SWMP

Stormwater Master Plan

FINAL

THE CITY OF ROCKFORD
ILLINOIS, USA

August 2015

CITY OF ROCKFORD

MUNICIPAL SEPARATE STORM SEWER SYSTEM

STORMWATER MASTER PLAN

NPDES Permit No. ILS000001

Submitted

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City of Rockford

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1.0 INTRODUCTION

The purpose of a Stormwater Master Plan is to develop a comprehensive planning approach to manage stormwater quality and quantity throughout the City. Planning helps to mitigate potential damage to property and infrastructure and ensure public safety and health.

The City of Rockford Stormwater Master Plan (SWMP) was developed as part of municipal separate storm sewer system (MS4) requirements by the State of Illinois of the National Pollution Discharge Elimination System (NPDES) stormwater discharge permit program. This SWMP outlines the City of Rockford's objectives, goals, programs, and standard operating procedures to provide policy and management guidance for activities affecting stormwater throughout the City of Rockford.

Background

The City of Rockford (City) is located along both banks of the Rock River in northeast Illinois occupying a total area of 64.67 square miles of which, approximately 0.87 square miles is water. The City consists of a population of approximately 150,000 residents who experience the typical Midwestern climate experiencing the four seasons. As referenced in the *Multi-Hazard Mitigation Plan, Winnebago County, Illinois*, the general climate in the region consists of an annual temperature of 53.51°F with an average precipitation of 40.09 inches most occurring in the spring and summer months. In addition, there is an average annual snowfall of approximately 15 inches and consisting of an average annual humidity of 80.84%.

The City is comprised of 17 watersheds including creeks, drainage-ways, and detention basins, 450 miles of storm sewer, 928 outfall structures, four dams (3-city owned; 1-ComEd owned), and one levee. Due to the size and topography of the City and the Rock River running through the center of the City there is a relatively high potential for stormwater issues to arise. In light of this, there is a greater emphasis of need for local management of urban stormwater and waterways to help protect water quality and control flooding. This is especially important since the City consists of significant and concentrated urban development.

The National Pollutant Discharge Elimination System (NPDES) Stormwater program began in 1990 and required MS4 communities like the City of Rockford to obtain NPDES coverage concerning stormwater regulations from the State of Illinois which is enforced by the Illinois Environmental Protection Agency (IEPA) and federally by the Environmental Protection Agency (EPA). The City of Rockford obtained its first NPDES Permit in 1996 to meet the requirements of the Clean Water Act. The most recent NPDES permit issued to Rockford was in 2004. Staff has been working with the Illinois Environmental Protection Agency (IEPA) since 2009 to renew this permit. The City hopes for a renewed permit in August 2015. A copy of the latest NPDES permit can be found in Appendix B. Based on its population and that the storm sewer system is separate from the sanitary sewer system Rockford qualified as a Phase 1 NPDES permit. It is the only municipality in Illinois that holds a Phase 1 permit.

There are 10 stormwater management program requirements under the Phase 1 permit.

- Structural Controls
- Erosion & Sediment Control: Construction Site Runoff & Post Construction Stormwater Management
- Roadways
- Flood Control
- Pesticide, Herbicide & Fertilizer Application
- Illicit Discharges and Improper Disposal
- Spill Prevention and Response
- Industrial and High Risk Runoff
- Public Education, Pollution Prevention and Good Housekeeping
- Monitoring: Wet Weather and Dry Weather

At the end of every year the City is required to submit an annual report to the Illinois Environmental Protection Agency on its efforts towards compliance with the NPDES permit. The 2014 Annual Report can be found in Appendix C.

2.0 LEGAL AUTHORITIES

To comply with the Clean Water Act the City has developed the following stormwater related Ordinances to manage stormwater runoff and to help reduce pollutants from the MS4 to the maximum extent practicable:

1. Chapter 17 – Nuisances
2. Chapter 26 – Streets, Sidewalks and Other Public Places
3. Chapter 109 – Stormwater Management Ordinance
4. Chapter 2 Division 4 – General Ordinance Violation
5. Chapter 121 – Subdivision Ordinance

It is noted that all City and/or private proposed projects shall refer to the following resources for planning and design guidance or as required by the City for stormwater management and flood control:

- Rockford Engineering Design Criteria Manual
- Rockford Stormwater Technical Guidance Manual
- *Design and Construction of Sanitary and Storm Sewers*. American Society of Civil Engineers and the Water Pollution Control Federation. 1986.
- *Illinois Urban Manual*. United States Department of Agriculture – Natural Resources Conservation Service. 1995.
- http://cfpub.epa.gov/npdes/stormwater/menuofbmps/menu.cfm - U.S. EPA's website for stormwater BMPs
- Standard Specifications for Water and Sewer Construction in Illinois – latest edition

- Illinois Department of Transportation Standard Specifications for Road and Bridge Construction – latest edition

3.0 STORMWATER MANAGEMENT STANDARD OPERATING PROCEDURES

One main objective of the stormwater management program is to achieve compliance with the City's NPDES permit. Several Standard Operating Procedures (SOPs) were developed that state the process for City staff to manage and inspect various aspects of the stormwater management program. They provide guidance on who is responsible, equipment needed, training required, inspection process and documentation required to perform specific operations. The individual SOPs can be found in Appendix D.

a. Detention Basin SOP

Describes the inspection process and maintenance requirements for both City-owned and privately owned detention basins. Maintenance efforts include mowing, removal of debris (trees, brush, garbage and silt) and erosion repairs. For point of reference the City owns and/or maintains the following detention ponds:

- Lowes Distribution Center
- Elliot Golf Course (City owns & maintains structure itself; Park District minor maint.)
- Arden Court
- Greater Rockford Industrial Park
- Logistics Park
- Mulford Village Dr.
- Newtowne & Javelin Drs.
- Marchesano @ Fire Station 3
- Linden Pointe (Park District owns & minor maint.; City maintains structure itself)

b. Erosion & Sediment Control Plan Review and Regulatory Inspections SOP

This document addresses the City's procedures for reviewing erosion and sediment control plans, Stormwater Pollution Prevention Plans (SWPPP) and performing regulatory site inspections. An important component of any stormwater management program is the reduction of pollutants from construction sites that may discharge to the municipal separate storm sewer system or waters of the state. A proactive program to identify and inspect all permitted construction sites can significantly reduce pollutants entering the municipal storm drainage system.

c. Erosion & Sediment Control Guidance Manual for City of Rockford Projects

This document explains to City staff for City of Rockford projects the requirements for plan reviews, General NPDES permit requirements, SWPPP content, site inspections and allowable discharges.

d. Right-of-Way & Drainageway Inspection & Maintenance SOP

It is the responsibility of the City to ensure the proper operation and maintenance of the storm sewer system, including city-owned and timely enforcement of privately-owned stormwater structures. The City shall inspect, maintain, clean, and repair all city owned components of the storm sewer system including storm inlets, pipes, culverts, manholes, detention ponds, drainageways and all other stormwater structures to the maximum extent practicable. The City shall inspect, track and take

necessary action to require that privately-owned stormwater structures are adequately maintained. This document outlines the SOPs for completing the inspections and maintenance of the storm sewer system.

e. Street Sweeping SOP

It is the responsibility of the City to provide street sweeping services to its citizens in an effort to enhance the overall storm water quality, health, and aesthetic beauty of the City. This SOP describes the protocol for street sweeping activities.

f. Pesticide, Herbicide and Fertilizer (PHF) Applications SOP

The City of Rockford holds a General NPDES Permit for Pesticide Application Source Discharges that is issued by the IEPA. The SOP addresses the City's procedures when applying PHFs of City owned properties.

g. Illicit Discharge Detection and Elimination (IDDE) Program

An illicit discharge is defined as any discharge that enters the storm sewer system that is not comprised entirely of stormwater, except discharges pursuant to a NPDES permit or identified as permissible in the City's ordinance. This SOP outlines how to detect and investigate a potential illicit discharge.

h. Spill Prevention and Response SOP

The SOP discusses procedures to prevent, contain, and respond to spills that may discharge to the City's storm sewer system. The Dept. of Public Works works closely with the Rockford Fire Department, who is the "First Emergency Responder" for spill response incidents, to maintain an accurate database. The Fire Department serves as the Incident Commander in spill scenarios.

i. Industrial High Risk Runoff (IHRR) Facility Inspection Program SOP

The goal of this SOP is to reduce the amount of polluted runoff from industrial and commercial facilities entering the City's storm sewer system. This document addresses how industrial facilities are identified for inspections and the procedures for performing them.

j. Stormwater & Environmental Education SOP

This document outlines how the City staff and the public will be educated regarding the City's stormwater programs. Various brochures on best management practices have been developed for educating the public.

k. Monitoring & Sampling Program SOP

It is important for the City to monitor the water quality within its storm sewer system in order to reduce and eliminate contaminates to the City's groundwater and waterways. This document addresses the procedures for the collection of water quality samples in varying conditions and locations for Representative Monitoring, Industrial High Risk Runoff and Illicit Discharge & Elimination monitoring.

4.0 STORMWATER MANAGEMENT GOALS AND STRATEGIES

The Stormwater Master Plan provides guidance to help manage stormwater, reduce urban runoff sources of pollution, protect the City's river, creeks and watersheds and protect the City's groundwater. The City's source of drinking water is through wells so protecting the groundwater is very important to the health and safety of its citizens. This plan guides stakeholders and decision-makers to look at stormwater comprehensively to ensure stormwater management and the health of our watersheds. The City has taken an integrated planning approach to stormwater management and have included goals and strategies into the Countywide Multi-Hazard Mitigation Plan and into its 2020 Implementation Plan. As the various organizations have formed to revitalize the City these goals and strategies are incorporated into those discussions and plans as well. Enforcing the concept that mitigating stormwater hazards plays an integral component in rebuilding Rockford.

The City has established goals that are key to an effective and sustainable stormwater management program.

Goal 1 – Reduce the potential for stormwater threats to public health, safety and property.

Goal 2 – Improve water quality and habitat conditions in the City's watersheds.

Goal 3 – Encourage site planning and stormwater techniques, such as low-impact development and green infrastructure, that best replicate pre-development hydrologic conditions.

Goal 4 – Comply with City, State and Federal regulations for stormwater, water quality and floodplain management.

The City has developed various strategies to meet the goals stated above, along with tactical activities and performance measures to implement those strategies. Each year the City states in its Stormwater Annual Report the actions it has taken to meet the goals and reports the performance measure data as noted in the SOPs. As technology, regulations and community understanding of stormwater management challenges evolve and change, the City will need to respond with new strategies and tactics. These strategies will be used in prioritizing projects and the status of each strategy will be evaluated and updated annually.

Strategy 1 – Preserve and enhance natural and environmentally sensitive areas

a. Update codes and regulations to regulate development and encourage development outside of environmentally sensitive areas.
b. Use topography to direct land development.
c. Establish a "green infrastructure" program to link, manage and expand existing parks, preserves and greenways.
d. Complete watershed assessments to identify the environmentally sensitive areas and enhancement projects.

Strategy 2 – Support regulations to improve on site stormwater management and reduce flooding damage

a. Update codes and regulations to regulate development and require post construction management plans of the stormwater systems on site.
b. Promote best management practices to reduce the effects of stormwater runoff.
c. Conduct regular inspections of the stormwater system for proper maintenance, including detention basins, creeks, inlets, dams/levees, and other structural controls.

d. Develop an open space acquisition reuse and preservation plan targeting hazard areas.

Strategy 3 – Protect the groundwater supply and enhance drinking water quality

a. Provide a program to inspect industrial and commercial properties to reduce illicit discharges into the ground and streams.
b. Provide a program to inspect outfalls into the creeks and river to detect illicit discharge.
c. Provide a monitoring and sampling program to evaluate the water quality within the watersheds.

Strategy 4 – Maintain and enhance local watershed protection

a. Complete watershed studies and plans.
b. Develop a community engagement process to identify and prioritize stormwater improvement projects.
c. Identify wetland sites for restoration projects.
d. Complete waterway planning for Kent and Keith Creeks.

Strategy 5 – Protect floodways and floodplains

a. Update Codes and regulations to enhance development and building standards within floodplains
b. Maintain compliance with the National Flood Insurance Program
c. Work with FEMA and the Illinois State Water Survey to complete revisions to the Flood Insurance Rate Maps to more accurately define the floodways and floodplains.
d. Develop and inventory of best practices to support neighborhoods impacted by the floodplain limits on the Flood Insurance Rate Maps.
e. Develop a creek inspection program to evaluate the condition of the channels and prioritize bank restoration projects.

Strategy 6 – Improve existing stormwater management facilities and construct new facilities

a. Complete retrofits as needed on city-owned detention basins to improve water quality and increase the detainment area for stormwater runoff.
b. Complete maintenance items noted in the Army Corp of Engineers and Illinois Department of Natural Resources inspection reports.
c. Remove and/or widen existing bridges as needed to reduce the restrictions to water flow in the creeks.

Strategy 7 – Provide ongoing public outreach and engagement on the stormwater management program.

a. Update educational brochures to the community on the stormwater program.
b. Attend various community events to inform and engage the citizens about potential impacts of pollutants on the stormwater system and groundwater.
c. Support water quality monitoring programs
d. Inform and engage the community about potential impacts of climate change of the City's stormwater infrastructure

5.0 WATERSHED INFORMATION

As previously mentioned, the City consists of a vast watershed and waterway network. Historic modifications to natural drainage patterns and increase in impervious area have contributed to ongoing stormwater and flooding problems throughout the community. Watershed assessments identify past and current flooding and water quality problems, overall current stormwater management and flood control issues and provides watershed-specific data and reference information. It is expected that as watershed assessments are completed the information will be utilized by planners, developers, engineers and residents to design and construct various sites throughout the City. The City has identified 17 watersheds (includes Rock River) due to the presence of a major creek system (reference Appendix A-1 for the Rockford Watersheds Map). Reference Table 1 below for a list of the City watersheds and general description. In addition, the table identifies the year a Hydrology and Hydraulic (H & H) modeling/assessment was completed for the watershed (if applicable). The City has prioritized four of the watersheds for a full watershed assessment. The goal is to complete one assessment every other year.

