CITY OF ST. CHARLES

Stormwater Management Program Plan

Municipal Separate Storm Sewer Systems (MS4) Program
NPDES Permit No. ILR400454

KANE / DUPAGE COUNTY, ILLINOIS

2019

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1. Overview of the Stormwater Management Program Plan

1.1 Introduction

The City of St. Charles holds a General National Pollutant Discharge Elimination System (NPDES) Permit for stormwater discharges from its municipal separate storm sewer system (MS4 Permit). To protect local surface water quality, the MS4 Permit requires that the City develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from its stormwater system to the maximum extent practicable.

The purpose of this Stormwater Management Program Plan (SMPP) is to describe the programs and activities the City implements to meet the requirements of the MS4 permit. The MS4 program requires that partially or fully urbanized areas obtain permits for their stormwater discharges into surface waters. The SMPP describes the procedures and practices that are implemented by the City with the goal of reducing the discharge of pollutants within stormwater runoff. Implementation of this plan is intended to protect water quality thus contributing to the following amenities:

- Cleaner lakes and streams,
- Improved recreational opportunities and tourism,
- Improved flood damage reduction,
- Better surface water aesthetics and wildlife habitat, and
- A safer and healthier environment for residents of the City.

The SMPP addresses the primary program elements for all City activities, including the manner in which the City:

- Reviews, permits, and inspects construction activity within its limits;
- Manages the planning, design, and construction of projects performed within its limits;
- Maintains its facilities and performs its day-to-day operations;
- Works toward protecting surface waters from illicit discharges;
- Provides public education and outreach;
- Trains its employees in carrying out and reporting program activities; and
- Continually monitors and evaluates the program.

1.2 State & Federal Regulations

Federal environmental regulations based on the 1972 Clean Water Act (CWA) require that MS4 communities, construction sites, and industrial activities control polluted stormwater runoff from entering receiving bodies of water (including navigable streams and lakes). The NPDES permit process regulates the discharge from these sources based on amendments to CWA in 1987 and the subsequent 1990 and 1999 regulations by the U.S. Environmental Protection Agency (USEPA). In Illinois, the USEPA has delegated administration of the Federal NDPES program to the Illinois Environmental Protection Agency (IEPA). On December 20, 1999, the IEPA issued a general NPDES Phase II permit for all MS4 communities. The General Permit is included as Appendix 5.1.

Under the General ILR 40 Permit, each MS4 community was required to submit a Notice of Intent (NOI) declaring compliance with the conditions of the permit by March 10, 2003. The original NOI describes the proposed activities and best management practices (BMP) that occurred over the original 5-year period toward the ultimate goal of developing a compliant SMPP. The current NOI is included as Appendix 5.2. At the end of the 5th year (March 1, 2008) the components of the SMPP were required to be implemented; per the ILR40 permit. IEPA reissued the ILR40 permit on April 1, 2009 and again on February 10, 2016. Additional MS4 Permit program information can be found at Illinois EPA's MS4 webpage: http://www.epa.illinois.gov/topics/forms/water-permits/storm-water/ms4/index

Additionally, under the General ILR10 permit also administered by IEPA, all construction projects that disturb greater than 1 acre of total land area are required to obtain an NPDES permit from IEPA prior to the start of construction. Municipalities covered by the General ILR40 permit, are automatically covered under ILR10 30 days after the IEPA receives the NOI from the municipality.

1.3 Countywide Approach to NPDES Compliance

The Kane County Stormwater Management Commission (SMC) is a countywide governmental agency created by county ordinance under the authority of Illinois Revised Statute 55/5-1062. The Kane County Board adopts this ordinance pursuant to its authority to regulate stormwater management and govern the location, width, course, and release rate of all stormwater runoff channels, streams, and basins in the County, in accordance with the Kane County Comprehensive Countywide Stormwater Management Plan. SMC's goals include the reduction of flood damage and water quality degradation. Another purpose of SMC is to assure that new development addresses non-point source pollution, does not increase flood and drainage hazards to others, or create unstable conditions susceptible to erosion. To accomplish this, the SMC works cooperatively with individuals, groups, and units of government as well as serving as the corporate enforcement authority for the Kane County Watershed Development Ordinance. SMC enforces the Stormwater Technical Manual in non-certified communities on behalf of the municipality. The municipality is responsible for enforcing the Stormwater Technical Manual in Certified Communities. A municipality is considered a Certified Community after its petition is approved by SMC. SMC utilizes technical assistance, education programs, and watershed planning to increase public awareness of natural resources and the impacts of urbanization on stormwater quality. In addition, SMC provides solutions to problems related to stormwater and identifies effective ways of managing natural resources.

The statutory authority for this ordinance is contained in 55 ILCS 5/5-1041, 5-1042, 5-1049, 5-1062, 5-1063, 5-1104, 5-12003 and 5-15001 *et seq.*, and 415 ILCS 5/43, and other applicable authority, all as amended periodically. As applicable, the municipalities within the County adopt and enforce this

ordinance pursuant to 55 ILCS 5/5-1062, 65 ILCS 5/1-2-1, 11-12-12, 11-30-2, 11-30-8, and 11-31-2; and 615 ILCS 5/5, *et seq.*, including 5/18g.

The General Permit allows for MS4 communities to take credit for activities being performed by a Qualifying Local Program (QLP) toward meeting its permit requirements. The Kane County Stormwater Management Commission (SMC) is a Qualifying Local Program for MS4 communities in Kane County. As part of their ongoing services, SMC performs some functions related to each of the six minimum control measures. However, MS4 communities are required to provide additional services for each of the Minimum Control Measures with the greatest effort in the Illicit Discharge Detection and Elimination and Pollution Prevention/Good Housekeeping categories.

Using the countywide approach, municipalities may take credit for the programs and ordinances developed by SMC as well as tailor specific local BMP programs for compliance with the MS4 Permit. SMC provides the following MS4 program implementation services:

1. **Public Education and Outreach**: SMC provides, through its Public Information Coordinator, Kane County Newsletter(s), and publications, various training workshops and speaking engagements, county educational websites, tributary signage, etc.

2. **Public Participation and Involvement**: SMC coordinates and participates in public meetings and committees such as the stream monitoring program, stream clean-up program, used motor oil and household hazardous waste collection program, etc.

3. **Illicit Discharge Detection and Elimination:** Kane County provides stormwater system mapping, response to non-stormwater discharges into the County's MS4, Kane County Employee Training Program to identify illicit discharges, educational outreach – storm drain stenciling program.

4. **Construction Site Runoff Control**: SMC adopted the countywide Watershed Development Ordinance in 1998, which establishes the minimum stormwater management requirements for development in Kane County. The Stormwater Technical Manual, which is enforced by SMC as well as by certified communities in the county, establishes standards for construction site runoff control.

5. **Post-Construction Runoff Control**: The Watershed Development Ordinance also establishes standards for post-construction runoff control.

6. **Pollution Prevention/Good Housekeeping**: SMC provides guidance for winter de-icing and chloride reduction, best management practices, and other green initiatives.

1.4 Organization of SMPP

The City's Stormwater Management Program Plan consists of policies, programs, and practices that implement and enforce stormwater management throughout the City. The plan is structured to meet the six minimum control measures as defined in the General NPDES Permit No. ILR40. Stormwater plan goals are to reduce the discharge of pollutants from the stormwater system to the maximum extent practicable and to protect water quality, among other requirements.

The SMPP identifies best management practices to be implemented in six different program areas, called minimum control measures in the ILR10 permit. These program areas are:

- Public Education and Outreach,
- Public Participation/Involvement,
- Construction Site Runoff Control,
- Post-Construction Runoff Control,
- Illicit Discharge Detection and Elimination, and
- Pollution Prevention/Good Housekeeping.

Chapter 1: Overview of the Stormwater Management Program Plan – contains the format of the SMPP document and the MS4 permit regulations through county, state, and federal agencies.

Chapter 2: Program Management – provides an overview of the organization, implementation, and responsible parties necessary to achieve overall compliance with the SMPP and Permit. It also identifies how the City of coordinates with other county and state agencies and discusses the legal authority that the City has to implement the Plan components.

Chapter 3: The Program - addresses BMPs and stormwater pollutant controls implemented by the City for the six minimum control measures.

Chapter 4: Monitoring, Program Evaluation, and Reporting - describes the monitoring, evaluation, and reporting procedures associated with the program. The SMPP is a guide created to protect the City of St. Charles receiving waters from pollution and resultant degradation. This Chapter assists in identifying best management practices and processes that may require improvement and refinement, as the document becomes an effective tool.

Chapter 5: Appendices – including the ILR40 permit and program implementation forms.

1.5 Watersheds, Sub-Watersheds, and Receiving Waters

The City of St. Charles is primarily located within the Fox River Watershed. There are several receiving waters, tributary to the Fox River, which are located within the City. These streams include 7th Avenue Creek, Ferson Creek, and Norton Creek.

