or obstruction, or causes damage to, or impairs a storm drain, or violates any of the provisions of this Ordinance. Costs include, but are not limited to, those penalties levied by the Environmental Protection Agency or Michigan Department of Environmental Quality for violation of an NPDES permit, attorney fees, and other costs and expenses.

### **Section 9.06 Collection of Costs; Lien**

Costs incurred by the City pursuant to Sections 9.01, 9.02, 9.03, 9.04 and 9.05 shall be a lien on the premises which shall be enforceable in accordance with Act No. 94 of the Public Acts of 1933, as amended from time to time. Any such charges which are delinquent for six (6) months or more may be certified annually to the City Treasurer who shall enter the lien on the next tax roll against the premises and the costs shall be collected and the lien shall be enforced in the same manner as provided for in the collection of taxes assessed upon the roll and the enforcement of a lien for taxes. In addition to any other lawful enforcement methods, the City shall have all remedies authorized by Act No. 94 of the Public Acts of 1933, as amended.

### **Section 9.07 Effect of Approval on Remedies**

The approval or disapproval of any Stormwater Plan shall not have any effect on any remedy of any person at law or in equity.

STATE OF MICHIGAN  
COUNTY OF WAYNE  
CITY OF RIVER ROUGE

ORDINANCE NO. **20-470**

AN ORDINANCE TO AMEND THE CODE OF ORDINANCES, CITY OF RIVER ROUGE, MICHIGAN, BY *ADDING A DEFINITION FOR "WATER QUALITY STANDARDS" AND PART 2 TO SECTION 5 – WATER POLLUTION PREVENTION* OF THE RIVER ROUGE POLLUTION ORDINANCE, BEING ORDINANCE NO. 04-442, OF SAID CODE.

**THE CITY OF RIVER ROUGE ORDAINS:**

SECTION 1. The River Rouge Pollution Ordinance, being Ordinance No. 04-442, shall be amended by adding to Section 3 - Definitions, of said Ordinance, and shall read as follows:

14. "Water Quality Standards" means the Part 4 - Water Quality Standards promulgated pursuant to Part 31 of Public Act No. 451 of the Public Acts of 1994, as amended, being Rules 323.1041 through 323.1117 of the Michigan Administrative Code.

SECTION 2. The River Rouge Pollution Ordinance, being Ordinance No. 04-442, shall be amended by adding a part 2 entitled "Illicit Discharge Exclusions" to Section 5 – Water Pollution Prevention of said Ordinance, and shall read as follows:

2. Illicit Discharge Exclusions. The City hereby excludes prohibiting the following discharges or flows of waters to the City, if they are identified as not being a significant contributor to violations of applicable Water Quality Standards:
  - A. Water line flushing and discharges from potable water sources.
  - B. Landscape irrigation runoff, lawn watering runoff, and irrigation waters.
  - C. Diverted stream flows and flows from riparian habitats and wetlands.
  - D. Rising groundwaters and springs.
  - E. Uncontaminated groundwater infiltration and seepage.
  - F. Uncontaminated pumped groundwater, except for groundwater cleanups specifically authorized by National Pollutant Discharge Elimination System 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.
- L. Firefighting activities.

SECTION 3. SEVERABILITY. If any section, subsection, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent portion of this ordinance, and such holding shall not affect the validity of the remaining portions of this ordinance.

SECTION 4. SAVINGS. All proceedings pending and all rights and liabilities existing, acquired or incurred at the time this ordinance takes effect are saved and may be consummated according to the law in force when they are commenced.

SECTION 5. REPEALER. All ordinances or parts of ordinances in conflict herewith are hereby repealed only to the extent necessary to give this ordinance full force and effect.

SECTION 6. EFFECTIVE DATE. This Ordinance shall be effective upon the passage by the City Council and the publication of the Ordinance in accordance with the Charter of the City of River Rouge and the statutes of the State of Michigan.

**CITY OF RIVER ROUGE  
ORDINANCE NO. 04-442**

AN ORDINANCE TO ADDRESS AIR POLLUTION, ILLICIT DISCHARGES OF POLLUTANTS TO SURFACE WATERS AND GROUND WATERS AND TO ADDRESS IMPROPER MANAGEMENT OF OIL AND POLLUTING MATERIALS WITHIN THE CITY; TO ALLOW THE CITY TO ACCESS AND INSPECT PROPERTY AND PREMISES WITHIN THE CITY TO DETERMINE COMPLIANCE WITH THIS ORDINANCE AND TO ASSESS PENALTIES FOR VIOLATIONS OF THE ORDINANCE.

THE CITY OF RIVER ROUGE ORDAINS:

SECTION 1. SHORT TITLE.

This Ordinance shall be known and may be cited as the "River Rouge Pollution Prevention Ordinance."

SECTION 2. FINDINGS AND PURPOSE.