Table 1 – City of Rockford Watersheds

Watershed	Approximate Acres	H & H Study Completion	Assessment Completed	Priority for Completing Full Assessment
Airport East	3,700	In process-Completion Summer 2016	Preliminary in 2009	1 - Underway
Blackhawk	1,190	NA	Preliminary in 2009	
Buckbee Creek (South East)	5,450	2013	Full Assessment in 2013	
Forest Hills	840	2013	Preliminary in 2009	
Fuller Creek	2,970	2013	Preliminary in 2009	
Keith Creek	9,000	2011	Preliminary in 2009	2
Kent Creek	29,980	2013	Preliminary in 2009	3 – North Kent
Kilbuck Creek		NA		
Kishwaukee North	8,410	NA	Preliminary in 2009	
Klehm	1,030	NA	Preliminary in 2009	
Madigan Creek	4,120	NA	Full Assessment in 2013	
Manning Creek	1,480	NA	Preliminary in 2009	
North Main	2,822	NA	Preliminary in 2009	
Riverside	4,620	NA	Preliminary in 2009	
Sinnissippi	1,490	NA	Preliminary in 2009	
South Main	1,200	NA	Preliminary in 2009	
Spring Creek	3,550	2013	Preliminary in 2009	4
Rock River	No Data	2013	NA	

NA – Not applicable or no study performed

It is noted that the watersheds listed above (with the exception of the Rock River and Kilbuck Creek watersheds) have had a Stormwater Management/Flood Control Assessment completed in 2009. These assessments are basic but a detailed description of each assessment can be viewed at the following link: http://www.rockfordil.gov/11569.aspx. Data such as detention facilities and outfalls are out of date. The individual assessments discuss stormwater drainage and/or flooding issues along with potential projects to fix the issues. It is also noted that each assessment includes individual maps of the watershed boundary depicting the location of issues/complaints, possible projects, along with the locations of the watershed outfalls, detention, and storm sewer piping. Reference below for a list of watersheds and their associated issues, complaints, and the future, proposed and/or completed projects (if applicable). Two of the assessments (Buckbee Creek & Madigan Creek) have been revised through a cooperative effort with Winnebago County through a Sec. 319 grant from the Illinois Environmental Protection Agency. Stakeholders of the Kishwaukee River completed a Kishwaukee River Corridor Green Infrastructure Plan for which Kilbuck Creek is located. As the creeks are evaluated the noted erosion concerns will be included within the assessments listed below and repairs will be prioritized according to the Standard Operating Procedures for Drainageways.

Based on the 2009 Watershed Assessments completed by MWH

Airport East

Camp Grant Army Barracks – To improve area drainage in an area with flat topography and the lack of storm sewers, ditch regrading will be required. (2014-2015 the Airport Dr/Falcon Rd Reconstruction Project installed a storm sewer system and improved grading throughout the area around the Rockford Airport)

Milford Avenue and 11th Street – To utilize two existing culverts that are underutilized at these two intersections, regrading of the channel upstream and reroute the stream flow to these culverts is proposed. (IDOT is designing culvert improvements under 11th St in the area. A property owner has designed a channel relocation to the culverts)

N.E. of Chesterfield Avenue and Blackwell Drive – Localized/nuisance flooding was reported at this location.

Channel clearing needed along creek from 20th Street to 11th Street

The City has retained Willett Hofmann & Associates to survey and complete a hydraulic and hydrology study of this watershed.

Blackhawk

Intersection of Harrison Avenue and Kishwaukee Street – Illinois Department of Transportation (IDOT) has completed a project where (2) 48-inch storm sewers were installed under Kishwaukee Street.

Buckbee/South East

A watershed assessment was completed for Buckbee Creek through a Section 319 grant
Harmon Park Drainage Improvements – Proposed 10-year plan for stormwater detention and conveyance projects following stormwater study. A regional detention facility has been conceptually designed for construction, early 2016. Several phases of the project have been completed to date.

Sandy Hollow and 11th Street Area – This area of the watershed is heavily urbanized and lacks adequate drainage due to nonexistent storm sewer or ditch infrastructure. Various street and drainage improvements have been completed and will continue.

Rock River Outfall Repairs – The outfall at RRWRD is in need of repairs. Project is designed and construction begin August 2015.

RRWRD Overflow Basin – An overflow basin has been designed and is under construction

Retrofit of the Greater Rockford Industrial Park Detention Pond – The pond is a wet pond that was partially constructed and in need of maintenance. Pond shall be cleared of trees and brush and expanded to plan.
Concrete Channel Repairs – The City has repaired several sections of the concrete channel over the past several years. Additional repairs were made in 2015 and will continue. Major repairs and bridge replacement will be completed as part of the Harrison Avenue Reconstruction Project.

Yale Drive Channel Improvements – The City has completed several gabion basket stabilization projects within this channel. More are needed but funding will be required through grants and by the property owners as this channel is owned by private property.

Fuller Creek
Lowes Distribution Center – Localized/nuisance erosion and more frequent flooding was reported south of this location due to its development.

S.W. of Beltline Road and U.S. Highway 20 – Future channel realignment is proposed at this location.

Keith Creek
Channel Widening from 18th Street to 5th Street – To date the City has applied twice for grants and have not been approved.

Backflow Preventers at Outfalls to Creek are needed

Alpine Dam Repairs – Repairs are needed at Alpine Dam. Design has been completed and the City is awaiting funding for construction.

Alpine Road Box Culverts – The north and south branch box culverts are under design for reconstruction.

Continued Creek Clearing of Debris and Silt

Continued Wall Repairs and Stabilization – Repairs have been completed Hunter Ave. and at 5th Street

Box Culvert Under Charles Street – The box culvert requires repairs or replacement due to both the bottom and the top heaving

Bridge Removals Between 18th St and 5th St – The City is programming bridge removals of 5th St, 8th St, 10th St and 12th St. The railroad bridge at 18th St will be programmed for removal as well.

Acquire and Demolish Properties in the Floodplain from 18th St to 9th St – This has been completed through Hazard Mitigation Grant Funds and DCEO CDBG and IKE Buyout Grant Funds.

Kent Creek

Safford Road and Springfield Avenue – Area is proposed for a future 400-acre mixed use development. (Not developed to date)

Riverside Boulevard and Rockton Avenue – Area proposed for future development. (Various phases have been under development)

Rockton Avenue and John Wesley Road – The area has the potential for a future regional detention facility to be constructed.

State Street In-Kind Culvert Replacement – IDOT completed this culvert replacement.

ACOE Channel Widening – The project to widen the channel to a 15-foot wide bottom along the north and south branches of Kent Creek has been completed.

ACOE Channel Widening - The project to widen the northwest channel to a 15-foot wide bottom of Kent Creek has been completed.

ACOE Diversion Channel/Levee – Project has been completed.

It is also noted that a portion of this watershed is inspected by the ACOE. Following a 2012 inspection, it was determined that the channel system consisted of a number of issues and is considered unacceptable. The ACOE has made the following recommendations to the City to correct the issues:

1. Woody vegetation along the banks was noted at many locations which need to be removed.

2. Minor shoaling observed which should be removed (along with debris) to prevent erosion on the opposite channel bank.

3. Reestablish and protect the bank caving that is occurring along the right bank of the North Branch channel near North Central Avenue and along the left bank of the South Branch downstream of S. Central Avenue.

Klehm

Elizabeth Center (N.W. of Heath and Main Streets) – Localized/nuisance flooding was reported due to poor drainage.

S.E. of Forsythia Drive and Ogilby Road – Maintenance of a 60-foot grassed drainage easement in this area is proposed.

Barbara Coleman Complex (Loomis and Main Streets) – The area is proposed for future redevelopment. (No development to date)

Madigan Creek

A watershed assessment was completed through a Section 319 grant and can be found in the Appendices

Tulip Lane – Localized/nuisance flooding was reported.

Intersection at Argus and Sundae Drives – Localized/nuisance flooding occurs. (This is flooding due to maintenance issues of a private pond. City has been working through maintenance enforcement with the property owner)

S.E. of Woodbine and Gordon Avenue – Area has completed maintenance.

N.E. of Newburg Road and Gordon Avenue – Channel cleaning and regrading in this area has been completed.

N.W. of Greenleaf Way and Einor Avenue – Channel cleaning and regrading in this area has been completed.

Stoney Creek Way and Madigan Creek – Localized/nuisance flooding occurs due to undersized culverts. (Developer to upsize the culverts during next phases of development)

Wood Creek Bend and Madigan Creek – Localized/nuisance flooding reported. Storm sewer in area will need to be upsized to keep runoff to the road.

Trainer Road and Madigan Creek – Maintenance is need on a 78-inch culvert at this location along with slope stabilization.

Madigan Creek– Major flooding at the intersection of E. State St. and Trainer Rd. Culverts under E. State St are undersized. This is an IDOT roadway. Future developments shall provide additional detention storage along State Street between Mulford and Perryville Roads.

Quarry S.W. of Charles Street and Mulford Road – A proposed plan to deepen quarry and increase the pump rate that discharges to the creek has the potential for water quality impacts.

N.E. of Brady Lane and Stone Bridge Crossing – Construction of a bridge for an additional access road is proposed.

North Main

Main Street Between Elm and Mulberry Streets – Street improvements are proposed in this area. (This project has been completed)

Ford Avenue and Latham Street – Localized/nuisance flooding was reported.

Willoughby Avenue and Douglas Street – Localized/nuisance surface flooding was reported.

South of Fulton Avenue and Harlem Boulevard – The installation of a new 12-inch storm sewer and inlet in a low point of the roadway is proposed.

Country Club Beach – Substantial over-bank flooding occurs in this area due to its location within the 100-yr floodplain. Backflow prevention has been installed to delay the flooding

Browns Beach – Substantial over-bank flooding occurs in this area due to its location within the 100-yr floodplain

Sinnissippi

N.E. of Chamberlain and Longwood Streets – Localized/nuisance flooding was reported for several blocks.

2nd St and Lower Jefferson Streets – Localized/nuisance ponding was reported on the roadway.

Longwood and Benton Streets – Localized/nuisance ponding was reported on the roadway.

Parkview Avenue and Spring Creek Road – Due to major surface flooding that occurs at this intersection from an unnamed tributary, a project to retrofit the detention facility north of the crossing is proposed.

Parkwood Avenue and Rural Street – Channel restoration is proposed between James and Parkwood Avenues.

South Main

Springfield Avenue and Beltline Road – Future development is proposed in this area. (No development to date)

Spring Creek

Ryebrook Street – Future development is proposed in this area.

Parkview Avenue and Spring Creek Road – Localized/nuisance flooding occurs in this area.

Camella Court – Streambank stabilization maintenance in this area is needed.

S.W. of Spring Creek Road and Alpine Road – Residents in this area are experiencing major surface flooding in the backyards.

S.E. of Spring Creek Road and Alpine Road – Residents in this area are experiencing major surface flooding in the backyards.

S.W. of Weymouth and Spring Lake Drives – The pond in this area has water quality impacts from elevated coliform count.

N.W. of Weymouth and Spring Lake Drive – Dredging maintenance of the channel is needed in this area. Installation of a trash rack at the pond's outlet is proposed.

S. of Muirfield Land and Fireside Drive – Maintenance in this area is needed.

Throughout the planning process all watershed Stormwater Management/Flood Assessments shall be reviewed and reevaluated. The existing list of potential stormwater management projects shall be edited and prioritized in order of severity of need based on the inspections completed on the creeks, drainageway and detention ponds. Nuisance drainage and flooding problems received throughout the year will be prioritized based on funding available and after life safety and flow obstruction issues are remedied. To achieve this the City shall hold a public meeting to explain watershed priority project list, and to gather input with respect to the public's interests/needs for completion.

6.0 FLOODING AND FLOODPLAIN MANAGEMENT

Flooding is a significant natural hazard in the City; therefore proper management of the floodplains can help reduce the impacts of stormwater. Flood damage in Winnebago County results from three types of floods, flash flooding, overbank or riverine flooding, and urban flooding. Flash floods arise with very little warning and often result in locally intense damage. Flash flooding could affect any low-lying location or areas of poor drainage within the City. Overbank/Riverine flooding typically are associated with precipitation events that are of relatively long duration and occur over large areas. Flooding is caused by water overflowing the banks of the channels. Urban flooding involves the overflow of storm drain systems and can result from inadequate drainage combined with heavy rainfall or rapid snowmelt. Floods on the Rock River generally are associated with spring snowmelt combined with ice jams and rain storms. Floods on the much smaller tributes of the Rock River in Winnebago County are usually caused by intense thunderstorms which occur in the late summer, or early fall.

All floodplains are susceptible to flooding in the City of Rockford. The floodplain of concern is for the 100-year flood event which is defined as areas that have a 1% change of flooding in any given year. However, flooding is dependent on various local factors including, but not limited to, impervious surfaces, amount of precipitation, river-training structures, etc.

Flood peaks have been increased by recent urbanization of uplands. Urbanization often is accompanied by floodplain filling or encroachment which reduces the cannel conveyance capacity and increases the rainfall runoff. Increased flooding on the main channels can produce backwater effects up tributaries thus increasing the flood hazard. Additional flood runoff is unable to flow through restricted culverts and bridges which often are clogged with sediment and debris from new construction.