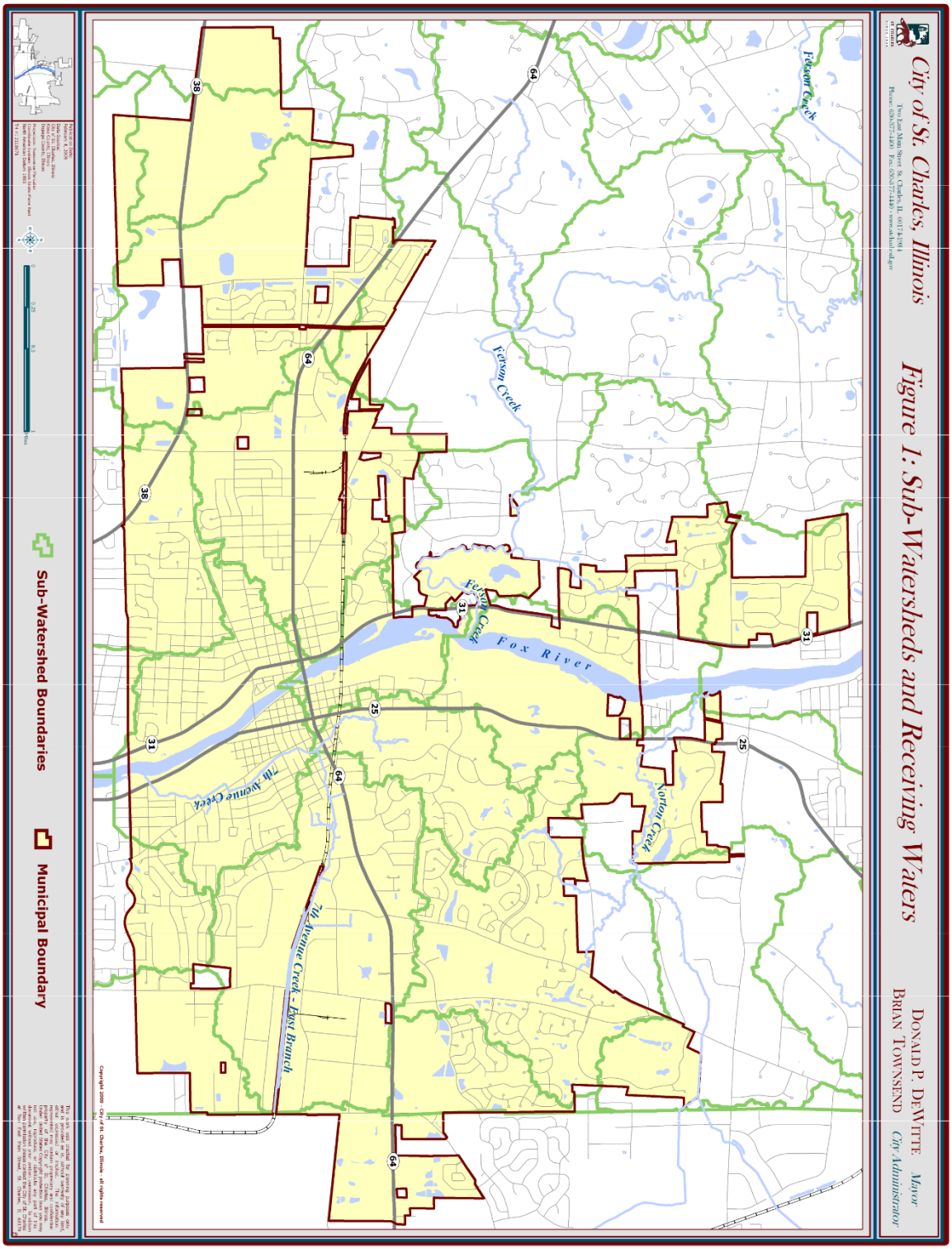
The major Watersheds and receiving waters are presented on **Figure 1** ***Map of Major Sub-Watersheds and Receiving Waters.***

Overview of the Fox River Watershed

- The Fox River drains 938 square miles in Wisconsin and 1720 square miles in Illinois, emptying into the Illinois River at Ottawa, Illinois. It is the third largest tributary to the Illinois River.
- The Fox River-Chain O'Lakes region is the United States' second busiest inland recreational waterway with over 27,000 boat stickers issued yearly.

- Over 214,000 people (residents of Elgin, Bartlett, Sleepy Hollow, and Aurora) receive their drinking water from the Fox River.
- The Fox River is home to at least 40 animals and 102 plants listed as Illinois endangered or threatened species.
- N Branch Nippersink Creek, Buck Creek, and Morgan Creek are 'biologically significant' streams supporting a diversity of fish and mussels in the Fox River Watershed. Other identified high quality tributaries of the Fox include Nippersink Creek, Boone Creek, Tyler Creek, Ferson Creek, and Big Rock Creek.

Figure 1: Map of Major Sub-Watersheds and Receiving Waters



2. Program Management

This Chapter describes the organizational structures of the City of St. Charles, the County and IEPA, and describes the roles and responsibilities of the various involved parties.

2.1 Intra-Department Coordination

The City Council is the policy and budget setting authority for the City. The Public Works and Community and Economic Development departments work together to implement the MS4 program. The Stormwater Coordinator has primary responsibility for managing the overall program.

2.1.A Stormwater Coordinator

The Public Works Engineering Division Manager is the Stormwater Coordinator and is responsible for the oversight and implementation of this SMPP. The Stormwater Coordinator has many different responsibilities:

- Is the lead contact for coordination with the Kane County Stormwater Management Commission, the Illinois Environmental Protection Agency, contractors, the development community, and other external regulatory agencies;
- Understands the requirements of ILR40, ensures that the SMPP meets the requirements of the permit, and that the City effectively implements the SMPP;
- Ensures that the City complies with the Watershed Development Ordinance (Stormwater Technical Manual) created by Kane County;
- Ensures that the municipal facilities comply with all minimum ILR40 permit requirements;
- Is aware when a municipal project is required to be authorized under the ILR10 permit. In these cases the Stormwater Coordinator should ensure that the NOI is received by IEPA at least 30 days prior to the start of construction; and
- Assists the development community in understanding when a ILR10 permit is required and whether construction sites comply with the general ILR10 and Stormwater Technical Manual permit conditions; and
- Should understand the role illicit discharges play in the overall NPDES Phase II MS4 program. In general, an incidence of non-compliance must be filed with IEPA for illicit discharges exiting an MS4 community's outfall into a receiving water. Additionally, if the illicit discharge is generated by a construction site, it may be necessary for both the applicant and the MS4 to file the ION form with IEPA.

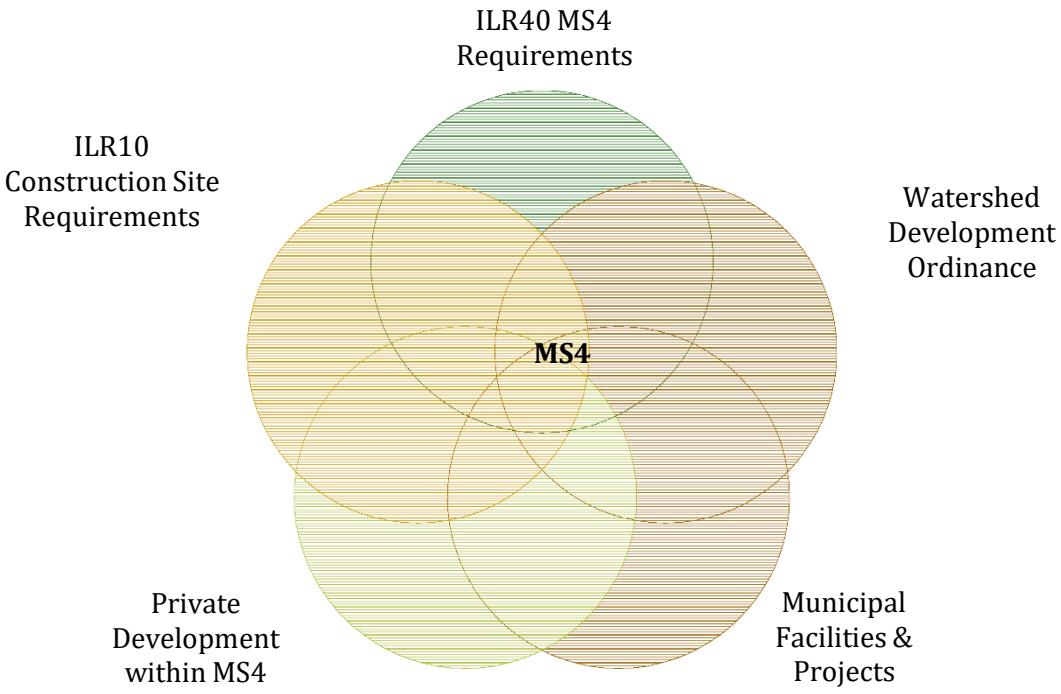


Figure 2: **MS4 Program Elements**

2.2.B Public Works

The Public Works Engineering Division is the lead division for MS4 program implementation, responsible for overseeing program elements. The Division Manager is the MS4 Stormwater Coordinator and Qualified Review Specialist for administration and enforcement of the Kane County Watershed Development Ordinance.