The City of River Rouge has determined that certain of the air pollution prevention requirements established under the Federal Clean Air Act and under the Michigan Air Pollution Act are insufficient in the opinion of the City to adequately prevent air pollution within the City. The Michigan Air Pollution Act provides that the City, as a political subdivision of the State, may adopt ordinances and otherwise exercise its right to prevent or abate air pollution provided such requirements are equal to or greater than the minimum applicable State requirements. The City has also determined that addressing discharges of wastewater and pollutants to waters of the City and the management of oil and polluting materials within the City is necessary to protect the quality of waters of the City, prevent damage to property and promote the public health, safety and welfare.

It is the responsibility of the City to preserve, protect and improve the air and water resources of the City of River Rouge, so as to promote the public health, safety and welfare; to prevent injury to human health, plant and animal life and property; and to foster the comfortable enjoyment of life and property by its residents. Accordingly, the City adopts this Ordinance with the purpose of preventing pollution of the environment and natural resources within the City.

SECTION 3. DEFINITIONS.

In this Ordinance, words and phrases shall be defined as follows:

1. "Act" means Part 31 of the Michigan Natural Resources and Environmental Protection Act ("NREPA"), (as may be amended subsequent to the effective date of this Ordinance), codified as MCL § 324.3101, *et seq.*, and the Michigan Department of Environmental Quality Rules promulgated under the Act.
2. "Air Contaminant" means a dust, fume, gas, mist, odor, smoke, vapor, chemical, or any combination thereof, and includes, but is not limited to, the following substances as defined in the Regulations of the Michigan Department of Environmental Quality or as commonly defined in the scientific community: organic compounds, metals, carbon monoxide, particulate matter, volatile organic compounds, acid gases and mists, oxides, dioxides and chlorides.

3. "Air Pollution" means the presence in the outdoor atmosphere of air contaminants in quantities, of characteristics and under conditions and circumstances and of a duration which are or can become injurious to human health or welfare, to animal life, to plant life or to property, or which interferes with the enjoyment of life and property.
4. "Department" means the Michigan Department of Environmental Quality.
5. "Discharge" means the discharge of any waste, waste effluent, wastewater, pollutant, or any combination thereof, into any of the waters of the city or upon the ground. "Discharge" shall include, but not be limited to:
  - (a) Point source discharges of pollutants to surface waters of the City, including regulated stormwater discharges.
  - (b) All direct or indirect discharges of pollutants to groundwater within the City.
  - (c) Spills or sudden releases of pollutants to waters of the City or upon the ground.

For purposes of this Ordinance, the term "Discharge" shall not include any discharge to waters of the City that are first sent to and processed at a publicly owned treatment works ("POTW") for treatment.

6. "Objectionable Odor" should be defined by Section 4.1 (B).
7. "Oil" shall have the same meaning as defined in Department Rule 324.2001 (MAC R § 324.2001).6. "Person" means any natural person or entity that owns or operates a stationary source of air emissions or discharges any waste, waste effluent, wastewater, pollutant, or any combination thereof, into any of the waters of the City or upon the ground.
8. "Point Source Discharge" shall have the same meaning as defined in 40 C.F.R. § 122.2 (July 1, 2004), including regulated stormwater discharges.
9. "Pollutant" shall have the same meaning as defined in 40 C.F.R. § 122.2 (July 1 2004).
10. "Polluting Material" shall have the same meaning as defined in Department Rule 324.2002 (MAC R § 324.2002).
11. "Regulated Storm water Discharges" means stormwater discharges associated with industrial and construction activity that are subject to regulation under 40 C.F.R. § 122.26 and Department Rules 2161 and 2190 (MACR 323.2161, 323.2190).
12. "Smoke" means gas and/or particles (excluding water vapor) in the atmosphere in observable quantities.
13. "Waters of the City" means all of the following located within or contiguous to the City, but does not include drainage ways and ponds used solely for wastewater conveyance, treatment, or control:

- (a) Rivers
- (b) Streams
- (c) Impoundments
- (d) Open drains
- (e) Other surface waters within the City
- (f) Groundwater

#### SECTION 4. AIR POLLUTION PREVENTION.

1. Odor. It shall be unlawful for any person to cause, suffer or allow the emission or release from a stationary source into the outdoor atmosphere odors that exceed Objectionable Odor Limits on public or private property, excluding property owned or operated by the emitter thereof. Odors commonly associated with a farm or a food production or preparation operation are excluded provided generally accepted odor management practices are followed.
2. Smoke. It shall be unlawful for any person to cause, suffer or allow the emission or release from a stationary source into the outdoor atmosphere of smoke at a density greater than the density described as No. 1 on the Ringelmann Chart, except that smoke of a density described as No. 2 on such Chart may be emitted for up to a total of no more than four minutes in any thirty minute period. The United States Environmental Protection Agency Method No. 9 method of measuring smoke quantities may be used to determine violations hereof provided such readings are correlated to the Ringelmann Chart.
3. Dust, Dirt, Fly Ash and Other Particulate. It shall be unlawful for any person to cause, suffer or allow the emission or release from a stationary source into the outdoor atmosphere of airborne solids, including, but not limited to, dust, dirt, ash, metals or any other particulate matter, in a quantity that upon its fallout from the atmosphere causes visible surface deposits on public or private property, excluding property owned or operated by the emitter thereof.