Reducing floodplain development is crucial to reducing flood-related damages. Areas with recent development may be more vulnerable to drainage issues. Storm drains and sewer systems are usually most susceptible to drainage issues. Damage to these can cause back-up of water, sewage, and debris into homes and basements, causing structural and mechanical damage as well as creating public health hazards and unsanitary conditions.

Flooding is a significant natural hazard. The type and severity of flooding are functions of the magnitude and distribution of precipitation over a given area, the rate at which precipitation infiltrates the ground, the geometry and hydrology of the catchment, and flow conditions in and along the river channel.
Unmanaged stormwater can cause flooding and erosion. When flooding occurs and water overflows onto roads and other areas containing materials such as trash and industrial waste, these pollutants are carried into the streams and creeks. Properly managed stormwater protects land and streams from flooding, pollutants, erosion, and can recharge groundwater.

The City has developed local and regional partnerships to coordinate implementation of flood control measures including the:

- Rockford Park District
- Winnebago County

- Illinois Emergency Management Agency (IEMA)
- Illinois Department of Natural Resources (IDNR)
- Federal Emergency Management Agency (FEMA)
- US Army Corp of Engineers (ACOE)
- Resilient Neighbors Network (RNN) within the National Hazard Mitigation Association
- United States Geological Survey (USGS)

Best Management Practices

Best management practices are useful measures to control and reduce the effects of flooding. Below is just a few methods the City has undertaken to make improvements to its storm system:

1. Constructing new and retrofitting existing detention basins to help reduce volume and rate of stormwater released during storm events into streams.
   a. *Elliot Detention Basin* – The City has reconstructed this basin to include a sediment trap. Inspections show that additional work is needed to account for the continued sediment buildup.
   b. *Logistics Park Basin* – With partnership with a construction company needing material this pond has been expanded. In July 2015 the City installed dry wells in the bottom of the basin.
   c. *Linden Pointe Basin* – Though not owned by the City the City is responsible for the structural components of the basin. This basin has been restudied because rain events since construction of this pond has shown it does not hold the required rain event. The goal is to expand the volume of the pond and repair the seeping walls.
   d. *Harmon Park Basin* – The City is partnering with the Rockford Park District to construct a detention pond in a large neighborhood built without considering the impacts of stormwater. Properties have been acquired and demolished to create in-series detention and storm systems.

2. Utilize stormwater infiltration methods such as porous and permeable pavements and infiltration trenches to reduce and store stormwater runoff

   a. The City has constructed an alley downtown using porous pavement and is looking to continue use of porous pavement in alleys.
   b. The City has worked with various developments to include permeable pavements within the parking lots.

3. Continue investigations and education of nuisance flooding on private property.

   a. The City investigates flooding complaints and works to educate the property owners on methods to reduce flooding on their property. Most property owners do not realize they have drainage easements on the property and that they are responsible for the maintenance of those easements.

   b. The City monitors known flood risk areas both public and private as noted in Table 2. These

are monitored due to continuous obstructed inlets, flooding of streets due to undersized storm system and known flash flood areas, flooding of basins that overtop the adjacent roadway, and flooding along the river.

Table 2. Known Flood Risk Areas

Flood Risk Areas	Project Location	Project Description
1	Sandhutton Ave & Danburry Dr - Harrison Park Assoc.	Detention basin - flooding risk
2	Turnberry Ridge Drainage (Citadel, Samuelson)	Job complete- monitor for flooding
3	Linden Pointe Detention Basin (Scarlet Oak Dr)	Detention basin - flooding risk
4	Leland Place (NE Rote & Divine)	Detention basin - flooding risk
5	Red Oak Estates (SE Rote & Eden)	Drainage ditch needs maintenance
6	Mill Rd & Highgrove Pl	Detention basin - flooding risk
7	Alpine Dam	monitor water level, trash rack, inspect dam
8	Churchill Park - 6th Ave, 7th Ave street flooding	monitor streets for flooding
9	Harmon Park - Eastgate, Sexton, McArthur, Log Cabin	monitor streets for flooding
10	Arden Court Detention Basin	monitor water level, trash rack
11	Red Oak Lane & Ramsey Clos	monitor streets for flooding
12	Country Club Beach Rd	Monitor river level, streets for flooding
13	Browns Beach Rd	Monitor river level, streets for flooding
14	Rote Rd, Bell School Rd	monitor streets, ditches, basins for flooding
15	University Dr.	monitor street, ditches, basins for flooding
16	Broadway Viaduct	monitor street for flooding
17	Keith Creek at Schnucks on Charles St (2642 Charles St)	monitor water level in creek, bridges
18	Shirley Rd	monitor water level in creek
19	Levings Lake Dam	monitor water level, inspect dam
20	Page Park Dam	monitor water level, inspect dam
21	Montague St & West St	clean out inlets, chronic problem area
22	15th Ave & 13th St	clean out inlets, chronic problem area
23	Parkview Ave and Crabapple Ln	monitor open top inlet, cuilvert on Parkview Ave
24	Kishwaukee St and Sandy Hollow Rd	inspect trash racks
23	1733 Homewood Dr	inspect trash racks
24	N Central Ave & Liberty Dr	monitor for street flooding
25	3000 Alida St	monitor manhole cover
26	700 Parkwood, Rural, James	monitor new drainage system, street flooding
27	Charles St & 9th St	monitor street for flooding

7.0 WATER QUALITY MONITORING PROGRAM

In order to improve the general water quality within the City and that enters the Rock River, the City has developed a stormwater sampling/monitoring program that was created in 2003. Tributary sampling is completed at the locations in Table 3 and Representative monitoring at outfall locations is shown in Table 4. The City takes samples during storm events and during dry weather events. The frequency and parameters the City must test for are noted in Table 5. Results of the monitoring and trends are reported in the annual report. Historically, the City has not seen majors concerns in the sample results. Any anomalies have been investigated and found to not be of concern.

Table 3 – Representative Tributary Monitoring Locations

Site ID	Locations*
T1	North Kent Creek @ Fairgrounds Park
T2	South Kent Creek @ Tay & Corbin St.'s
T3	Keith Creek @ Tenth Avenue Park
T4	Keith Creek @ Dahlquist Park
T5	Spring Creek @ Starkweather Avenue

*Reference Appendix A-2 for a map exhibit of the tributary monitoring locations.

Table 4 - Representative Outfall Monitoring Locations

Source: Rockford Stormwater NPDES Permit No. ILS000001		
Outfall ID	**Location***	**Watershed Description**
Station R1	Paradise Boulevard	225 ac residential & open space
Station R2	Market St. & N. Water St.	50 ac commercial, offices & residential
Station R3	Fairview Blvd & Crosby St.	510 ac residential
Station R4	8th Street & Wills Avenue	780 ac industrial, commercial & residential
Station R5	Forest View Rd & 28th Ave	80 ac light industrial

*Reference Appendix A-2 for a map exhibit of the outfall monitoring locations.

Mitigation Goals

- Mapping City wells and cone of influence
- Mapping groundwater ordinances and plume of contamination
- Installation of additional sampling locations

Table 5 – Stormwater Sampling Schedule & Parameters

PARAMETER	MONITOR FREQUENCY				
	Year 1	Year 2	Year 3	Year 4	Year 5
BOD5 (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
COD (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
TSS (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Total Nitrogen (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Total Kjeldahl Nitrogen (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Total Phosphorus (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Fecal Coliform (per mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Oil and Grease (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Total Cadmium (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Total Copper (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Total Lead (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Total Zinc (mg/l)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
pH (S.U.)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Hardness (as $CaCO_3$)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr
Temperature (C^o)	2x/yr	2x/yr	2x/yr	2x/yr	2x/yr

8.0 ENFORCEMENT PROCEDURES

The intent of this document is to provide guidance to City officials and staff in enforcing the Stormwater Management Ordinance. The provisions of this enforcement response plan are not intended to limit the judgment and flexibility of the administrator in determining an appropriate response.

Actual enforcement procedures should consider any unusual aspects of a violation or condition, as well as special characteristics of an enforcement action, in determining the proper response.

Minor infractions may be resolved by a verbal notice, telephone call, or warning letter advising the owner/operator/person of the nature of the violation. If such action fails to generate an adequate response by the owner/operator/person, further enforcement actions as provided by the ordinance may be taken.

The City has developed a Stormwater Enforcement Response Plan that can be referenced in Appendix E.

9.0 ANNUAL REPORT REQUIREMENTS

The City shall prepare an annual system-wide report to be submitted by no later than April 1 of each year, in accordance with the city permit (ILS000001, Appendix B-1). A copy of the 2014 Annual Report can be found in Appendix C. The report shall include a brief overview of the entire Municipal Separate Storm Sewer System and the following separate sections:

1. Status of implementing the stormwater management program(s) – provide summaries for individual permit components as detailed in Part III – Schedules for implementation of, and compliance with, SWMP.

2. Proposed changes to the stormwater management program(s).

3. Revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application under 40 CFR 122.26(d)(2)(iv) and (d)(2)(v).

4. An overall summary of the data, including monitoring data, accumulated throughout the reporting year.

5. Annual expenditures for the reporting period, with a breakdown for the major elements of the stormwater management program and the budget for the year following each annual report.

6. A summary describing the number and nature of enforcement actions, inspections, and public education programs.

7. Identification of water quality improvements or degradation.

8. Provide the Latitude and Longitude of the Representative Monitoring Outfalls listed in Table V.A.1.b, along with a map identifying their locations within the city.

9. A brief summary of what the city has experienced and evaluated in the past year about its programs regarding stormwater and pollution prevention, and a list of any proposed changes to their programs and/or additional actions they feel would be beneficial.

10. A summary of the effectiveness and accuracy of the monitoring results obtained as a result of the current requirements of the Permit. The City should provide suggestions and justifications for any possible improvements to the current monitoring locations and/or frequency as well as information indicating reasons why certain monitoring requirements should be modified or eliminated.

10.0 SWMP CITY RESOURCES

a. City Staff Stormwater Responsibility

The stormwater activities and functions related to permit compliance of the SWMP are divided among multiple personnel within the City's Department of Public Works (DPW). The following is a list of the responsible Public Works City staff and titles:

Marcy Leach – Stormwater Administrator & Engineering Operations Manager

Dean Kurth – Stormwater Program Manager

Brad Holcomb – Stormwater Program Manager

Jason Irvin – Project Manager (Storm & Water)

Ryan Lundberg – Stormwater & Environmental Coordinator

Justin Emerson – Sr. Project Manager (GIS/Facilities Mngt)

Warren Stahl – Sr. Engineering Technician

Justin Kink – Sr. Engineering Technician

Vacant – (2) Sr. Engineering Technician

Interns/temps

A full and more detailed breakdown of the stormwater program staff, respective responsibilities, and personnel requirements is located in Appendix F.

b. Fiscal Expenditures

To operate the SWMP annually, the City has to develop a projected budget for program activities. The projected 2015 budget for SWMP activities is presented on Table 6 below.

Table 6 – SWMP Fiscal Information

Item	Budget Source	2015 (Budgeted)
Street Sweeping	Street	$473,335
Sewer Repair/Inlet Cleaning	Street	$693,002
Bridge, Dam, Ditch Maintenance	Street	$91,000
City-Wide Inlet Repair	CIP	$150,000
Stormwater City-Wide Drainage Fund	CIP	$450,000
Stormwater Sampling & Testing	General	$25,000
Stormwater (Other)	CIP	$560,000
Stormwater Maintenance & Monitoring	CIP	$120,000
City-Wide Bank Stabilization	CIP	$500,000
Stormwater Miscellaneous Consultant Contract	General	$50,000

Additional funding options that should be evaluated to maintain the stormwater program and continue compliance with the City's NPDES permit. Stormwater program funding sources include:

- Stormwater utility
- State Revolving Fund loans
- Stormwater Fees
- Property taxes or sales tax
- Grants
- Debt financing
- Local improvement districts
- Developer participation
- System development fees/connection charges

The City maintains equipment for use in various stormwater operations. The latest list is below.

City of Rockford Public Works Equipment List (May 2015)		
Type of Vehicle	**Description**	**Quantity**
Light Duty Trucks	1/2 to 1 Ton w/ arrow-board	12
John Deere Backhoes	Class 410	8
Case Backhoe	Class N590	1
Wheel Loader	Model 644R - 4 yd bucket	1
Caterpillar Wheel Loader	Model 950G - 4 yd bucket	1
Truck Mounted Clam Loader	(Tree & Brush Loaders)	2
Street Sweepers	Vacuum Style	2
Vermeer Wood Chippers	Model 1800 (3 w/ winches)	3
Bobcat Skid Street Loaders	1 model 863; 2 Model 773	3
Aerial Bucket Trucks - Forestry	1 - 50' Reach; 1 - 60' Reach	2
Aerial Bucket Trucks - Traffic	Used for Signal Repair	4
GMC Tanker Truck	2200 Gal. Capacity	1
Tandem Axle Dump Trucks *	10 yd Capacity Dump Bodies	32
Single Axle Dump Trucks *	7 yd Capacity Dump Bodies	16
* Of the 45 dump trucks, 30 are quipped for Snow & Ice Operations		
Mini Salt & Plow		2
Pothole Patch Trucks		4
Stake Bed Trucks		2
Storm Sewer Vacuum Truck		1
Trailers	Various sizes (5); Loaded w/ shoring matl(4)	9
Compressors		3
Passenger Buses	Avg Passenger Seating - 35	17
Drivers - Approximately 70 CDL licensed drivers within Public Works		
Mechanics - 6 Heavy Equipment & 2 Light Duty		
Equipment Operators - 13		
Tree Trimmers - 7		
24 - 2 man crews (Street/Water/Traffic/Property)		

11.0 STORMWATER MASTER PLAN REVIEW AND MODIFICATION TIMING

The City's Stormwater Administrator & Engineering Operations Manager will review annually.