The Public Services Division is responsible for management, maintenance, and operation of the City's stormwater drainage system, streets and parking lots, facilities, and equipment fleet. The Environmental Services Division is responsible for the management, maintenance, and operation of the City's waste collection and disposal, recycling program, and environmental monitoring.

2.2.C Community and Economic Development

Development Engineering is responsible for providing engineering services during planning, design, and construction for development within the City, the administration of the stormwater management ordinance, and the City's land development & engineering regulations.

2.3 Coordination with Kane County Stormwater Management Commission

Coordination between the City and the Kane County Stormwater Management Commission (SMC) occurs through both participation in the SMC sponsored forums and through the Certified Community Status

under the Kane County Watershed Development Ordinance (Stormwater Technical Manual). The City's Stormwater Coordinator is the lead contact for participation in the forums. The Stormwater Coordinator is responsible for enforcement of the Stormwater Technical Manual.

2.4 Coordination with Consultants

The City may enlist the services of consultants to assist in the implementation of the Stormwater Technical Manual (including, but not limited to, plan review, site inspections and enforcement), and the design of MS4 projects. The Stormwater Coordinator has the responsibility of administering these contracts.

2.5 Coordination of Contractors

The City may hire contracted services. The Stormwater Coordinator also has a responsibility to educate contractors hired by the municipality in the requirements of this SMPP and applicable requirements of the ILR40 and ILR10 permits. Furthermore, the municipality has a responsibility to ensure that the development community hire contractors which meet the qualifications necessary under the program, refer to Chapter 3.4.B for additional information on qualified personnel.

2.6 Coordination with the Public

Coordination with the Public occurs on several levels. The Public Education and Outreach Program of this SMPP is discussed in Chapter 3.1. The Public Participation and Involvement Program of this SMPP is discussed in Chapter 3.2. The Public has the opportunity to comment on proposed preliminary and final plats through the Plan Commission and Municipal Board process established in the Municipal Code.

2.7 Coordination with the IEPA

The City is required to complete an annual report that describes the status of compliance with the ILR40 permit conditions and other related information as presented on the annual report template provided by the (QLP) qualified local program. The annual report must be posted on the City website and be submitted to the IEPA by the first day of June each year. The current annual report is included as Appendix 5.3.

2.8 Coordination with the Development Community

The City has a responsibility to assist the development community in understanding when an ILR10 permit is required and whether construction sites comply with the general ILR10 and Stormwater Technical Manual permit conditions. An incidence of non-compliance must be filed with IEPA for illicit discharges exiting an outfall into a receiving water. Additionally, if a construction site generates the illicit discharge, it may be necessary for both the applicant and the MS4 to file the ION form with IEPA.

2.9 Coordination with the Fire Department

The City's Fire Department is designated as the first responder for all hazardous material spills and illicit discharges.

3. Program Implementation

This Stormwater Management Program Plan includes six program areas, each of which is necessary in an effort to reduce/eliminate stormwater pollution in receiving water bodies. The implementation of each area is described within this chapter.

3.1 Public Education and Outreach

The City conducts public education programs that inform the community of potential impacts to receiving waters and the contributions the public can make to reduce pollutants in stormwater runoff. The City works with public schools, public libraries, developers, contractors, homeowners, business owners, boaters, and the general public as part of the Public Education and Outreach Program.

The City, in cooperation with Kane County, utilizes a variety of methods to educate and provide outreach to the public about the importance of managing pollutants that could potentially enter the stormwater system.

3.1.A Distribution of Paper Materials

The City actively pursues the acquisition of educational sheets prepared by the County, IEPA, USEPA, Center for Watershed Protection, Chicago Metropolitan Agency for Planning "CMAP" (previously Northeastern Illinois Planning Commission "NIPC"), University of Wisconsin Extension, Solid Waste of Kane County (Kane County Environmental Management), and other agencies and organizations. The City lists the Public Works Engineering Division phone number on all City outreach publications to encourage residences to contact the City with environmental concerns.

Types of materials distributed include:

- The "Guidelines for Draining Swimming Pools" door hanger,
- The "Protect Our Water" door hanger,
- Informational sheets/pamphlets regarding storm water best management practices,
- Informational sheets/pamphlets regarding water quality best management practices,
- Informational sheets/pamphlets regarding construction site activities (soil erosion and sediment control best management practices),
- Informational sheets/pamphlets published by Kane County Environmental Management regarding proper hazardous waste use and disposal, and
- A water quality/storm water section in the municipal newsletter.

Publications are provided in the following manner: at takeaway racks, annual outreach events, in the quarterly municipal newsletter, at Earth Day events within the community, and at scheduled meetings with the general public.

3.1.B Classroom Education

When permitted, the City participates in classroom presentations at local schools. A Kane County Environmental Management representative prepares the presentation with City support. The City keeps a log of event dates and participating schools.

3.1.C Website

The City website includes stormwater quality specific elements. The website gives information regarding water quality, solid waste and hazardous material, stormwater and general environmental health. A significant amount of information is made available through links to other educational and informational sites.

This SMPP, the NOI, and any previous annual reports are posted on the City's website. Annual reports are posted on the website and submitted to the IEPA by the first day of June each year.

3.1.D Technical Workshops

Periodically, Kane County hosts or co-host workshops for the general public that focus on specific stormwater topics. These workshops typically discuss stormwater topics currently of interest within the County. They offer the opportunity to share information and facilitate a collective focus on potential solutions to the challenges faced by the County, Cities, and other stakeholders. The City publicizes these events at take-a-way racks and on the website.

3.1.E Storm Drain Stenciling & Markers

The City supports the efforts of private entities to stencil or apply stickers to inlets, as well as the purchase of factory stamped inlet grates. These efforts apply messages at storm drain inlets with the intent of assisting in educating the public about stormwater runoff pollution. City efforts include:

- Providing the "Guide to Storm Drain Marking" (by SMC) to Home Owners Associations, school groups, etc. that express interest.
- Requiring all new development to furnish stamped inlet grates as of March 2009.
- Require that all new or rehabilitated open lid storm sewer structures will contain the "No Dumping Drains To River" stamped on the inlet grate.

3.1.F Household Hazardous and Other Residential Wastes

Improper disposal of HHW household hazardous waste (HHW), poor septic system maintenance, pool dewatering, and even car washing are all issues stemming from residential homes, which can result in acute toxicity to downstream aquatic life. The City supports local initiatives to improve resident awareness in an attempt to minimize incidents resulting from residential households. Such initiatives include:

- Mass media campaigns to educate residents
- Conventional outreach materials notifying residents about HHW, proper disposal of vehicle fluids, safe care washing materials, and proper pool dewatering techniques

- Providing pollution hotlines and fines/enforcement actions
- Water bill inserts promoting environmentally safe car washing products

3.2 Public Participation and Involvement

Public participation and involvement allows input from citizens during the development and implementation of the SMPP. The SMPP is evaluated on an annual basis. Major highlights and deficiencies are noted and the plan is revised as necessary.

3.2.A Public Review Process

Prior to the acceptance of the SMPP, the draft document was presented to the City Council. Comments on the SMPP are continually accepted through the website, phone calls or other media. Comments are evaluated for inclusion and incorporated into the next revision of the SMPP as appropriate.

3.2.B Complaints, Suggestions and Requests

Calls are screened, logged, and routed to the appropriate department for action. General program related calls are directed to the Stormwater Coordinator, or designee. Construction activity related telephone calls are directed to the Qualified Review Specialist, or designee. Illicit Discharge, storm sewer, and other related stormwater runoff concerns are directed to the Stormwater Coordinator. The City maintains a website which enables and encourages public communication.

3.2.C Watershed Planning and Stakeholders Meetings

The City participates (and encourages the participation of local stakeholders) in Kane County or other sponsored watershed planning events. The City will adopt Watershed Plans per the direction and in coordination with Kane County.

3.2.D Illicit Discharge/Illegal Dumping Hotline

The City maintains, operates, and publicizes a call in phone number which can be used to contact the City with environmental concerns. Primary advertisement venues include the website and all related municipal publications. Telephone calls received from residents, other internal departments, or other agencies are logged on the **Indirect Illicit Discharge Tracking Form** (**Appendix 5.10)**. This tracking form is reviewed by the Stormwater Coordinator annually to determine if trends can be seen and if there are additional outreach efforts needed.

3.2.E KCSMC Municipal Advisory Committee (MAC)

The City participates in MAC meetings and events hosted by Kane County, where topics often include all or parts of MS4 program implementation.

3.3 Illicit Discharge Detection and Elimination (IDDE)

There are two primary situations that constitute illicit discharges; non-stormwater runoff from contaminated sites and the deliberate discharge or dumping of non-stormwater. Illicit discharges can enter the storm sewer system as either an indirect or direction connection.

3.3.A Regulatory Authority

Effective implementation of an IDDE program requires adequate legal authority to remove illicit discharges and prohibit future illicit discharges. This regulatory authority is achieved through adoption of the Kane County Watershed Development Ordinance (Stormwater Technical Manual). Additionally, IEPA has regulatory authority to control pollutant discharges and can take the necessary steps to correct or remove an inappropriate discharge over and above local jurisdiction.