#### SECTION 5. WATER POLLUTION PREVENTION.

1. Illicit Discharges and Management Practices. It shall be unlawful for any person to cause or contribute to illicit discharges of waters of the City or to engage in illicit management of oil, pollutant and polluting materials within the City. Illicit discharges and management practices are:
  - A. Discharges of pollutants to the waters of the City that are not in compliance with the Act or the terms and conditions of permits issued under the Act authorizing the discharge of pollutants to surface water and groundwater.
  - B. Discharges that are required to be reported to the Department or other state, local or federal environmental agencies in accordance with Act, Parts 111, 121 on 201 of NREPA (MCL §§ 324.11101, *et seq.*, 12101, *et seq.*, and 20101, *et seq.*) or the federal Comprehensive Environmental

Response, Compensation and Liability Act which have not been reported to the Department or other appropriate agency.

- C. Staging, storage, or management of oil, pollutants, and polluting materials (including soils) in violation of the Act or Part 91 of NREPA, MCL 324.9101 *et. seq.* and any plans required by the Act or Part 91.

## SECTION 6. COMPLIANCE INSPECTIONS.

- 1. Access. The City Attorney or his or her designates shall have the right to enter the premises of any person within the City to determine whether such person is complying with this Ordinance. Such persons shall promptly allow ready access to all parts of the premises for the purposes of inspection, sampling, records examination, copying, and the performance of any additional duties needed to determine compliance with this Ordinance.
  - A. Where a person has security measures in force which require proper identification and clearance before entry into its premises, the person shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the City Attorney will be permitted to enter without delay for the purposes of performing specific responsibilities.
  - B. Unreasonable delays in allowing access to a person's premises shall be a violation of this Ordinance.
- 2. Search Warrants. If the City Attorney has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this Ordinance, then Attorney may seek issuance of a search warrant from a court of competent jurisdiction compelling access.

## SECTION 7. ENFORCEMENT, FINES AND REMEDIES.

- 1. Designated Officials. The City Attorney or his or designees, of the City shall be responsible for the enforcement of the requirements of this Ordinance. The City council reserves for itself concurrent authority to institute on its own motion or upon other credible information, actions to prevent or prosecute violations of this Ordinance or to require compliance with its requirements.
- 2. Municipal Civil Infraction; Civil Fine. The City Attorney, or his or her designees are authorized to issue municipal civil infraction citations ("Citation"). The Citation shall be a written Complaint or Notice to Appear in the 26-1 District Court at the time and date specified. A Citation may be issued for any violation of this Ordinance. The civil fine for any violation of this Article, a Use Permit, or an Order shall be up to \$5,000 per violation per day. In calculating the amount of the civil fine, the City Attorney or the Court, as applicable, shall consider the frequency of violation by the person, the impact on human health and the environment of the violation, the magnitude and duration of the violation, the economic benefit to the person gained by the violation, the compliance history of the person, and other factors deemed appropriate by the Court or the City Attorney as applicable.

In addition to fines imposed by the Court, the judge shall summarily tax and determine the cost of the action, which are not limited to the costs taxable in ordinary civil infraction actions and may include all expenses, direct or indirect, to which the plaintiff has been put in connection with the municipal civil infraction, up to the entry of the judgment. Cost of not less than \$9.00 or more than \$500.00 shall be ordered.

3. Violation Constitutes Public Nuisance. Violations of this Ordinance are declared to constitute a public nuisance.
4. Criminal Violations.
  - A. Violations – Generally. Any person who willfully or intentionally violates any provision of this Ordinance shall, upon conviction, be guilty of a misdemeanor, punishable as provided by fine if not more than \$500.00, 90 days in jail, or both. Each day of violation is a separate offense.
  - B. Falsifying Information. Any person who knowingly provides or makes any false statements, representations or information to the City Attorney regarding the emissions, discharges and management practices addressed in Section 4 and 5 above shall, upon conviction, be guilty of a misdemeanor punishable as provided by fine if not more than \$500.00, 90 days in jail, or both. Each day of violation is a separate offense.

#### SECTION 8. EXISTING RIGHTS AND REMEDIES.

It is the purpose of this Ordinance to provide additional and cumulative rights and remedies to prevent and abate pollution in the City. Nothing herein contained shall abridge or alter other public or private rights of action or remedies now or hereafter existing, including without limitation the right of the City to commence any action allowed under state or federal law to compel a person to address the conditions giving rise to the violation of this Ordinance.

#### SECTION 9. OTHER ORDINANCES.

Any other Ordinances or parts of Ordinances of the City that prescribe less restrictive pollution prevention requirements are repealed but only to the extent necessary to give this Ordinance full force and effect.

#### SECTION 10. INVALIDITY.

Should any section, subsection, clause or phrase of this Ordinance be declared by a court of competent jurisdiction to be invalid, the validity of the balance of this Ordinance shall not be affected.

#### SECTION 11. EFFECTIVENESS.

This Ordinance as ordered shall take effect twenty (20) days after its adoption and upon publication.

Adopted: July 20, 2004  
Published: July 29, 2004