12.0 ORDINANCE REVIEW SCHEDULE

The City's Stormwater Administrator & Engineering Operations Manager will review annually.

13.0 DEFINITIONS

Reference Appendix G for a list of relevant definitions.

14.0 REFERENCE MATERIAL LIST

Reference Appendix H for the City Yards Stormwater Plan.
Reference Appendix I for a list of references.

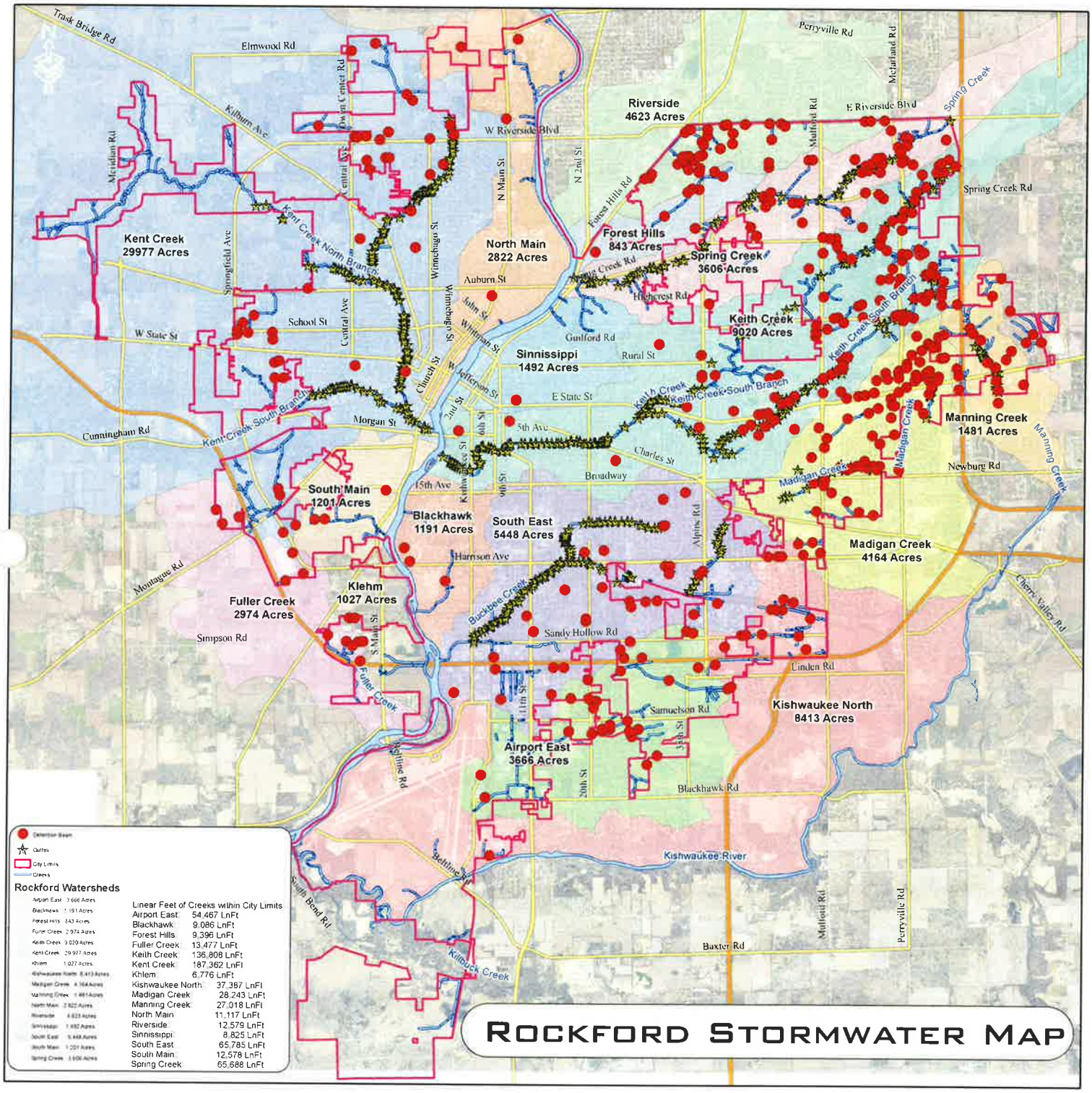
15.0 DECREE

A copy of the decree can be found in Appendix J.

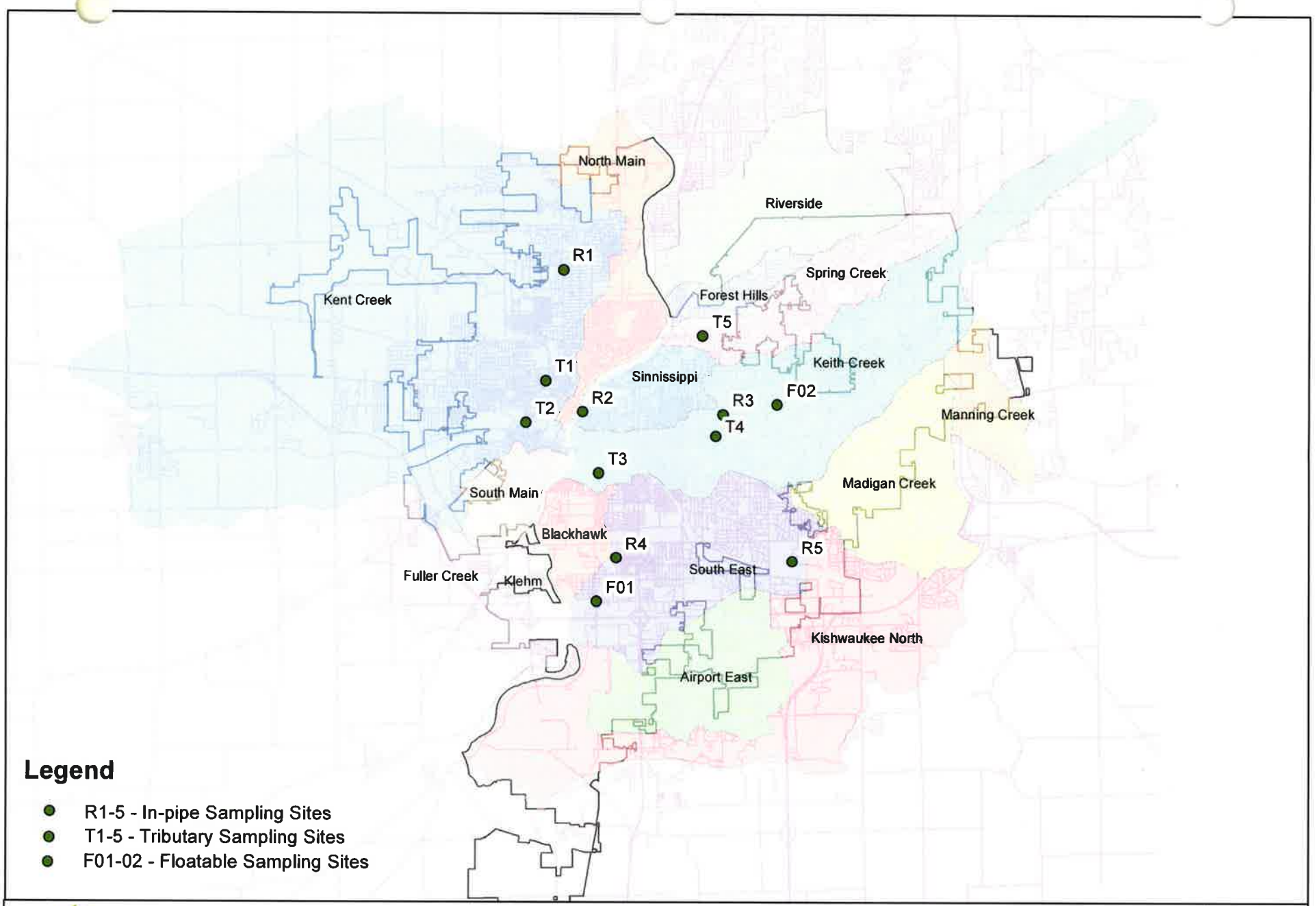
Appendix A. – Figures

A-1; Rockford Watersheds Map

A-2; Storm Sewer Outfall and Tributary Sampling Locations Map



Rockford Stormwater Map



ROCKFORD

City of Rockford
Public Works
Engineering Services

NPDES Sampling Sites

1 inch = 11,184 feet

0 5,500 11,000 22,000 33,000 44,000 Feet

SWET
Date Produced: 8/12/2015

Appendix B. – NPDES Permits

B-1

NPDES Permit for MS4 Discharges – City of Rockford ILS000001

NPDES Permit No. ILS000001
Notice No. JCH:09120201.daa

Public Notice Beginning Date:
Public Notice Ending Date:

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET
of
Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

City of Rockford
425 East State Street
Rockford, Illinois 61104

Name and Address of Facility:

City of Rockford
Storm Sewer Outfalls
(Winnebago County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Jeff Hutton at 217/782-0610.

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in discharging storm water runoff for the City of Rockford.

Receiving Water(s): Rock River, Kishwaukee River, Keith Creek, Kent Creek, Spring Creek and unnamed tributaries within the corporate boundaries of the City of Rockford.

The length of the Permit is approximately 5 years.

This permit covers all areas within the corporate boundary of the City of Rockford served by, or otherwise contributing to discharges from, municipal separate storm sewers owned or operated by the Permittee.

This permit authorizes all existing or new storm water point source discharges to waters of the State from the Municipal Separate Storm Sewer System (MS4). This permit also authorizes the discharge of storm water commingled with flows contributed by process wastewater,

non-process wastewater or storm water associated with industrial activity provided such discharges are authorized under separate NPDES permits.

Four water body segments within Rockford's corporate limits were assessed under the 305(b) process, and three of these four water segments (Rock River segment P-15, Rock River segment P-23 and the Kishwaukee River Segment PW-12) are on the 303 (d) list of impaired waters.

NPDES Permit No. ILS000001

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

P.O. Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

City of Rockford
425 East State Street
Rockford, Illinois 61104

Receiving Water(s): Rock River, Kishwaukee River, Keith Creek, Kent Creek, Spring Creek and unnamed tributaries within the corporate boundaries of the City of Rockford.

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C, Chapter I, and the Clean Water Act (CWA), 33 U.S.C. 1251 et *seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act", the above-named Permittee is authorized to discharge, in accordance with the provisions set forth in Parts I-VII and standard conditions herein; from all portions of the City of Rockford's Municipal Separate Storm Sewer System (MS4) owned or operated by Permittee listed above, to Waters of the State.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.
Manager, Permit Section

SAK:JCH:09120201.daa

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ATTACHMENT H – STANDARD CONDITIONS

PART I. DISCHARGES AUTHORIZED UNDER THIS PERMIT

Permit Area. This permit covers all areas within the corporate boundary of the City of Rockford served by, or otherwise contributing to discharges from, municipal separate storm sewers owned or operated by the Permittee.

B. Authorized Discharges. This permit authorizes all existing or new storm water point source discharges to waters of the State from the Municipal Separate Storm Sewer System (MS4). This permit also authorizes the discharge of storm water commingled with flows contributed by process wastewater, non-process wastewater, or storm water associated with industrial activity provided such discharges are authorized under separate NPDES permits.

C. Limitations and Coverage. The following discharges, whether discharged separately or commingled with municipal storm water, are not authorized by this permit:

1. *Non-Storm Water and Industrial Storm Water:* discharges of non-storm water or storm water associated with industrial activity except where such discharges are:
    a. authorized and in compliance with a separate NPDES permit;
    b. identified by and in compliance with Part II.A.7.a of this permit.
    c. a bypass in compliance with 40 CFR 122.41(m)

PART II. DISCHARGE LIMITATIONS AND STORM WATER MANAGEMENT PROGRAMS

The Permittee is required to limit, to the maximum extent practicable, the discharge of pollutants from the MS4. This shall include but not be limited to, compliance with the discharge limitations in Part II.A.

A. Discharge Limitations The permittee must design, select, install, and implement storm water controls to comply with the following discharge limitations:

1. *Structural Controls:* The Permittee shall operate and maintain any storm water structural controls for which they are the owner or operator, in a manner so as to reduce the discharge of pollutants to the maximum extent practicable.

    The city shall on an ongoing basis:

    a. conduct site visits and gather data for basins. Data collected and recorded shall include but not be limited to; estimates of the amount of sediments trapped in detention and retention basins, types of inlet structures, types of outlet structures and water depth at the outlet structure during dry weather as well as storm situations. This information shall be compiled into a database that will allow for analysis of different basin configurations and types of outlet structures to determine if certain basin design elements should be used for future basins, and/or used to improve existing basin configurations

    b. monitor basins including association controlled basins on a periodic basis to determine if present maintenance efforts need to be improved including those by associations. Develop a cleaning and maintenance schedule for the retention basins maintained by the Permittee. based upon a pilot study of a small sampling of the basins. As appropriate the basin cleaning and maintenance schedule shall be revised. The city will work with neighborhood associations on a joint effort to improve basin maintenance.

    c. continue its existing maintenance program by periodic inspection and removal of floatables from the MS4 to the MEP.

    d. continue to identify stream channels within the Permittee's jurisdiction experiencing horizontal and/or vertical erosion, and develop a program to mitigate and stabilize excessive erosion conditions for Permittee owned channels reduce sediment generation and the discharge of sediments and/or pollutants into downstream areas and/or into the municipal storm sewer system. The Permittee shall continue to work with property owners on the maintenance of privately owned portions of the stream channels.