3.3.A.1 Watershed Development Ordinance

Several provisions of the Kane County Watershed Development Ordinance (Stormwater Technical Manual) prohibit illicit discharges as part of the development process. These provisions are applicable to regulated development activities as defined by the Stormwater Technical Manual. Regulated developments are required to meet the soil erosion and sediment control standards of the Stormwater Technical Manual. Furthermore, the Stormwater Technical Manual requires that the applicant prohibit illicit discharges into the stormwater management system generated during the development process.

3.3.B Identifying Outfalls and Receiving Waters

An Outfall (as defined by 40 CFR 122.26(B)(9)) means a point source (as defined by 40 CFR 122.2) at the point where a municipal separate storm sewer discharges into a water of the United States "receiving water". Open conveyances connecting two municipal storm sewers, or pipes, tunnels or other conveyances that connect segments of the same stream or other Waters of the United States are not considered Outfalls. For the purposes of the SMPP the following definitions shall be used:

> *Outfall:* Storm sewer outlet, or other open conveyance point discharge location, that discharge into a Waters of the U.S, receiving water or another MS4.

Regulated systems include the conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, gutters, ditches, swales, manmade channels, or storm sewers.

An outfall inventory was completed by the City, which was supplemented by data provided by Kane County for several of the receiving waters, using their prior stream inventory work. These two data sources were combined to create an ***Outfall Inventory Map***. This map is used in combination with the ***Storm Sewer Atlas*** to help determine the extent of discharged dry weather flows, the possible sources of the dry weather flows, and the particular water bodies these flows may be affecting. The inlets and outfall locations have been numbered to facilitate detection and tracking of identified illicit discharges. The ***Storm Sewer Atlas and Outfall Inventory Map*** can be obtained from the Public Works Engineering Division.

The outfall map is revised annually, as needed, to incorporate permitted outfalls associated with new developments. An outfall inventory is performed every 5 years; the focus of this effort is to search for new outfalls (i.e. those not already included on the existing ***Outfall Inventory Map***).

3.3.C Implementation

Environmental Services is performing Illicit Discharge Detection and Elimination outfall inspections. Staff follow procedures for detection, tracing, and removal of illicit discharges through dry weather screening of outfalls, regular storm sewer maintenance, and public reporting. An outfall screening

equipment checklist is provided in Appendix 5.4. A stormwater outfall inspection data collection form is provided in Appendix 5.5. An outfall sampling report form is provided in Appendix 5.6.

Spills are responded to by Public Works, with support by local fire department staff if needed, and emergency notification to Illinois EPA and local authorities based on the situation. The City's atlas shows all of the outfalls and all receiving waters to which the City's separate storm sewer system discharges. The atlas is in a GIS based system, and is updated as development occurs.

A prioritization has been developed for outfall inspections. Public Works staff inspect high priority storm sewer outfalls annually for evidence of potential illicit discharges. High priority outfalls include outfalls discharging directly to the Fox River, and potentially others to Fox River tributaries. Other outfalls are inspected over a five-year cycle.

Eight steps are taken to definitively identify and remove an inappropriate discharge to the storm sewer system. These steps are as follows:

Step 1. An outside laboratory service takes a grab sample and tests for the illicit discharge at the manhole located immediately downstream of the suspected discharge connection.

Step 2: Conduct an internal meeting with appropriate personnel including Public Works Personnel, Public Works Director, Building Department Code Qualified Review Specialist, and Stormwater Coordinator to discuss inspection and testing results and remedial procedures.

Step 3: The Public Works Administration sends a notification letter to the owner/operator of the property/site suspected of discharging a pollutant. The letter requests that the owner/operator describe the activities on the site and the possible sources of non-stormwater discharges including information regarding the use and storage of hazardous substances, chemical storage practices, materials handling and disposal practices, storage tanks, types of permits, and pollution prevention plans.

Step 4: Arrange a meeting for an inspection of the property with Public Works Personnel, the Building Department Code Qualified Review Specialist, and the owner/operator of the property where the pollution source is suspected. Most illicit connections and improper disposal can be detected during this step. Notify the site owner/operator of the problem and instruct them to take corrective measures.

Step 5: Conduct additional tests as necessary if the initial site inspection is not successful in identifying the source of the problem. The Public Works Director is responsible for determining the appropriate testing measure to pinpoint the source.

Step 6: If the owner/operator does not voluntarily initiate corrective action, the Building Department Code Enforcement Office issues a notification of noncompliance. The notification includes a description of the required action(s) and a time frame in which to assess the problem and take corrective action. Upon notification of noncompliance, the owner can be subject to any penalties stipulated by City Ordinance for illicit discharge.

Step 7: Conduct follow-up inspections after stipulated time frame has elapsed to determine whether corrective actions have been implemented to: 1) remove the illicit connection or 2) eliminate the improper disposal practice.

Step 8: If corrective actions have been completed and the illicit discharge has been eliminated, Public Works Administration sends a notification of compliance letter to the owner/operator of the property/site suspected of discharging a pollutant.

If corrective actions have not been completed, an additional internal meeting with appropriate personnel is held to determine appropriate steps to obtain compliance. Appropriate actions may include fines and/or court citations.

3.4 Construction Site Runoff Control

The goal of the Kane County Stormwater Technical Guidance Manual is to ensure that new development does not increase existing stormwater problems or create new ones. The Technical Manual establishes countywide standards for runoff maintenance, detention sites, soil erosion and sediment control, water quality, wetlands, and floodplains. These provisions are only applicable for regulated development activities as defined by the technical Manual. Applicants that hydrologically disturb greater than 1-acre are also required to seek coverage under the statewide construction general permit by filing a Notice of Intent (NOI) with IEPA.

3.4.A Regulatory Program

The Kane County Stormwater Technical Manual is implemented primarily at the local level. Kane County allows those municipalities meeting certain criteria to be classified as a "Certified Communities." The designation allows those communities to enforce Stormwater Technical Manual standards within their own jurisdictions. SMC administers the Technical Manual and issues permits for the developments within the Non-Certified Communities.

The City has adopted the Kane County Stormwater Technical Guidance Manual and is currently a Certified Community for the review, permitting, inspection, and enforcement of the provisions of the Technical Manual. The community designates a Qualified Review Specialist; this person is responsible for the administration and enforcement of the Stormwater Technical Manual. The City has created an Inspection and Violation Notification Procedure to ensure compliance with the Technical Manual.

Applicants are directed to the City's Development Engineering Division for information pertaining to the permitting process. Developments that exceed the Stormwater Technical Manual minimum thresholds are provided with a Kane County Watershed Development Ordinance application form. Applicants submit the completed form and supporting documentation to the Development Engineering Division for review and comment. After the Development Engineering Division concurs that the applicable provisions of the Stormwater Technical Manual have been addressed, a permit is issued. Each permit lists any additional conditions that are applicable to the development.

Ordinance provisions include, but are not limited to, the following:

- Grading, soil erosion and sediment control plan. The plan must:
  - Prevent discharge of sediment from the site through the implementation of soil erosion control practices, primarily, and sediment control secondarily, and
  - Protect receiving waters, natural areas and adjacent properties from damage that may result from the proposed grading.
- Established inspection duties for the applicant and procedures for inspections;
- Record keeping and reporting procedures;
- Security deposits to ensure faithful performance;
- Enforcement measures to achieve compliance; and
- One year warranty period, for applicable developments.

As part of the permit review process, applicants that hydrologically disturb greater than 1-acre are required to seek coverage under the statewide construction general permit by filing a Notice of Intent (NOI) with IEPA. During construction, applicants are required to submit to IEPA Incidence of Noncompliance (ION) forms, as necessary. After the site is substantially stabilized, the applicant is required to submit a Notice of Termination (NOT).

3.4.B Responsible Parties

3.4.B.1 Applicant

The applicant is ultimately responsible for ensuring compliant soil erosion and sediment control measures on-site during construction. General contractors, sub-contractors and other hired employees of the applicant can assist the applicant in maintaining a compliant site; however the applicant remains the responsible party. The applicant is also responsible for obtaining all other required state and federal permits, including an NOI with IEPA and upholding all permit conditions (including completing inspection logs).

3.4.B.2 Qualified Review Specialist

The Qualified Review Specialist is responsible for administration and enforcement of the provisions of the Stormwater Technical Manual. Additionally, the Qualified Review Specialist is responsible for performing inspections and monitoring the development. Personnel under his/her direct supervision can perform review and inspection efforts. A full description of the Qualified Review Specialists responsibilities is included in Article 14 of the Stormwater Technical Manual. The Qualified Review Specialist follows established procedures for notifying applicants of deficiencies and obtaining site compliance (i.e. enforcement).

3.4.C Site Plan Review

The City is a certified community for the enforcement of the Stormwater Provisions of the Stormwater Technical Manual. Development Engineering provides applicants with a variety of documents necessary to obtain municipal permits.