2. *Erosion and Sedimentation Control: Construction Site Runoff and Post Construction Storm Water Management Program:*

    a. Construction Site Runoff: The Permittee shall implement a program to reduce the discharge of pollutants from construction sites, including:

        The city shall:

        i. The Permittee has adopted the ILR10 requirements and will continue to enforce those requirements as written.

        ii. Continue to review erosion control plans and required Storm water Pollution Plans (SWPPP) for new construction.

        iii. continue its inspection program of reviewing construction site conditions and records.

iv. continue to require erosion control plans to be sufficiently detailed over the life of the development so that erosion and sedimentation are minimized, and to allow inspectors to be aware of the types of control measures that should be in place at various times during development. Regulated construction sites must have a storm water pollution prevention plan that meets the requirements of Part IV of NPDES Permit No. ILR10 including management practices, controls and other provisions at least as protective as the requirements contained in the Illinois Urban Manual, 2002, or as amended including green infrastructure techniques where appropriate and practicable. Linear projects may adopt measures contained in the Illinois Department of Transportation Erosion and Sediment Control Field Guide for Construction Inspections.

v. continue to require maintenance of appropriate structural and non structural best management practices to reduce pollutants discharged to the Municipal Separate Storm Sewer System during the time construction is underway;

vi. Review for approval, BMPs not included in the manuals specified in II.A.2.iv, at the contractor's request and submit such approvals to the Illinois Environmental Protection Agency.

vii. Use the Illinois Urban Manual and IDOT Erosion and Sediment Field Guide For Construction Inspections as field guides for inspection of construction site BMPs to complement the City's existing inspection checklist, establish minimum requirements for regular inspections of active and inactive constructions sites subject to the terms of this permit and continue to inspect citizen complaints. BMPs not included in the above referenced manuals shall be submitted to the permittee for review and approval prior to installation;

viii Provide appropriate education and training measures for developers, development engineers and construction site operators, and continue to operate a hotline for citizen reporting of construction site erosion and sediment control complaints;

ix. Notify appropriate building permit applicants of their potential responsibilities under the NPDES permitting program for construction site runoff;

b. Post Construction Storm Water Management Program - Areas of New Development and Redevelopment: The Permittee shall utilize a comprehensive master planning process to develop, implement, and enforce controls to minimize the discharge of pollutants from areas of development and redevelopment after construction is completed.

The Permittee shall:

i. Use a master planning approach to identify storm water management issues on a watershed scale;

ii. Continue to require all regulated construction sites to have post construction management that meets or exceeds the requirements of Section IV(D)(2)(b) of NPDES Permit No. ILR10 including management practices, controls and other provisions at least as protective as the requirements contained in the Illinois Urban Manual, 2002 and further updates.

iii. Require developers to create and commit to long-term maintenance of privately owned permanent structural BMP's

iv. Monitor facilities during dry weather, conduct field surveys to assess potential improvements to existing facilities, work with private owners of existing facilities and neighborhood associations to assess performance and recommend improvements.

3. *Roadways:* The Permittee shall operate and maintain public streets, roads, and highways under its jurisdiction in a manner so as to minimize the discharge of pollutants (including those related to deicing or sanding activities) to the MEP.

The Permittee shall:

a. Continue its existing street sweeping and inlet cleaning programs, which include proper disposal of the street sweepings.

b. Evaluate different street sweeping and inlet cleaning frequencies to determine appropriate scheduling for such activities.

c. Store and cover deicing chemicals and review its current deicing practices, implementing changes where feasible to minimize the discharge of pollutants to the MS4.

d. Review its current street design, construction, and maintenance requirements in environmentally sensitive areas, such as those adjacent to streams, wetlands, other natural areas, and floodplains so as to incorporate BMPs and low-impact development designs to the MEP.

4. *Flood Control:* The Permittee shall ensure any flood management projects it undertakes assesses the impacts on the water quality of receiving waters.

   The Permittee shall:

   a. Continue to evaluate the feasibility of retrofitting the city owned existing flood control devices (dams, levees, basins) to provide additional pollutant removal from storm water quality controls.

   b. Coordinate with state and local agencies in planning and implementing regional flood control and water quality improvement projects.

   c. investigate ways that both the permittee and the public can reduce nuisance flooding.

5. *Pesticide, Herbicide, and Fertilizer Application:* The Permittee shall implement controls to reduce the pollutants in discharges from the Permittee's MS4 associated with the application of pesticides, herbicides, and fertilizers (PHF).

   The Permittee shall:

   a. Adhere to PHF label instructions for PHF application on public properties, including right-of-ways. At least once during the term of this permit, the Permittee will evaluate the reduction of PHF usage to determine the effectiveness and feasibility of application rates below the manufacturers recommended rates as described on labels.

   b. Include PHF education in its storm water public education and outreach programming and promote the proper use, handling and storage of PHFs.

   c. Cooperate with Illinois EPA and the Rock River Water Reclamation District to continue to provide access to the Household Hazardous Waste Disposal Program.

6. *Illicit Discharges and Improper Disposal:* The Permittee shall implement an ongoing program to detect and remove (or require the discharger to the MS4 to remove or obtain a separate NPDES permit for) illicit discharges and improper disposal into the storm sewer.

   a. Unless identified by either the Permittee or the Agency as significant sources of pollutants to Waters of State, the following non-storm water discharges need not be prohibited from entering the MS4. As necessary, the Permittee may incorporate appropriate control measures in the SWMP to insure these discharges are not significant sources of pollutants to Waters of the State.

      i. water line flushing;
      ii. landscape irrigation;
      iii. diverted stream flows;
      iv. rising ground waters;
      v. uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers;
      vi. uncontaminated pumped ground water;
      vii. discharges from potable water sources;
      viii. foundation drains;
      ix. air conditioning condensate;
      x. irrigation water;
      xi. springs;
      xii. water from crawl space pumps;
      xiii. footing drains;
      xiv lawn watering;
      xv. individual residential car washing;
      xvi flows from riparian habitats and wetlands;
      xvii. dechlorinated swimming pool discharges;
      xviii. street wash waters; and
      xix. discharges or flows from emergency fire fighting activities.

   The Permittee shall adopt an ordinance to:

   b. Continue to prohibit non-storm water discharges to the MS4, other than those authorized under a separate NPDES permit.

   The Permittee shall:

   c. Work with the Rock River Water Reclamation District to identify, track and eliminate unpermitted discharges of dry and/or wet weather overflows from sanitary sewers into the MS4.

d. Continue its program to collect used motor vehicle fluids (including, at a minimum, oil and antifreeze), tires and hazardous materials (including paint, solvents, pesticides and herbicides) for recycle, reuse, and/or proper disposal. T program should continue to be readily available to all private residents. This program should be publicized a promoted on a regular basis (at least annually);

e. implement the following regarding illicit discharges within the term of this permit;

i. review and evaluate existing legal authority and modify that authority based on experiences with the SWMP.

ii. conduct field screening activities based upon citizens complaints and/or permittees awareness.

iii. continue procedures for investigations of illicit connections and testing of suspected sources.

iv. continue a public education program to encourage reporting of storm water pollution and to improve disposal of oil and toxic materials.

v. Continue to operate the hotline and online reporting tool for citizen complaints.

7. *Spill Prevention and Response:* The Permittee shall implement a program to prevent, contain, and respond to spills that may discharge into the Municipal Separate Storm Sewer System. The spill response program may include a combination of spill response actions by the Permittee (and/or another public or private entity), and legal requirements for private entities within the Permittee's municipal jurisdiction.

The Permittee shall:

a. provide a summary in the annual report of coordination of spill prevention activities with City of Rockford's Fire Department.

b. develop and implement a GIS system and SIC code database for assistance with other governmental agencies spill prevention.

8. *Industrial and High Risk Runoff:* The Permittee shall implement a program to identify, monitor, and control pollutants in sto water discharges to the Municipal Separate Storm Sewer System from municipal landfills; hazardous waste treatment, storag disposal and recovery facilities and facilities that are subject to EPCRA Title III, Section 313; and any other industrial or commercial discharge the Permittee determines are contributing a substantial pollutant loading to the Municipal Separate Storm Sewer System.

The Permittee shall:

a. Identify industries and high risk properties that discharge to the MS4, including where applicable:

i. Hazardous waste treatment, storage or disposal facilities;

ii. Industries listed on the Rock River Water Reclamation District pretreatment program.

iii. Industries subject to reporting requirements pursuant to SARA Title III Section 313 and are releasing over 10,000 pounds of waste materials to the environment.

iv. Industrial facilities or high risk properties that the Permittee determines are contributing substantial loading of pollutants to the MS4.

b. Develop, improve and implement its existing inspection and monitoring program for those facilities identified in paragraph II.A.8.a. This program shall continue to include inspection and monitoring of a random select group of industries and high risk properties to verify that discharges of storm water to the Permittee's MS4 are complying with their NPDES storm water permits.

c. If necessary the Permittee will use enforcement procedures available pursuant to their legal authority if any industry is not providing a satisfactory response to elimination of the storm water pollutants.

9. *Public Education, Pollution Prevention and Good Housekeeping:* The Permittee shall implement a public education program designed to educate the public, promote pollution prevention and educate the public on good housekeeping measures. This program shall include any and all public education and public involvement addressed in this section as well as all other sectio within this permit.

The Permittee shall continually develop and update this program which shall be designed to:

a. educate the public on green infrastructure strategies such as green roofs, rain gardens, rain barrels, bioswales, permeable piping, dry wells and permeable pavement that mimic natural processes and direct storm water to areas where it can be infiltrated, evapotranspirated or reused, discuss the benefits and costs of such strategies and provide guidance to the public on how to implement such measures..

b. promote, publicize, and facilitate public reporting of the presence of illicit discharges or improper disposal of materials (e.g. industrial and commercial wastes, trash, used motor vehicle fluids, leaf litter, grass clippings, animal wastes, etc.) into the Municipal Separate Storm Sewer System.

c. advise residents of preferred methods for vehicle washing and yard waste disposal.

d. promote, publicize, and facilitate the proper management and disposal of used oil and household hazardous wastes.

e. promote, publicize, and facilitate the proper use, application, and disposal of pesticides, herbicides, and fertilizers by the public and commercial and private applicators and distributors.

f. where applicable and feasible, publicize those best management practices (including but not limited to the use of reformulated or redesigned products, substitution of less toxic materials, and improvements in housekeeping) used by the Permittee that facilitate better use, application, and/or disposal of materials identified in 10.b. and 10.c. this section.

The Permittee shall continue to operate a hotline and online reporting tool for citizen complaints for:

g. citizen reporting of illicit discharge detection.

h. citizen reporting of construction site erosion and sediment control complaints.

The Permittee shall:

i. work with stakeholder groups, including representatives from developers, engineering, construction, contractor, and industrial communities, to draft ordinance(s) pertaining to storm water management.

Area-Specific Storm Water Management Program Requirements:

This permit may be modified, in accordance with Part VI of this permit, to incorporate additional area-specific requirements.

C. Deadlines for Program Compliance: Except as provided in PART III, compliance with the storm water management program shall be required 90 days from the effective date of the permit.

D. Legal Authority: The Permittee shall insure legal authority to control discharges to and from those portions of the Municipal Separate Storm Sewer System over which it has jurisdiction. This legal authority may be a combination of statute, ordinance, permit, contract, or an order to:

1. Control the contribution of pollutants to the Municipal Separate Storm Sewer System;

2. Prohibit illicit discharges to the Municipal Separate Storm Sewer System;

3. control the discharge of spills and the dumping or disposal of materials other than storm water (e.g. industrial and commercial wastes, trash, used motor vehicle fluids, leaf litter, grass clippings, animal wastes, etc.) into the Municipal Separate Storm Sewer System;

4. Control through interagency or inter jurisdictional agreements the contribution of pollutants from one portion of the Municipal Separate Storm Sewer System to another;

5. Require compliance with conditions in ordinances, permits, contracts or orders; and

6. Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance with permit conditions.

E. Storm Water Management Program Resources: The Permittee shall provide adequate finances, staff, equipment, and support capabilities to implement their storm water management program.

F. Storm Water Management Program Development: The permittee shall develop a Storm Water Management Program (SWMP) that describes the controls necessary to reduce the discharge or pollutants to the MEP. Controls may consist of a combination of best management practices, control techniques, system design and engineering methods and other provisions that the Permittee or Agency determines appropriate. Controls and activities identified in the SWMP shall be clearly identified on a system, jurisdiction, or specific area basis. The Permittee may implement the SWMP through participation with other public agencies or private entities. The SWMP

shall be developed as a separate document which describes the selection, design, installation, and implementation of structural and non-structural controls to satisfy the requirements of Parts A-E and Part G of this permit for all portion s of the MS4 authorized to discharge storm water under this permit. Implementation of the discharge limitation shall be documented in Part III. The Agency may require modification of the SWMP as specified in Part II.G.3.

G. Storm Water Management Program Review and Modification:

The Permittee shall provide adequate public notice of the Storm Water Management Program.

1. *Program Review:* The Permittee shall participate in an annual review of the current Storm Water Management Program in conjunction with preparation of the annual report required under Part V.C. This annual review shall include:

   a. A review of the status of program implementation and compliance (or non-compliance) with all schedules of compliance contained in this permit;

   b. An assessment of the effectiveness of controls established by the Storm Water Management Program;

   c. A review of monitoring data and any trends in estimated cumulative annual pollutant loadings; and

   d. An assessment of any Storm Water Management Program modifications needed to comply with the Clean Water Act and Title 35 Ill. Adm. Code Subtitle C.