The Engineering Division performs a review of the proposed site plan and provides comments to the applicant on any plan deficiencies and/or recommended plan enhancements. The plan review also assists in identifying other approvals that the applicant may be required to obtain. After Development Engineering concurs that the applicable provisions of the Stormwater Technical Manual have been addressed, a permit is issued. The permit lists any additional conditions that are applicable for the development, including providing prior notification of the pre-construction meeting to the City. City attendance of the pre-construction meeting shall be made a condition of the permit for all major developments. The applicant is required to post the permit at the construction site.

3.4.D Construction Site Inspection Procedures

Representatives of the City are authorized to enter upon any land or water to inspect development activity and to verify the existing conditions of a development site that is under permit review. Development Engineering staff are performing and documenting site inspections, and following up on issues noted during inspection.

Staff inspect site developments at all stages of the construction process. Construction plans approved by the Qualified Review Specialist are maintained at the site during progress of the work. Inspections are typically performed upon completion of installation of sediment and runoff control measures (including perimeter controls and diversions), after stripping and clearing, rough grading, final grading, after each rain event exceeding 0.5 inches of rain, and after final stabilization / restoration.

Site Inspection Process:

- The City attends the pre-construction meeting on applicable development sites.
- The applicant notifies the City when initial sediment and runoff control measures have been installed. Upon inspection approval, general construction commences.
- The City inspects the stormwater management system and authorizes additional site improvement activities.
- The City performs site inspections and completes the ***SE/SC Inspection Form*** **(Appendix 5.7)**.
- The City requires as-built documentation of the stormwater management system prior to final site stabilization.

3.4.E Complaints

The City frequently receives phone calls regarding a development, either during the review or construction phase. Both site design and construction related phone calls are directed to the City's Qualified Review Specialist, or designee. Site design comments are handled on a case-by-case basis. Construction related calls are typically addressed by performing a site inspection.

3.4.F Construction Site Violations and Incidents of Noncompliance (ION)

If the inspector determines a violation of the Storm Water Pollution Prevention Plan (SWPPP), the developer is required to complete immediate corrective action. If the discharge from the construction site enters receiving waters within the MS4 jurisdictional boundaries, the City files an ION with IEPA. A sample notice of violation letter is provided as Appendix 5.8.

If site violations are not immediately corrected, the City takes appropriate enforcement actions to obtain compliance, which may include fines and court citations.

3.4.G BMP Reference Information

Reference information includes, but is not limited to, the following sources:

- Native Plant Guide
- Illinois Urban Manual
- Kane County Stormwater Technical Guidance Manual
    - Soil erosion and sediment checklist and notes
    - Typical construction sequencing
- City construction details
- Chicago Metropolitan Agency for Planning course manuals
- IDOT manuals
- Center for Watershed Protection documents
- IEPA and USEPA publications

3.4.H Construction Site Waste Control

The Stormwater Technical Manual includes several provisions that address illicit discharges generated by construction sites. The applicant is required to prohibit the dumping, depositing, dropping, throwing, discarding or leaving of litter and construction material, and all other illicit discharges from entering the stormwater management system.

3.5 Post Construction Runoff Control

The City attempts to inspect 100% of stormwater management facilities annually, both publicly and privately owned. If deficiencies are found in respect to the approved ongoing maintenance plan, owners are required to take corrective actions. The City may take enforcement actions for those properties that do not take corrective actions in a timely manner.

City engineering staff annually inspects streambanks of receiving waters for erosion, with a target inspection rate of 20% per year. Observed erosion, seeding/re-seeding, or slope stabilization needs are documented. Documented deficiencies are reported to the Stormwater Coordinator, who evaluates and determines appropriate remediation activities. Remedial actions might include notifying the property owner or including maintenance activities the City's work program.

3.6 Pollution Prevention and Good Housekeeping

The City is responsible for the care and upkeep of its general facilities, municipal roads, and associated maintenance yards. Many maintenance activities are most regularly performed directly by staff; however periodically, contractors are employed to perform specific activities. On-going education and training is provided to ensure that employees have the knowledge and skills necessary to perform their functions effectively and efficiently.

3.6.A Inspection and Maintenance Program

The following sections describe areas/items that require inspection and their recommended inspection frequency. It further details recommended maintenance activities and subsequent tracking procedures for each of the tasks.

3.6.A.1 Street Sweeping

Street sweeping operations are performed to reduce potential illicit discharges and to provide a clean environment. The curb lines of all streets are cleaned on a rotating basis. The rotation may be changed or interrupted if heavy rain occurs, the sweeper is out of order due to mechanical problems, or the Street Division experiences heavy workload. Each street is typically swept/cleaned approximately 10 to 15 times per year. Sweeper waste is collected and disposed of in the spoil waste area.

3.6.A.2 Catch Basins and Storm Sewers

The Public Works Department's goal is to annually clean approximately 20% of all catch basins, to a minimum sump depth of 2 feet. Spoil waste obtained from catch basin cleaning is disposed of in the spoil waste area. Locations of cleaned catch basins and their condition are logged into the Street Division Work Order Database.

If catch basin debris is at the invert elevation of the downstream pipe (i.e. has completely filled the sump area), then the downstream storm sewer system is also cleaned. Likewise, if a water main break or other heavy flow occurs that flushes potential illicit discharges into the storm sewer system, the receiving storm sewer lines are inspected and then cleaned as necessary.

3.6.A.3 Landscape Maintenance

The City maintains care and upkeep of its general facilities, municipal roads, associated maintenance yards, and other public areas. Municipal staff is responsible for Litter and Debris control described in Chapter 3.6.A.4.a below. The City annually selects and contracts with a landscape contractor. The landscape contractor is responsible for the remainder of the landscape maintenance program under the supervision of the Public Works Department. The City is responsible for ensuring that their landscape contractors are provided with training and/or other information to ensure that they adhere to the City's SMPP.

3.6.A.3.a Litter and Debris

Litter and debris can accumulate on City property and roadway right-of-ways. Each Public Works Division is responsible for the clean-up of their respective facilities. Clean-up at park and recreation areas is the responsibility of the St. Charles Park District. Other City properties and right-of-ways (including municipal, Township, County, and State right-of-ways within the MS4 limits) are cleaned by Public Works personnel or volunteer groups on an as-needed basis.

3.6.A.3.b Private Residence Yard Waste

Yard waste and leaves from private residences are collected through a refuse collection contract. Yard waste is collected weekly throughout the growing season. Leaf collection typically starts in October and runs for approximately six weeks.

3.6.A.3.c Fertilizers

The annual landscape contractor is required to be a licensed applicator for fertilizers. Weed killer and fertilizers are typically scheduled two and four times per season, respectively. Contractor specifications incorporate low impact products. The use of pesticides and fertilizers is managed in a way that minimizes the volume of storm water runoff and pollutants (per ILR40 Requirements).

3.6.A.4 Snow Removal and Ice Control

During snow removal and ice control activities, salt, de-icing chemicals, abrasives, and snowmelt may pollute stormwater runoff. To address these potential pollutants, the following procedures for the "winter season" (November 1 through May 1) are implemented.

3.6.A.4.a Roadway Ice Control

Use the minimal amount of salt, de-icing chemicals, and additives necessary for effective control. Prior to November 1, preparation work to obtain seasonal readiness is completed. These tasks include: inspecting and re-conditioning of spreaders and spinners, installing these items onto snow removal vehicles, performing test operations, calibrating distribution rates per National Salt Institution Application Guidelines, and conducting better driver training. The completion of these preparatory tasks helps to ensure that only the necessary level of salt is applied.

Once the ambient temperature is below 20-degrees Fahrenheit, a Public Works Supervisor considers the additional use of "Geo-melt" to improve the efficiency of snow melting efforts. If deemed necessary, it is applied to the salt material prior to spreading, at a rate of 8-Gal/Ton of salt; a computer controls the application rate. The "Geo-melt" dispensing system (including pump and sprayers) is primed for operation monthly to ensure proper working conditions.

3.6.A.4.b Salt Delivery and Storage

Steps are taken to ensure that the delivery, storage, and distribution of salt do not pollute stormwater runoff from the Public Works Complex. The City stores all salt in an enclosed storage building. The floor of the salt storage building and adjacent receiving/unloading area are constructed of asphalt. Delivered salt is unloaded at the Public Works facility. The limits of the salt pile are pushed back from the door opening to minimize potential illicit runoff. In the event that there is runoff from the salt storage building or unloading area, a street sweeper and front-end loader are utilized to clean the runoff area.

3.6.A.4.c Snow Plowing

Snow plowing activities direct snow off the pavement and onto the parkways which reduces the amount of salt, chemical additives, abrasives, or other pollutants that go directly into the storm sewer system. When deemed necessary, the Public Works Department hauls accumulated snow to designated stockpile locations. These locations are asphalt and/or gravel surface areas. Snow blowing, plowing or dumping into drainageways is not allowed. Once the snow has melted, the stockpile areas are cleaned with a street sweeper removing any debris deposited.

3.6.A.5 Vehicle and Equipment Operations

Vehicle and equipment operation and maintenance procedures and practices are designed to minimize or eliminate the discharge of pollutants to the stormwater management system, including receiving waters.

3.6.A.5.a Vehicle Fueling

The vehicle fueling area contains one two-port fiberglass tank and two dispensers. These tanks are monitored by an OPW leak detection system. Leak Line tests are performed on an annual basis. Surface runoff, in the vicinity of the tank farm, is directed to the west side of the Public works compound.

3.6.A.5.b Vehicle Maintenance

Vehicle maintenance procedures and practices are designed to minimize or eliminate the discharge of petroleum-based pollutants to the storm water management system, including receiving waters. This section discusses proper handling and disposal of vehicle maintenance by-products such as waste oil, antifreeze, batteries, and tires.

Waste Oil

Used motor oil, transmission fluids, gear lubes, brake fluids, and other vehicle fluids (except antifreeze) are collected and stored on the west side of the Fleet department. Typically, the waste oil tank is emptied and the contents removed for recycling.

Antifreeze

Used antifreeze is stored in a temporary container. When 55-gallons are accumulated, a special waste hauler is contacted for collection and disposal.

Batteries

Used batteries are stored in a designated area located in the Inventory Control area of the Public works building. Typically, the batteries are collected bi-weekly from a local vendor.

Tires

Used tires are disposed of weekly by a local vendor. Tires are stored outside the Fleet department at the Public Works Complex until picked up for disposal.

Other

Private certified companies perform all air-conditioning related work; therefore, the disposal of freon is not handled directly by the City. Cleaning fluids and solvents are contained within an enclosed tank and maintained by a private licensed special waste company.

3.6.A.6 Animal Nuisance Control

The Public Works Department, upon receiving notification, collects "road kill" from right-of-way areas. The carcasses are disposed of in the Public Works Complex garbage dumpsters.

3.6.A.7 Waste Management

Waste Management consists of implementing procedural and structural practices for handling, storing, and disposing of wastes generated by a maintenance activity. This helps prevent the release of waste materials into the stormwater management system including receiving waters. Waste management practices include removal of materials such as asphalt and concrete maintenance by-products, excess earth excavation, contaminated soil, hazardous wastes, sanitary waste, and material from within the triple basins.

3.6.A.7.a Spoil Stock Pile

The spoil stockpile is located at the Public Works Complex. Asphalt and concrete maintenance by-products and excess earth excavation materials are temporarily stored in the stockpile. Attempts are made to recycle asphalt and concrete products prior to storage in the spoil stockpile. Licensed waste haulers are contracted to remove and dispose the contents of the spoil stockpile at a licensed landfill on an as-needed basis.

3.6.A.7.b Contaminated Soil Management

Collect or manage contaminated soil/sediment generated during an emergency response or identified during construction activities for treatment or disposal. Attempts are made to avoid stockpiling of the contaminated soil. If temporary stock piling is necessary, the stockpile is placed on an impermeable liner. Additionally, BMPs (presented in the Illinois Urban Manual) are used to protect the down slope of the stockpiled area. Any construction entrances are located on the upstream side of the temporary stockpile.

3.6.A.7.c Hazardous Waste

Store all hazardous wastes in sealed containers constructed of compatible material and labeled taking precautions not to overfill. The containers are located in non-flammable storage cabinets or on a containment pallet. These items include paint, aerosol cans, gasoline, solvents, and other hazardous wastes. Please refer to chapter 3.6.A.7 for vehicle related hazardous wastes. Paintbrushes and equipment used for water and oil-based paints are cleaned within the designated cleaning area. Associated waste and other cleaning fluids are contained within an enclosed tank. The tank is maintained by a private licensed special waste company.

3.6.A.7.d Sanitary Waste

Discharge sanitary waste into a sanitary sewer or managed by a licensed waste hauler.

3.6.A.7.e Triple Basins

Floor drains in the garage bay floor area of the Public Works Complex are directed to an underground Triple Basin. At a minimum, the Triple Basin are vacuumed out and completely cleaned bi-monthly.

Vacuumed out material is transported to the wastewater treatment station to air-dry on a protected impervious surface. The dried material is then transported to a landfill.

3.6.A.8 Water Conservation & Irrigation

Water conservation practices minimize water use and help to avoid erosion and/or the transport of pollutants into the stormwater management system. During periods of dry weather, a sprinkling/irrigation schedule is enforced. Maintenance activities (performed by the staff or its contractors) preserve water by utilizing vacuum recovery as opposed to water based cleaning when possible. Additionally, the water main replacement program decreases the possibility for water main leaks. In the event that a water main leak occurs, crews valve off the leaking section as soon as possible and then repair.

3.6.B Spill Response Plan

Spill prevention and control procedures are implemented wherever non-hazardous chemicals and/or hazardous substances are stored or used. These procedures and practices are implemented to prevent and control spills in a manner that minimizes or prevents discharge to the stormwater management system and receiving waters. The following general guidelines are implemented, when cleanup activities and safety are not compromised, regardless of the location of the spill:

- Cover and protect spills from stormwater run-on and rainfall, until they are removed,
- Dry cleanup methods are used whenever possible,
- Dispose of used cleanup materials, contaminated materials, and recovered spill material in accordance with the Hazardous Waste Management practices or the Solid Waste Management practices of this plan,
- Contaminated water used for cleaning and decontamination shall not be allowed to enter the stormwater management system,
- Keep waste storage areas clean, well-organized, and equipped with appropriate cleanup supplies, and
- Maintain perimeter controls, containment structures, covers, and liners to ensure proper function.

3.6.B.1 Non-Hazardous Spills/Dumping

Non-hazardous spills typically consistent of an illicit discharge of household material(s) into the street or stormwater management system. Upon notification or observance of a non-hazardous illicit discharge, Public Works personnel implement the following procedure:

- Sand bag the receiving inlet to prevent additional discharge into the storm sewer system, as necessary. It may be necessary to sand bag the next downstream inlet.
- Check structures (immediate and downstream). If possible, materials are vacuumed out. The structure(s) are then jetted to dilute and flush the remaining unrecoverable illicit discharge.

- Clean up may consist of applying "Oil Dry" or sand and then sweeping up the remnant material.
- After containment and cleanup activities have been performed, the on-site Public Works personnel fills out the ***Spill Response Notice*** **(Appendix 5.8**) and distributes to adjoining residences/businesses. In residential areas, the hanger should be provided to residences on both sides of the spill and on both sides of the street.
- Public Works personnel document the location, type of spill and action taken. The on-site Public Works personnel provide the tracking form to their supervisor. The supervisor, or his designee, takes the information from the form and transfers it to the ***Indirect Illicit Discharge Tracking and Summary Form*** **(Appendix 5.10)**.
- If a person is observed causing an illicit discharge, Public Works Engineering is notified and appropriate citations issued by the Police Department.

3.6.B.2 Hazardous Spills

Upon notification or observance of a hazardous illicit discharge, Public Works follows the following procedure:

- Call 911, explain the incident. The Fire Department responds;
- Public Works provides emergency traffic control, as necessary;
- The Fire Department evaluates the situation and applies "No Flash" or "Oil Dry" as necessary;
- The Fire Department's existing emergency response procedure, for hazardous spill containment clean-up activities, is followed;
- Public Works documents the location, type of spill and action taken. The on-site Public Works personnel provide the tracking form to their supervisor. The supervisor, or his designee, takes the information from the form and transfers it to the ***Indirect Illicit Discharge Tracking and Summary Form*** **(Appendix 5.10)**.

3.6.C Employee Training

The City provides education and training to all of its employees to ensure that they have the knowledge and skills necessary to perform their functions effectively and efficiently. The purpose of the training is to teach appropriate employees about the following:

- Stormwater characteristics and water quality issues;
- The roles and responsibilities of the various Departments, and individuals within these Departments, regarding implementation of the SMPP to consistently achieve Permit compliance;
- Activities and practices that are, or could be sources, of stormwater pollution and non-stormwater discharges; and,
- Managing and maintaining green infrastructure and low impact design features.

The MS4 Permit requires stormwater quality Best Management Practices (BMP) training on the following topics.

- Park and open space maintenance
- Fleet and building maintenance
- Operation of storage yards
- Snow disposal, deicing material storage handling and use on roadways
- New construction and land disturbance
- Storm water system maintenance procedures
- Proper disposal of street cleaning debris and catch basin material
- How flood management projects impact water quality
- Non-point source pollution control
- Aquatic habitat
- Green infrastructure controls, including routine maintenance, repair, or replacement of public surfaces
- Training for recognizing hazards associated with illicit discharges, and response

Annual training is provided to educate staff on pollution prevention and reduction of stormwater pollution from municipal activities. Digital and hard copies of the training materials will be kept and shared with applicable new employees as part of their job introduction.

Revisions/enhancements to the SMPP will be approved by the Stormwater Coordinator and then shared with applicable employees. The Stormwater Coordinator will monitor the potential need for overall refresher material distributions and offer additional training as necessary.