2. *Program modification:* Permittee may modify the Storm Water Management Program during the life of the permit in accordance with the following procedures:

   a. The approved Storm Water Management Program may be modified by the Permittee(s) without the prior approval of the Agency. An itemized list of changes to the Storm Water Management Plan shall be included in the Annual Report required in Section V.C. of this permit.

   b. Modifications adding (but not subtracting or replacing) components, controls, or requirements to the approved Storm Water Management Program may be made by the Permittee at any time.

   c. Modifications replacing an ineffective or unfeasible BMP specifically identified in the Storm Water Management Program with an alternate BMP may be requested at any time. Unless denied by the Agency, the modification shall be deemed approved and may be implemented by the Permittee 60 days from submittal of the request. Such requests must include the following:

      i. an analysis of why the BMP is ineffective or infeasible (including cost prohibitive),

      ii. expectations on the effectiveness of the replacement BMP, and

      iii. an analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.

   d. Modification requests and/or notifications must be made in writing, signed in accordance with Attachment H, Standard Conditions, Item 11.

   e. The SWMP required in Part II.b must be kept up-to-date, including all modifications required by the Agency pursuant to Part II.G.3.

3. *Modifications required by the Permitting Authority:* The permitting authority may require the Permittee to modify the Storm Water Management Program as needed to:

   a. Address impacts on receiving water quality caused, or contributed to, by discharges from the Municipal Separate Storm Sewer System;

   b. Include more stringent requirements necessary to comply with new State or Federal statutory or regulatory requirements;

   c. Include such other conditions deemed necessary by the Agency to comply with the goals and requirements of the Clean Water Act. Modifications requested by the Agency shall be made in writing and set forth the time schedule for the Permittee to develop the modification(s).

PART III. SCHEDULES FOR IMPLEMENTATION AND COMPLIANCE

A. Implementation of Storm Water Management Program

STRUCTURAL CONTROLS

TASKS	ACTION DATE
Evaluate detention and retention basin configurations, outlet structures, cleaning frequencies, water depth at the outlet structures , drainage facilities and stream channels experiencing erosion as detailed in Part II.A.1.a, b, c and d.	Continual
Report to IEPA status of compliance with Part II.A.1 and implementation of solutions.	As Part of Annual Report

EROSION AND SEDIMENTATION CONTROL, CONSTRUCTION SITE RUNOFF AND POST-CONSTRUCTION STORM WATER MANAGEMENT PROGRAM

TASKS	ACTION DATE
Report on the compliance with all parts of Part II.A.2.	As Part of Annual Report

ROADWAYS

TASKS	ACTION DATE
Continue evaluation of roadway maintenance activities minimize the discharge of pollutants to the MEP as detailed in Part II.A.3.	Continual
Documentation of compliance with Part II.A.3 and any changes in maintenance activities and/or procedures shall be detailed in the Annual Report.	As Part of Annual Report

FLOOD CONTROL

TASKS	ACTION DATE
Continue Efforts to evaluate the feasibility of retrofitting existing flood control devices – Part II.A.4.a.	Continual
Documentation of compliance with items in Part II.A.4 shall be detailed in the Annual Report.	As Part of Annual Report

PESTICIDE, HERBICIDE AND FERTILIZER APPLICATION

TASKS	ACTION DATE

Evaluate current PHF application practices within City and revise as needed- Part II.A.5.a.	Continual
Implement a public education program in accordance with Part II.A.5.b.	Continual
Report to IEPA status of compliance with Part II.A.5.	As Part of Annual Report

ILLICIT DISCHARGE AND IMPROPER DISPOSAL

TASK	ACTION DATE
Report progress in meeting requirements of Part II.A.6.	As Part of Annual Report

SPILL PREVENTION AND RESPONSE

TASK	ACTION DATE
Report progress in meeting requirements of Part II.A.7.	As Part of Annual Report

INDUSTRIAL AND HIGH RISK RUNOFF

TASKS	ACTION DATE
Inspect and monitor select industries as described in Part II.A.8 to verify discharges to the MS4 are in compliance with their NPDES storm water permits.	Select groups annually
Report to IEPA status of compliance with Part II.A.8.	As Part of Annual Report

PUBLIC EDUCATION, POLLUTION PREVENTION AND GOOD HOUSEKEEPING

TASKS	ACTION DATE
Report to IEPA status of compliance with Part II.A10.	Submit with Annual Report
Prepare annually a report on existing situation and make recommendations on future program goals. Include details on the distribution methods of information to industry, the general public and schools as well as a summary of the response from those receiving information and any positive actions arising as a result of the distribution of information and/or the education of the public on storm water issues and pollution prevention.	Submit with Annual Report

B. Compliance With Effluent Limitations

This permit may be modified, in accordance with Part VI of this permit, to include compliance with specific numerical limitations if deemed appropriate by the Agency.

PART IV. NUMERIC EFFLUENT LIMITATIONS

This permit may be modified, in accordance with Part VI of this permit, to include specific numerical limitations if deemed appropriate by the Agency.

PART V. MONITORING AND REPORTING REQUIREMENTS

A. Storm Event Discharges. The Permittee shall implement a wet-weather monitoring program for the Municipal Separate Storm Sewer System to provide data necessary to assess the effectiveness and adequacy of control measures implemented under the Storm Water

Management Program; estimate annual cumulative pollutant loadings from the Municipal Separate Storm Sewer System; estimate event mean concentrations and seasonal pollutants in discharges from major outfalls; identify and prioritize portions of the Municipal Separate Storm Sewer System requiring additional controls, and identify water quality improvements or degradation. The Permittee is responsible for conducting any additional monitoring necessary to accurately characterize the quality and quantity of pollutants discharged from the municipal separate storm sewer system. Improvement in the quality of discharges from the municipal separate storm sewer system will be assessed based on the monitoring information required by this section, plus any additional monitoring conducted by the Permittee(s).

1. *Representative Monitoring:* The Permittee shall monitor representative outfalls, internal sampling stations, and/or instream monitoring locations to characterize the quality of storm water discharges from the Municipal Separate Storm Sewer System.

   a. Monitoring Requirements: (See Table V.A.I.a)

   b. Outfall Descriptions: (See Table V.A.I.b)

   c. Alternate or new representative monitoring locations may be substituted for just cause during the term of the permit. Requests for approval of alternate monitoring locations shall be made to the Agency in writing and include the rationale for the requested monitoring station relocation. Unless disapproved by the Agency, use of an alternate monitoring location may commence thirty days from the date of the request. Four samples shall be collected during the first year of monitoring at substitute outfalls.

2. Floatables Monitoring Program: The permittee shall establish two monitoring locations for removal of floatable material in discharges to or from the MS4. Floatables material shall be collected at the frequency necessary for maintenance of the removal devices, but not less than twice per year. The amount of material collected shall be estimated (either volume or weight) and shall be reported in the Annual Report.

3. Storm Event Data: For Part V.A.1 - Representative Monitoring only: quantitative data shall be collected to estimate pollutant loadings and event mean concentrations for each parameter sampled. In addition to the parameters listed below, the Permittee shall maintain records of the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration (in hours) between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and an estimate of the total volume (in gallons) of the discharge sampled.

4. *Sample Type, Collection, and Analysis:* The following requirements apply only to samples collected for Part V.A.1 - Representative Monitoring.

   a. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample may be taken.

   b. Samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Composite samples may be taken using continuous (automatic) samplers that will be triggered using either tipping bucket rain gauges programmed to initiate sampling after 0.1 inch of rain, or flow meters programmed to initiate sampling after 0.1 inches of runoff. Sampling may also consist of 3 grab samples from an event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inches rainfall) storm event. The first grab sample shall be taken within 2 hours of the storm event. The second and third grab samples shall be taken at intervals of not less than 2 hours. Should the discharge cease before the 2nd and 3rd grab samples can be taken the permittee shall identify the approximate time that the discharge ceased. Additionally grab samples of storm water will be collected for analysis of fecal coliform. If possible, this grab sampling will take place during the same storm event, but if this cannot be performed, these samples will be taken from separate events.

   c. Analysis and collection of samples shall be done in accordance with the methods specified at 40 CFR Part 136. Where an approved Part 136 method does not exist, alternate available methods may be used.

   d. The permittee shall include an analysis of the composite sample data from 2003 to 2009 and the grab sample data from 2009 to 2014, which shall compare the similarity of the two data sets and the amount of variability in each data set.

Table V.A.1.a. Representative Monitoring Requirements for Outfalls 001, 002, 003, 004 and 005

PARAMETER	MONITORING FREQUENCY				
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
BOD5 (mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
COD (mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
TSS(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
TDS(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Total Nitrogen(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Total Kjeldahl Nitrogen(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Total Phosphorus (mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Fecal Coliform (per mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Oil and Grease(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Total Cadmium(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Total Copper(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Total Lead(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Total Zinc(mg/l)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
pH (S.U.)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Hardness (as $CaCO_3$)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year
Temperature (C)	Twice / year	Twice / year	Twice / year	Twice / year	Twice / year

Samples shall be collected during the spring and fall of each year. Results from samples collected as part of the Rock River Watershed Analysis-Quality Assurance Project Plan for Outfalls R1-R5 may be submitted to satisfy the above monitoring requirements.

Table V.A.1.b Representative Monitoring Outfall Descriptions

Outfall / Latitude & Longitude	Location	Description
Outfall 001 - Station R1 / N 42° 18.346' W 89° 5.772'	Paradise Boulevard Section 11,T44N,R1E	225 Ac. Residential and Open Space
Outfall 002 - Station R2 / N 42° 16.214' W 89° 5.434'	Market Street and Water Street Section 23, T44N, R1E	50 Ac. Commercial Offices, and Residential
Outfall 003 - Station R3 / N 42° 16.168' W 89° 2.616'	Fairview Boulevard and Crosby Street Section 19, T44N, R2E	510 Ac. Residential
Outfall 004 - Station R4 / N 42° 14.049' W 89° 4.790'	Wills Avenue and 8th Street Section 36, T44N, R1E	780 Ac. Industrial, Commercial, Residential
Outfall 005 - Station R5 / N 42° 13.956' W 89° 1.267'	Forest View Road and 28th Ave. Section 5, T43N, R2E	80 Ac. Light Industrial

5. *Sampling Waiver.* When a discharger is unable to collect samples required by Part V.A.1 (Representative Monitoring) due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, tornadoe electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

B. Annual Report The Permittee shall prepare an annual system-wide report to be submitted by no later than April 1 of each year, in accordance with this permit. The report shall include a brief overview of the entire Municipal Separate Storm Sewer System and the following separate sections:

1. Status of implementing the storm water management program(s) -provide summaries for individual permit components as detailed in Part III – Schedules for implementation of, and compliance with, SWMP.

2. Proposed changes to the storm water management program(s).

3. Revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application under 40 CFR 122.26(d) (2) (iv) and (d) (2) (v).

4. An overall summary of the data, including monitoring data, accumulated throughout the reporting year.

5. Annual expenditures for the reporting period, with a breakdown for the major elements of the storm water management program and the budget for the year following each annual report.

6. A summary describing the number and nature of enforcement actions, inspections, and public education programs.

7. Identification of water quality improvements or degradation.

8. Provide the Latitude and Longitude of the Representative Monitoring Outfalls listed in Table V.A.1.b, along with a map identifying their locations within the city.

9. A brief summary of what the city has experienced and evaluated in the past year about its programs regarding storm water and pollution prevention, and a list of any proposed changes to their programs and/or additional actions they feel would be beneficial.

10. A summary of the effectiveness and accuracy of the monitoring results obtained as a result of the current requirements of the Permit. The Permittee should provide suggestions and justifications for any possible improvements to the current monitoring locations and/or frequency as well as information indicating reasons why certain monitoring requirements should be modified or eliminated.

C. Certification and Signature of Reports

All reports required by the permit and other information requested by the Agency shall be signed and certified in accordance with Attachment H, Standard Conditions, Item 11.

D. Reporting: Where and When to Submit.

1. Monitoring results obtained during the reporting period running from January 1 through December 1 shall be submitted on Discharge Monitoring Report Form(s) annually along with the Annual Report required by Part V.C. A separate Discharge Monitoring Report Form is required for each event monitored.

2. Signed copies of discharge monitoring reports required under Part V., the Annual Report required by Part V.C., requests for Storm Water Management Program modification, requests for changes in monitoring locations, and all other reports required herein, shall be submitted to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section

E. Retention of Records.

The Permittee shall retain the latest approved version of the Storm Water Management Program developed in accordance with Part II of this permit for at least three years after coverage under this permit terminates. The Permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and records of all other data required by or used to demonstrate compliance with this permit, until at least three years after coverage under this permit terminates. This period may be explicitly modified by

alternative provisions of this permit or extended by request of the Agency at any time.

PART VI. PERMIT MODIFICATIONS

A. Modification of the Permit: The permit may be reopened and modified during the life of the permit to address:
   1. Changes in the State's Water Quality Management Plan, including Water Quality Standards;
   2. Changes in State or Federal statutes or regulations;
   3. add a new Permittee who is the owner or operator of a portion of the Municipal Separate Storm Sewer System;
   4. changes in portions of the Storm Water Management Program that are consolidated permit conditions; or
   5. other modifications deemed necessary by the Agency to meet the requirements of the Act.

All modifications to the permit will be made in accordance with 40 CFR 122.62, 122.63 and 124.5.

PART VII. DEFINITIONS

"Agency" means the Illinois Environmental Protection Agency

"Best Management Practices" (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97117, 33 U.S.C. 1251 et.seq.

"Co-Permittee" means a Permittee to a NPDES permit that is only responsible for permit conditions relating to the discharge for which it is operator.

"Core municipality" means, for the purpose of this permit, the municipality whose corporate boundary (unincorporated area for counties) defines the municipal separate storm sewer system.

"Discharge", for the purpose of this permit, unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sew System (MS4).

"Duty to Mitigate" or "Mitigate" means the permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

"Flow-weighted composite sample" means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge at the time the aliquot is collected.

"Green Infrastructure", means wet weather management approaches and technologies that utilize, enhance or mimic the natural hydrologic cycle processes of infiltration evapotranspiration and reuse. Green infrastructure approaches currently in use include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, porous and permeable pavements, porous piping systems, dry wells, vegetated median strips, reforestation/revegetation, rain barrels and cisterns and protection and enhancement of riparian buffers and floodplains.

"Individual Residence" refers, for the purposes of this permit, to single or multi-family residences. (e.g. single family homes and duplexes, townhomes, apartments, etc.)

"Illicit connection" means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

"Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.
"Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

"Land application unit" means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

"Large or medium municipal separate storm sewer system" means all municipal separate storm sewers that are either:

(i)located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122) or

(ii)located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or

(iii) owned or operated by a municipality other than those described in paragraph (1) or (ii) and that are designated by the Agency as part of the large or medium municipal separate storm sewer system.

"MEP" is an acronym for "Maximum Extent Practicable," the technology-based discharge standard for Municipal Separate Storm Sewer Systems established by CWA ɜ 402(p).

"MS4" is an acronym for "municipal separate storm sewer system" and is used to refer to either a Large or Medium Municipal Separate Storm Sewer System.

"Municipal Separate Storm Sewer" means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basing, curbs, gutters, ditches, man-made channels, or storm drains): (i) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State Law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian Tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to Waters of the State (iii) designed or used for collecting or conveying storm water; (iii) which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

"Permittee" refers to any "person," as defined at 40 CFR 122.2, authorized by this NPDES permit to discharge to Waters of the State.

"Point source" means any discernible, confined, and discrete conveyance, Including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Process wastewater" means any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product.

torm Sewer,", unless otherwise indicated, refers to a municipal separate storm sewer.

"Storm Water," means storm water runoff, snow melt runoff, and surface runoff and drainage.

"SWMP" is an acronym for "Storm Water Management Program."

"Time-weighted composite" means a composite sample consisting of a mixture of equal volume aliquots collected at a constant time interval.

"Waters of the State" is defined as: All accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois

"Waters of the United States" is defined at 40 CFR 122.2.

217/782-0610

City of Rockford
425 East State Street
Rockford, Illinois 61104

Re: City of Rockford
Storm Sewer Outfalls
NPDES Permit No. ILS000001
Draft Permit

Gentlemen:

Attached to this letter is a copy of the draft Permit, Public Notice/Fact Sheet for your discharge. The Agency proposes to issue the NPDES Permit for your discharge as shown in the draft Permit.

Fifteen days from the date of this letter, the Agency proposes to distribute the attached Public Notice/Fact Sheet statewide. If you have objections to the content of the Public Notice/Fact Sheet, a written statement must be received by the Agency at the indicated address, attention: NPDES PN Clerk within 10 days.

The Agency will receive comments regarding the Permit for a period of 30 days after the Public Notice is issued. If you wish to comment or object to any of the terms and conditions of the Permit, you must state the objections in writing prior to the end of the public notice. The Agency may or may not change the Permit based on comments received from you or the public.

If you should have questions or comments regarding the above, please contact Jeff Hutton at 217/782-0610.

Sincerely,

Richard E. Pinneo, P.E.
Manager, Southern Municipal Unit, Permit Section
Division of Water Pollution Control

REP: JCH: 09120201.daa

Attachments: Draft Permit, Public Notice/Fact Sheet

cc: Records Unit
Compliance Assurance Section

217/782-0610

U. S. Environmental Protection Agency
Attention: 5WN - 16J Peter Swenson, Chief
NPDES Programs Branch
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: City of Rockford
Storm Sewer Outfalls
NPDES Permit No. ILS000001
Draft Permit Request for Approval

Dear Mr. Swenson:

In accordance with our agreement, we hereby submit for approval, a Draft Permit and Public Notice/Fact Sheet for the above subject discharger. The IEPA fully expects to receive either an approval letter or a letter stating objections to the Permit within 45 days of the date of this letter.

Any verbal comments should be directed to Jeff Hutton at 217/782-0610.

Sincerely,

Richard E. Pinneo, P.E.
Manager, Southern Municipal Unit, Permit Section
Division of Water Pollution Control

REP:JCH:09120201.daa

Attachments: Draft Permit, Public Notice/Fact Sheet, Additional Backup Material

cc: Records Unit

217/782-0610

Department of the Army
Rock Island District
Corps of Engineers
Clock Tower Building
Rock Island, Illinois 61201

Re: City of Rockford
Storm Sewer Outfalls
NPDES Permit No. ILS000001
Request for Corps of Engineers Comment

Gentlemen:

Attached please find a copy of the Public Notice/Fact Sheet for the subject discharge. Please review for determination of the impact of this discharge on navigation and anchorage. If no written reply is received at the indicated address, attention: NPDES PN Clerk within 15 days of the date of this request, the Agency will assume the Corps of Engineers has no objection to the proposed discharge.

Sincerely,

Richard E. Pinneo, P.E.
Manager, Southern Municipal Unit, Permit Section
Division of Water Pollution Control

REP:JCH:09120201.daa

Attachment: Public Notice/Fact Sheet

cc: Records Unit

MEMORANDUM

DATE:

TO: Manager, DWPC/FOS, Rockford Region

FROM: Richard E. Pinneo, Manager, Southern Municipal Unit

SUBJECT: City of Rockford
Storm Sewer Outfalls
NPDES Permit No. ILS000001
Draft Permit, Public Notice/Fact Sheet

Please review the attached copy of the subject documents, and notify the Southern Municipal Unit if you take exception to the limitations, sampling frequency, sample type or other requirements therein.

If no response is received within fifteen (15) days from the date of this memorandum, we will assume that you concur in the issuance of the Public Notice.

If you have any questions, please contact Jeff Hutton at 217/782-0610.

Thank you for your cooperation.

REP:JCH:09120201.daa

Attachments: Draft Permit, Public Notice/Fact Sheet

cc: Records Unit

217/782-0610

Municipal Clerk
City of Rockford
425 East State Street
Rockford, Illinois 61201

Re: City of Rockford
Storm Sewer Outfalls
NPDES Permit No. ILS000001
Public Notice of Permit

Municipal Clerk:

In accordance with the requirements of the Illinois Pollution Control Board regulations of 35 Ill. Adm. Code 309.109(a)(2)(A), the attached National Pollutant Discharge Elimination System Public Notice is sent to a municipality in the vicinity of the applicant. The Agency understands that the applicant may not be associated with the municipality to which it is sent.

Please post the attached National Pollutant Discharge Elimination System Public Notice for a period of 30 days. In addition, please complete and return the enclosed postcard indicating the date of posting. Should you choose not to post the attached notice, please indicate so on the postcard and return.

Thank you for your cooperation.

Sincerely,

Richard E. Pinneo, P.E.
Manager, Southern Municipal Unit, Permit Section
Division of Water Pollution Control

REP:JCH:09120201.daa

Attachments: Public Notice/Fact Sheet, Post Card

cc: Records Unit

217/782-0610

City of Rockford
425 East State Street
Rockford, Illinois 61104

Re: City of Rockford
Storm Sewer Outfalls
NPDES Permit No. ILS000001
Public Notice of Permit

Gentlemen:

Please post the attached Public Notice for the subject discharge for at least a period of thirty days from the date on the Notice in a conspicuous place on your premises.

We have enclosed a copy of the draft NPDES permit on which this official Public Notice is based. If you wish to comment on the draft permit, please do so within 30 days of the Public Notice date. If there are any questions, please contact Jeff Hutton at the indicated telephone number and address.

Thank you for your cooperation.

Sincerely,

Richard E. Pinneo, P.E.
Manager, Southern Municipal Unit, Permit Section
Division of Water Pollution Control

REP:JCH:09120201.daa

Attachments: Draft Permit, Public Notice/Fact Sheet

cc: Records Unit
Compliance Assurance Section
Rockford Region

217/782-0610

City of Rockford
425 East State Street
Rockford, Illinois 61104

Re: City of Rockford
Storm Sewer Outfalls
NPDES Permit No. ILS000001
Final Permit

Gentlemen:

Attached is the final NPDES Permit for your discharge. The Permit as issued covers discharge limitations, monitoring, and reporting requirements. Failure to meet any portion of the Permit could result in civil and/or criminal penalties. The Illinois Environmental Protection Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Agency has begun a program allowing the submittal of electronic Discharge Monitoring Reports (eDMRs) instead of paper Discharge Monitoring Reports (DMRs). If you are interested in eDMRs, more information can be found on the Agency website, http://epa.state.il.us/water/edmr/index.html. If your facility is not registered in the eDMR program, a supply of preprinted paper DMR Forms for your facility will be sent to you prior to the initiation of DMR reporting under the reissued permit. Additional information and instructions will accompany the preprinted DMRs upon their arrival.

The attached Permit is effective as of the date indicated on the first page of the Permit. Until the effective date of any re-issued Permit, the limitations and conditions of the previously-issued Permit remain in full effect. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board within a 35 day period following the issuance date.

Should you have questions concerning the Permit, please contact Jeff Hutton at the 217/782-0610.

Sincerely,

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:REP:JCH:09120201.daa

Attachment: Final Permit

cc: Records
Compliance Assurance Section
Rockford Region
Billing

217/782-0610

U.S. Fish & Wildlife Service
Rock Island Field Office
1511 47th Avenue
Moline, IL 61265

Re: City of Rockford
Storm Sewer Outfalls
NPDES Permit No. ILS000001

Gentlemen:

In accordance with 40 CFR 124.10, we hereby submit a copy of the Public Notice/Fact Sheet for the above discharger. If no written reply is received at the indicated address, attention: NPDES PN Clerk within 30 days of the date of this request, the Agency will assume that the U.S. Fish and Wildlife Service has no objection to the proposed discharge.

Sincerely,

Richard E. Pinneo, P.E.
Manager, Southern Municipal Unit, Permit Section
Division of Water Pollution Control

REP:JCH:09120201.daa

Attachment: Public Notice/Fact Sheet

cc: Records Unit

B-2

General NPDES Permit No. ILR00
Stormwater Discharges from Industrial Activities

General NPDES Permit No. ILR00

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
www.epa.state.il.us

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit
For
Storm Water Discharges from Industrial Activities

Expiration Date: April 30, 2014

Issue Date: April 3, 2009

Effective Date: May 1, 2009

Discharges authorized by this General Permit: In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act, the following discharges may be authorized by this permit in accordance with the conditions herein:

Discharges of storm water associated with industrial activity, as defined and limited herein. Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

This general permit regulates only storm water discharges from a facility. Other discharges such as process wastewater or cooling water shall be regulated by other NPDES permits.

Receiving waters: Discharges may be authorized to any surface water of the State.

To receive authorization to discharge under this general permit, a facility operator must either submit an application as described in the permit conditions to the Illinois Environmental Protection Agency or have a valid Illinois General NPDES Permit for industrial storm water. Authorization, if granted, will be by letter and include a copy of this permit.

Alan Keller

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

General NPDES Permit No. ILR00

CONTENTS OF THIS GENERAL PERMIT

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A. APPLICABILITY OF THIS GENERAL PERMIT

This permit is applicable to storm water discharges associated with industrial activity from areas (except access roads and rail lines) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water in the state of Illinois from the facilities listed below.

1. Discharges of storm water from facilities whose process wastewater discharges are subject to new source performance standards or toxic pollutant effluent standards under 40 CFR Subchapter N, except:

   a. discharges subject to new source performance standards or toxic pollutant effluent standards and described in paragraph A.2. below which do not have materials or activities exposed to storm water. Facilities with these discharges shall submit a No Exposure Certification form to the Agency.

   b. discharges subject to storm water effluent limitations guidelines listed in B.1. of this permit.

2. Discharges from facilities in the following SIC codes:

SIC 20	(Food and kindred products manufacturing or processing)
SIC 21	(Tobacco products)
SIC 22	(Textile mill products)
SIC 23	(Apparel and other finished products made from fabrics and similar materials)
SIC 24	(Lumber and wood products except furniture)
SIC 2434	(Wood kitchen cabinets)
SIC 25	(Furniture and fixtures)
SIC 26	(Paper and allied products)
SIC 265	(Paperboard containers and boxes)
SIC 267	(Converted paper and paperboard products)
SIC 27	(Printing, publishing, and allied industries)
SIC 28	(Chemicals and allied products)
SIC 283	(Drugs)
SIC 285	(Paints, varnishes, lacquers, enamels, and allied products)
SIC 29	(Petroleum refining and related industries), except discharges subject to 40 CFR 419
SIC 30	(Rubber and miscellaneous plastics products)
SIC 31	(Leather and leather products)
SIC 311	(Leather tanning and finishing)
SIC 32	(Stone, clay, glass, and concrete products)
SIC 323	(Glass products, made of purchased glass)
SIC 33	(Primary metal industries)
SIC 34	(Fabricated metal products, except machinery and transportation equipment)
SIC 3441	(Fabricated structural metal)
SIC 35	(Industrial and commercial machinery and computer equipment)
SIC 36	(Electronic and other electrical equipment and components, except computer equipment)
SIC 37	(Transportation equipment)
SIC 373	(Ship and boat building and repairing)
SIC 38	(Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks)
SIC 39	(Miscellaneous manufacturing industries)
SIC 4221-25	(Farm products warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)

3. Facilities classified as SIC Codes 10-14 (Mineral Industry) including active or inactive mining operations and oil and gas exploration, production, processing, treatment operations, or transmission facilities, except discharges subject to 40 CFR 434, 436, or 440.

4. Landfills, land application sites (excluding land application sites which utilize agricultural land), and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described in 40 CFR 122.26(b)(14)).