4. Program and Performance Monitoring, Evaluation and Reporting

The SMPP describes the City's approach to achieving compliance with the requirements of the NPDES Phase II program for both private and public activities within the City. Land development, redevelopment and transportation improvement projects were required to comply with the provisions of the Stormwater Technical Manual prior acceptance of the SMPP. Additionally, the City had numerous written and unwritten procedures for various tasks. This SMPP documents and organizes previously existing procedures and incorporates the objectives of the Stormwater Technical Manual to create one cohesive program addressing pre- development, construction, post-development activities and municipal operations.

This chapter describes how the City will monitor and evaluate the proposed stormwater pollution prevention plan. As part of the stormwater management program, the City:

- Reviews its activities,
- Inspects its facilities,
- Oversees, guides, and trains its personnel, and
- Evaluates the allocation of resources available to implement stormwater quality efforts

4.1 Performance Milestones

Previously established ordinances and programs implement many of the anticipated tasks. The following schedule describes general performance expectations.

- Within 6 months following the acceptance of the SMPP, applicable employees will receive training regarding the implementation of the SMPP.

- Within 1 year following the acceptance of the SMPP, program enhancement items within Chapter 3 will be implemented, except for the IDDE program milestones discussed below. Refer to Chapter 2.1 for a description of tasks associated with the implementation of the SMPP.

- Within 3 years following the acceptance of the SMPP, the Outfall Inspection Procedure will be completed for all pipes identified, during the pre-screening efforts, as having dry weather flow.

- Within 5 years following the acceptance of the SMPP, tracing and removal procedures will be completed for all pipes identified, during the Outfall Inspection Procedure, as contributing illicit discharges to receiving waters.

4.2 Program Monitoring and Research

Water quality monitoring is performed to inform both local MS4 program implementation and support regional water quality planning. The City collects water quality samples and supplies the analysis results to the Fox River Study Group (FRSG). FRSG implements a regional water quality monitoring program and the City, as a member, has access to all of FRSG monitoring information. As required by

permit, the Stormwater Coordinator should review the monitoring results each year and determine if any adjustments should be made to the MS4 program and its BMP procedures and commitments.

The Stormwater Coordinator will also monitor research conducted by others regarding the effectiveness of various alternative municipal practices, procedures, and technologies. The City will continue to seek innovative stormwater practices and technologies. Information and guidance obtained through county municipal advisory committee meetings and other sources will be incorporated into this SMPP as practical. This information will be used to provide insight into how the program may need to evolve.

4.3 Program Evaluation

The primary mechanism for evaluating the program and ensuring that the field staff has adequate knowledge is supervision by responsible managers. Management support tasks include observing and evaluating design, construction, and field personnel as they implement the requirements of the SMPP on both municipal and private projects, and maintenance personnel as they conduct their assigned activities. City staff will be performing ongoing evaluations of the SMPP.

The following types of questions/answers are discussed annually between the Stormwater Coordinator, managers and field staff.

- Are proper stormwater management practices integrated into planning, designing, and constructing both (City) and private projects?
- Are efforts to incorporate stormwater practices into maintenance activities effective and efficient?
- Is the training program sufficient?
- Is the SMPP sufficient? Are the procedures for implementing the SMPP adequate?

5. Appendices

5.1 ILR40 MS4 Permit

5.2 Notice of Intent

5.3 Annual Facilities Inspection Report

5.4 Stormwater Outfall Screening Equipment Checklist

STORM WATER OUTFALL SCREENING EQUIPMENT CHECKLIST		
Field Analysis		pH Testing Strips
		Chlorine Testing Strips
		Copper Test Strip
		Ammonia Test Strip
		Phenols Test Kit (Minimum of 15 Tests)
		Detergents Test Kit (Minimum of 15 Tests)
		Color Chart
		Thermometer
		Wash Bottle with Tap Water
Sampling		Extended Sampler
		250-ml and 500-ml glass sample containers with labels
		Cooler with ice or ice packs
Other		Outfall Screening Data Form (Minimum of 10)
		Outfall Sampling Report (Minimum of 10)
		Clipboard and Pens
		Resident Form Letters (Minimum of 10)
		Training Manual
		Storm Sewer Atlas
		Digital Camera
		Flashlight
		Manhole Cover Hook
		Tape Measure
		Folding Rule
		Brush Clearing Tool
		Plastic Trash Bags
		Paper Towels
Safety (PPE Equipment)		Traffic Cones/Flags/Light Sticks
		Traffic Safety Vest
		First Aid Kit
		Steel-Toe Boots
		Work Gloves
		Safety Glasses/Goggles
		Rubber Boots
		Disposable Gloves (Latex)
		ID Badge
Personal (supplied by employee if desired)		Insect Repellant
		Sunscreen

5.5 Stormwater Outfall Inspection Data Form

Section 1: Background Data

Subwatershed:	Outfall ID:	
Date:	Time (Military):	
Temperature:	Inspector(s):	
Previous 48 Hours Precipitation:	Photo's Taken (Y/N)	If yes, Photo Numbers:
Land Use in Drainage Area (Check all that apply): ☐ Industrial ☐ Residential ☐ Commercial	☐ Open Space ☐ Institutional Other: _____ Known Industries: _____	

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
Storm Sewer (Closed Pipe)	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Clay / draintile ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: ____	☐ Single ☐ Double ☐ Triple ☐ Other:_____	Diameter/Dimensions: _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
Open drainage (swale/ditch)	☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other:	☐ Trapezoid ☐ Parabolic ☐ Other:		Depth: Top Width: Bottom Width:	

Section 3: Physical Indicators

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Peeling Paint ☐Corrosion	
Deposits/Stains	☐	☐ Oily ☐Flow Line ☐ Paint ☐ Other:	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Floatables ☐ Oil Sheen ☐ Suds ☐ Excessive Algae ☐ Other:	
Pipe algea/growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other:	
Do physical indictors suggest an illicit discharge is present (Y/N):			

Flow Present?	☐ Yes ☐ No	**If No, Skip to Section 7 and Close Illicit Discharge Investigation**
Flow Description	☐ Trickle ☐ Moderate ☐ Substantial	

Section 4: Physical Indicators (Flowing Outfalls Only)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	☐	☐ Sewage ☐ Rancid/sour ☐ Sulfide ☐ Petroleum/gas ☐ Laundry ☐ Other:	☐ 1–Faint	☐ 2 – Easily detected	☐ 3 – Noticeable from a distance
Color (color chart)	☐	☐ Clear ☐ Brown ☐ Gray ☐ Yellow ☐ Green ☐ Orange/Red ☐ Multi-Color ☐ Other:	☐ 1–Faint colors in sample bottle	☐ 2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in outfall flow
Turbidity	☐	See severity	☐ 1–Slight cloudiness	☐ 2 – Cloudy	☐ 3 – Opaque
Floatables -Does Not Include Trash!!	☐	☐ Sewage ☐ Suds and Foam ☐ Petroleum (oil sheen) ☐ Grease ☐ Other:	☐ 1–Few/slight; origin not obvious	☐ 2 – Some; indications of origin	☐ 3 - Some; origin clear
Do physical indictors (flowing) suggest an illicit discharge is present (Y/N):					

Section 5: On-Site Sampling / Testing (Flowing Outfalls Only)

PARAMETER	RESULT	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)	EQUIPMENT
Temperature		NA	NA	Thermometer
pH		6 – 9		5-in-1 Test Strip
Ammonia		<3 mg/L April – Oct < 8 mg/L Nov - March		Test Strip
Free Chlorine		NA	NA	5-in-1 Test Strip
Total Chlorine		< 0.05 mg/L		5-in-1 Test Strip
Phenols		< 0.1mg/L		Test Kit
Detergents as Surfactants		> 0.25 mg/L residential > 5 mg/L non-residential		Test Kit
Copper		<0.025 mg/L		Test Strip
Alkalinity		NA	NA	5-in-1 Test Strip
Hardness		NA	NA	5-in-1 Test Strip
Sample Location				

(Note NA values used for future tracing procedures)

Section 6: Data Collection for Lab Testing (see flow chart)

1. Sample for the lab?		Yes		No
2. If yes, collected from:		Flow		Pool

PARAMETER	RESULT (from lab)	ACCEPTABLE RANGE	WITHIN RANGE (Y/N)
Fecal Coliform		400 per 100 mL	
Fluoride		0.6 mg/l	
Potassium		Ammonium/Potassium ratio or > 20mg/l	

*note label sample with outfall number

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

5.6 Outfall Sampling Report

Outfall Sampling Report

Structure ID #		Date:	
Outfall ID #		Time of Sample:	
Sampled By:			AM PM

Glass Bottle Size:	250 ml	500 ml	32 ml

Tests requested:	Fluoride	Potassium	Fecal Coliform

Relinquished By:	Date:
Comments:	Time:
Received By:	Date:
Comments:	Time:
Relinquished By:	Date:
Comments:	Time:
Received By:	Date:
Comments:	Time:

5.7 Soil Erosion and Sediment Control Inspection Form

Inspections of implemented erosion and sediment control best management practices must be performed weekly and within 24 hours after a precipitation event 0.5 inches or greater which results in runoff.

Weekly written reports of all inspections conducted by or for the permittee must be maintained throughout the period of general permit coverage.

Name of Permittee:	
Construction Site Name (Project):	**Construction Site ID No.:**
Location:	**County:**
Contractor:	**Field Office Phone:**

Note: Weekly inspection reports, along with erosion control and storm water management plans, are required to be maintained on site and made available upon request.

Date of inspection (mm/dd/yy): _____ **Time of inspection: Start: _____ a.m./p.m.** **End: _____ a.m./p.m.**	**Type of inspection: ☐ Weekly ☐ Precipitation Event** **☐ Other (specify)** _____ **Name(s) of individual(s) performing inspection:**
Weather:	
Description of present phase of construction:	

Modifications Required	Yes	No	Not Applicable	**Comments/Recommendations** about the overall effectiveness of the erosion and sediment control measures. **Note**: For each item checked "Yes", complete the follow-up information on page 2.
Ditch Checks	☐	☐	☐	
Erosion Control Plan	☐	☐	☐	
Erosion Mat	☐	☐	☐	
Grading Practices	☐	☐	☐	
Inlet Protection	☐	☐	☐	
Mulch	☐	☐	☐	
Offsite Sediment	☐	☐	☐	
Permanent Seeding	☐	☐	☐	
Schedule / Phasing	☐	☐	☐	
Silt Fence	☐	☐	☐	
Silt Screen	☐	☐	☐	
Sod	☐	☐	☐	
Stabilized Outlet	☐	☐	☐	
Temp. Diversion Channel	☐	☐	☐	

Name of Permittee:				
Construction Site Name (Project):				**Construction Site ID No.:**
Temp. Settling Basin	☐	☐	☐	
Temporary Seeding	☐	☐	☐	
Tracking Pads	☐	☐	☐	
Turbidity Barrier	☐	☐	☐	
Other (specify) _____	☐	☐	☐	

Exact place of erosion/sediment control inspected	**Type of erosion/sediment control and its observed condition**	**Description of any necessary maintenance or repair to erosion/sediment control, including anticipated date of completion**
_____	_____	_____

5.8 Sample Notice of Violation Letter

Date:

1ST NOTICE OF VIOLATION

Applicant Name
Company
Address
City State Zip

Subject: Project Name:
Watershed Development Permit No.:
1st Notice of Violation

Dear Permittee:

You are hereby notified of the following violation(s) to your Watershed Development Permit:

☐ Failure to notify the City of St. Charles prior to construction.

☐ Failure to display Permit placard visible from street.

☐ Failure to install/maintain a non-erosive outlet from the structure to the watercourse (Art. IV, Sec. B.1.j.1.b).

Location(s) _____

☐ Failure to install/maintain soil erosion and sediment control features prior to the hydrologically disturbing upstream areas (Art. IV, Sec. B.1.j.1.c).

Location(s) _____

☐ Failure to install/maintain temporary or permanent seeding (Art. IV, Sec. B.1.j.1.d.).

Location(s) _____

☐ Failure to install/maintain sod (Art. IV, Sec. B.1.j.1.d.).

Location(s) _____

☐ Failure to install/maintain erosion control blanket (Art. IV, Sec. B.1.j.1.d.).

Location(s) _____

☐ Failure to install/maintain silt fence, meeting AASHTO Std. Spec 288-00 (Art. IV, Sec. B.1.j.1.f.i).

Location(s) _____

☐ Failure to install/maintain sediment traps (Art. IV, Sec. B.1.j.1.f.ii).

Location(s) _____

☐ Failure to install/maintain sediment basins with perforated filtered riser pipe (Art. IV, Sec. B.1.j.1.f.iii).

Location(s) _____

☐ Failure to install/maintain storm inlet protection (Art. IV, Sec. B.1.j.1.g).

Location(s) _____

☐ Failure to route dewatering services through an effective sediment control measure (Art. IV, Sec. B.1.j.1.h).

Location(s) _____

☐ Failure to install/maintain stabilized construction entrance. Failure to clean right of way/pavement. (Art. IV, Sec. B.1.j.1.j).

Location(s) _____

☐ Failure to install/maintain runoff diversion controls (Art. IV, Sec. B.1j.1.m).

Location(s) _____

☐ Failure to prevent erosion from stockpile, or the placement of stockpile in a flood-prone area, buffer, WOUS or IWLC (Art. Iv, Sec. B.1j.1.n).

Location(s) _____

☐ Failure to maintain dust control (Art. IV, Sec. B.2.b.8.e.).

Location(s) _____

☐ Failure to follow permitted construction sequencing (Art. IV, Sec. B.2.b.8.j).

Location(s) _____

_____

You must take immediate action and cure all deficiencies identified above within five (5) working days, or the City of St. Charles may issue a Stop Work Order or invoke Article VII – Penalties and Legal Actions of the Stormwater Technical Manual that provides for up to a $500 fine for each offense each day the violation continues. Once all deficiencies have been cured, please call our office to schedule a re-inspection. If you have any questions please contact the City of St. Charles Development Engineering Division at (630) 377-4443.

Sincerely,

Qualified Review Specialist

C: Stormwater Coordinator

Summary of Violation Notification Procedure

1st Notice: City will furnish a Violation Notification to applicant and/or representative via fax and Certified Mail outlining necessary corrective measures to be completed and re-inspected within 5-working days of said notification. After which time, if violations are still not corrected, a *Red Tag* will be issued for the site (i.e. all work to stop except for activities related to correcting violations).

2nd Notice: City issues a *Red-Tag* for the site along with a Conditional Stop Work Order (allowing only remediation activities) via fax and Certified Mail granting an additional 5-working day deadline to complete remedial work to cure said Stormwater Technical Manual violation(s). Fines continue to accrue.

<u>3rd and Final Notice</u>: If corrective measures have not been completed within the period allowed by 2nd Notice, the City shall meet with the applicant/developer to discuss the Village's additional punitive actions and the plan and schedule within which the necessary remedial measures will be completed. Fines continue to accrue and the Conditional Stop Work Order remains in effect.

NOTE: Building and/or Occupancy Permits and surety reduction requests will be withheld until all violations are resolved and levied fines are paid.

5.9 Spill Response Notice

Stormwater Pollution Found in Your Area!

This is not a citation.

This is to inform you that our staff found the following pollutants in the storm sewer system in your area. This storm sewer system leads directly to

_____

- ❑ Motor oil
- ❑ Oil filters
- ❑ Antifreeze/ transmission fluid
- ❑ Paint
- ❑ Solvent/degreaser
- ❑ Cooking grease
- ❑ Detergent
- ❑ Home improvement waste (concrete, mortar)
- ❑ Pet waste
- ❑ Yard waste (leaves, grass, mulch)
- ❑ Excessive dirt and gravel
- ❑ Trash
- ❑ Construction debris
- ❑ Pesticides and fertilizers
- ❑ Other

_____

For more information or to report an illegal discharge of pollutants, please call:

WHEN IT RAINS IT DRAINS

www.epa.gov/npdes/stormwater

EPA 833-F-03-002
April 2003

5.10 Indirect Illicit Discharge Tracking and Summary Form

Illicit Discharge Incident Tracking Form				
Incident ID:				
Responder Information				
Call taken by:			Call date:	
Call time:			Precipitation (inches) in past 24-48 hrs:	
Reporter Information				
Incident time:			Incident date:	
Caller contact information (*optional*):				
Incident Location *(complete one or more below)*				
Latitude and longitude:				
Stream address or outfall #:				
Closest street address:				
Nearby landmark:				
Primary Location Description	**Secondary Location Description:**			
☐ Stream corridor *(In or adjacent to stream)*	☐ Outfall	☐ In-stream flow	☐ Along banks	
☐ Upland area *(Land not adjacent to stream)*	☐ Near storm drain	☐ Near other water source (storm water pond, wetland, etc.):		
Narrative description of location:				
Upland Problem Indicator Description				
☐ Dumping	☐ Oil/solvents/chemicals	☐ Sewage		
☐ Wash water, suds, etc.	☐ Other: _____			
Stream Corridor Problem Indicator Description				
Odor	☐ None	☐ Sewage	☐ Rancid/Sour	☐ Petroleum (gas)
	☐ Sulfide (rotten eggs); natural gas	☐ Other: Describe in "Narrative" section		
Appearance	☐ "Normal"	☐ Oil sheen	☐ Cloudy	☐ Suds
	☐ Other: Describe in "Narrative" section			
Floatables	☐ None:	☐ Sewage (toilet paper, etc)	☐ Algae	☐ Dead fish
	☐ Other: Describe in "Narrative" section			
Narrative description of problem indicators:				
Suspected Violator (name, personal or vehicle description, license plate #, etc.):				

Investigation Notes	
Initial investigation date:	Investigators:
☐ No investigation made	Reason:
☐ Referred to different department/agency:	Department/Agency:
☐ Investigated: No action necessary	
☐ Investigated: Requires action	Description of actions:
Hours between call and investigation:	Hours to close incident:
Date case closed:	
Notes:	