5. Facilities involved in the recycling of materials including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards including but not limited to SIC 5015 (Used motor vehicle parts) and SIC 5093 (Scrap and waste materials)

6. Transportation facilities-areas of the following facilities involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or airport deicing operations:

SIC 40	(Railroad transportation)
SIC 41	(Local and suburban transit and inter-urban highway passenger transportation)
SIC 42	(Motor freight transportation and warehousing) except SIC 4221-4225 (Farm product warehousing and storage, refrigerated warehousing and storage, general warehousing and storage)
SIC 43	(United States Postal Service)
SIC 44	(Water transportation)
SIC 45	(Transportation by air)
SIC 5171	(Petroleum bulk stations and terminals-wholesale)

7. Treatment Works treating domestic sewage with a design flow of 1.0 mgd or more; includes sludge or wastewater treatment devices or systems used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, and land dedicated to sludge disposal located within the confines of the facility; excludes off-site sludge management lands, farm lands, and gardens.

B. TYPES OF DISCHARGES NOT COVERED BY THIS PERMIT

This permit is not applicable to storm water discharges from the facilities listed below. Storm water discharges from these facilities must be authorized by an individual NPDES permit or alternate general NPDES permit.

1. Discharges subject to storm water effluent limitations guidelines in the following categories;

   Cement Manufacturing (40 CFR 411)
   Feedlots (40 CFR 412)
   Fertilizer Manufacturing (40 CFR 418)
   Petroleum Refining (40 CFR 419)
   Phosphate Manufacturing (40 CFR 422)
   Steam Electric (40 CFR 423)
   Coal Mining (40 CFR 434)
   Mineral Mining and Processing (40 CFR 436)
   Ore Mining and Dressing (40 CFR 440)
   Asphalt Emulsion (40 CFR 443).

2. Hazardous waste treatment, storage or disposal facilities.

3. Steam electric power generating facilities, including coal handling sites.

4. Construction site activity including clearing, grading and excavation activities.

5. Storm water discharges associated with industrial activity from facilities with an existing NPDES individual or general permit for the storm water discharges.

6. Storm water discharges associated with industrial activity which are identified by the Agency as possibly causing or contributing to a violation of water quality standards.

7. Storm water discharges associated with inactive mining or inactive oil and gas operations occurring on Federal lands where an operator cannot be identified.

8. Storm water discharges to any receiving water identified under 35 Ill. Adm. Code 302.105(d)(6).

9. Storm water discharges that the Agency determines are not appropriately covered by this general permit.

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill, and does not supercede any reporting requirements for spills or releases of hazardous substances or oil.

General NPDES Permit No. ILR00

C. SPECIAL CONDITIONS

1. Prohibition on non-storm water discharges

   a. Except as provided in C. 1. b. below, all discharges covered by this permit shall be composed entirely of storm water.

   b. i. Except as provided in C. 1 .b. ii. below, discharges of material other than storm water must be in compliance with an NPDES permit (other than this permit) issued for the discharge.

      ii. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharges is in compliance with Part E.7. of this permit: discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles without the use of detergents; waters used to control dust; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; condensate from refrigerants; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

2. Provisions for handling storm water from bulk storage and hazardous waste containment areas

   a. This permit does not authorize the discharge of storm water collected in containment areas at bulk storage and hazardous waste facilities where the storm water becomes contaminated by direct contact with a spill or release of stored materials into the containment area. Such storm water shall be handled properly by on-site treatment or hauling off-site for treatment and disposal.

   b. Where a spill or release to a dry containment area occurs, the permittee shall institute procedures to clean up the spill in order to prevent contamination of any storm water, which subsequently collects in the containment area. Spills shall be cleaned and any contaminated water or solids shall be disposed of in accordance with applicable regulations. Where these procedures are followed, collected storm water may be discharged; following visual inspection to assure that the storm water contains no unnatural turbidity, color, oil films, foams, settleable solids, or deposits.

   c. If you have storage piles of salt used for deicing or other commercial or industrial purposes, they must be enclosed or covered to prevent exposure to precipitation (except for exposure resulting from adding or removing materials from the pile). Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the state or the discharges from the piles are authorized under another permit.

3. Discharging pollutants for which a water body is impaired with an approved TMDL

   a. For existing dischargers, new dischargers and new sources: you must carefully document the justifications for all Best Management Practices (BMP) selections in your SWPPP, and install, implement and maintain BMPs that are consistent with all relevant TMDL allocations and with all relevant conditions in an implementation plan.

4. Discharges covered by this permit, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard.

5. Additional Monitoring Required by IEPA – IEPA may provide written notice requiring additional discharge monitoring. Any such notice will briefly state the reasons for the monitoring, locations and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

D. APPLICATION REQUIREMENTS

1. Dischargers that are covered by a valid Illinois General NPDES Permit for industrial storm water as of May 31, 2008 are automatically covered by this permit unless they request otherwise prior to the effective date of this permit. Other dischargers seeking coverage under this general permit shall provide the Illinois Environmental Protection Agency (IEPA) with the following information:

   a. i. A completed IEPA Notice of Intent form, accompanied by quantitative sampling data for the storm water discharge(s) if available; or

      ii. A completed U.S. EPA Form 1, including form 2F and quantitative sampling data when requested by the Agency.

b. An electronic copy of the storm water pollution prevention plan that has been prepared for the industrial site in accordance with Part E of this permit. The electronic copy shall be submitted to the Agency at the following email address: epa.indilr00swppp@illinois.gov .

2. Quantitative sampling data as required by U.S. EPA Form 2F for storm water discharges from the following existing or new facilities is required to be submitted.

   a. Facilities subject to reporting requirements under Section 313 of EPCRA for chemicals classified as "Section 313 water priority chemicals": Storm water discharges that come into contact with any equipment, tank, container, or other vessel or area used for storage of a Section 313 water priority chemical, or located at a truck or rail car unloading area where a Section 313 water priority chemical is handled.

   b. Facilities classified as SIC 33 (Primary Metal Industries).

   c. Active or inactive landfills, land application sites, or open dumps without a stabilized final cover which have received any industrial wastes.

   d. Wood treatment facilities: Storm water discharges from areas that are used for wood treatment, wood surface application, or storage of treated or surface protected wood.

   e. Coal pile runoff at industrial facilities other than coal mines.

   f. Battery reclaiming facilities: Storm water discharges from areas used for storage of lead acid batteries, reclamation products, or waste products, and areas used for lead acid battery reclamation.

   g. Airports with over 50,000 flight operations per year: storm water discharges from aircraft or airport deicing areas.

   h. Meat packing plants, poultry packing plants, and facilities that manufacture animal and marine fats and oils.

   i. Facilities classified as SIC 28 (Chemicals and Allied Products) and SIC 30 (Rubber and Miscellaneous Plastics Products): Storm water discharges that come into contact with solid chemical storage piles.

   j. Automobile junkyards: Storm water discharges exposed to over 250 auto/truck bodies with drivelines, over 250 drivelines, or any combination thereof (in whole or in parts); over 500 auto/truck units (bodies with or without drivelines in whole or in parts); or over 100 units per year are dismantled and drainage or storage of automotive fluids occurs in areas exposed to storm water.

   k. Lime manufacturing facilities: Storm water discharges that have come into contact with lime storage piles.

   l. Cement manufacturing facilities and cement kilns: Storm water discharges other than those subject to 40 CFR 411.

   m. Ready-mixed concrete facilities. Sampling data is not required for new ready-mixed concrete facilities or for relocated ready-mixed concrete facilities.

   n. Ship building and repairing facilities.

3. When a facility has two or more outfalls that, based on consideration of features and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may sample the effluent of one such outfall and report that quantitative data also applied to the substantially identical outfalls. If the applicant is requesting approval to sample a representative outfall, identification of all storm water outfalls considered to be substantially identical along with the outfall being used to represent such outfalls and appropriate justification must be provided with the application.

4. For existing facilities with an individual NPDES permit covering storm water associated with industrial activity, or those facilities who have previously submitted an application for an individual permit and not yet received a permit, the permittee/applicant may elect to seek coverage under this general permit in place of obtaining an individual permit. To be considered for coverage the permittee/applicant is required to submit the above information.

5. For new facilities, the NOI and required information shall be submitted 180 days prior to the date on which the discharge is to commence unless permission for a later date has been granted by the IEPA. Mobile facilities (such as concrete or asphalt batch plants) shall apply at least 30 days prior to discharge.

General NPDES Permit No. ILR00

6. The required information shall be submitted to the following address:

   Illinois Environmental Protection Agency
   Division of Water Pollution Control
   Permit Section #15
   Post Office Box 19276
   Springfield, Illinois 62794-9276

7. In any case where an NPDES Permit has been timely applied for but final administrative disposition of such application has not been made, it shall not be a violation of Section 12-F of the Environmental Protection Act to discharge without such permit unless the complainant proves that final administrative disposition has not been made because of the failure of the applicant to furnish information reasonably required or requested in order to process the application. This provision does not relieve the applicant from the responsibility for compliance with any other requirement of the Act or regulations promulgated under the Act.

8. Facilities which discharge storm water associated with industrial activity to a municipal separate storm sewer system shall notify the municipality, and shall provide the municipality with a copy of their application if requested.

E. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

1. A storm water pollution prevention plan shall be developed by the permittee and submitted to the Agency for each facility covered by this permit. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. An electronic copy of the plan shall be submitted to the Agency at the following email address: epa.indilr00swppp@illinois.gov. The permittee shall submit any modified plan to the Agency, when such modification includes substantive changes to the plan or modification is made to the plan for compliance with this permit.

   a. Waters not classified as Impaired pursuant to Section 303(d) of the Clean Water Act

      Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

   b. Waters classified as Impaired pursuant to Section 303(d) of the Clean Water Act

      For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.

2 Plans for new facilities shall be completed prior to submitting an NOI to be covered under this permit. An electronic copy of the storm water pollution prevention plan shall be submitted to the Agency at the following email address: epa.indilr00swppp@illinois.gov. Plans shall provide for compliance with the terms of this permit prior to operation of any industrial activity to be covered under this permit. [Note: If the plan has already been required to be developed under a previous permit it shall be maintained in accordance with all requirements of this special condition.]. The owner or operator of an existing facility with storm water discharges covered by this permit shall make a copy of the plan available to the Agency at any reasonable time upon request.

   Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

3. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this permit. After such notification, the permittee shall make changes to the plan and shall submit a revised plan to the Agency, with the requested changes that have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.

4. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph E.8. of this permit indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objectives of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be submitted to the Agency.

5. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from the facility. The plan shall include, at a minimum, the following items:

a. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.

b. A site map showing:

i. The storm water conveyance and discharge structures;

ii. An outline of the storm water drainage areas for each storm water discharge point;

iii. Paved areas and buildings;

iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates;

v. Location of existing or future storm water structural control measures/practices (dikes, coverings, detention facilities, etc.);

vi. Surface water locations and/or municipal storm drain locations;

vii. Areas of existing and potential soil erosion;

viii. Vehicle service areas;

ix. Material loading, unloading, and access areas;

x. Areas under Items iv and ix above may be withheld from the site map for security reasons.

c. A narrative description of the following:

i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;

ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;

iii. Existing or future structural and non-structural control measures/practices to reduce pollutants in storm water discharges;

iv. Industrial storm water discharge treatment facilities;

v. Methods of onsite storage and disposal of significant materials.

d. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.

e. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.

f. A summary of existing sampling data describing pollutants in storm water discharges.

6. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:

a. Storm Water Pollution Prevention Personnel - Identification by job titles, direct telephone numbers and email addresses of the individuals who are responsible for developing, implementing, and revising the plan.

b. Preventive Maintenance - Procedures and frequencies for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.

c. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.

d. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill

clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.

e. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:

i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable, storm water discharged from any area where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.

ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.

iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.

iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.

v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from the exposure area.

vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.

vii. Mercury Switch Removal and Recycling – Mercury-containing convenience lighting switches and anti-lock brake assemblies shall be removed from vehicles, and recycled in an approved manner, in a way which prevents mercury from entering the storm water discharges.

viii. Storm Water Reduction – Install vegetation on roofs of buildings within and adjacent to the exposure area to detain and evapotranspirate runoff where the precipitation falling on the roof is not exposed to contaminants, to minimize storm water runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.

f. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.

g. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.

h. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.

7. Non-Storm water Discharges - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include a description of any tests for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible. Except as provided in C.1. b., discharges not comprised entirely of storm water are not authorized by this permit.

8. Quarterly Visual Observation of Discharges – The requirements and procedures for quarterly visual observations are applicable to all facilities covered under this permit, regardless of your sector of industrial activity.

a. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observation requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the documentation.

b. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour of when the runoff or snowmelt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.5.d.

c. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

d. You may exercise a waiver of the visual observation requirement at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.

e. Representative Outfalls – If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observation of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).

f. The visual observation documentation shall be made available to the Agency and general public upon written request.

9. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.

10. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.

11. The plan is considered a report that shall be available to the public at any reasonable time upon request.

12. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.

13. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirements imposed by the operator of the municipal system.

F. CONSTRUCTION AUTHORIZATION

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

1. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee thereupon waives all rights thereunder.

2. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.

3. Plans and specifications of all treatment equipment being included as a part of the stormwater management practice shall be included in the SWPPP.

4. Any modification of or deviation from the plans and specifications originally submitted with the initial SWPPP requires amendment of the SWPPP.

5. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding required permit(s).

G. REPORTING

1. The facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part 9 of the Storm Water Pollution Prevention Plan of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available to the public at any reasonable time upon request.

2. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.

3. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

4. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be submitted to the following email and office addresses: epa.indannualinsp@illinois.gov

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section #19
Annual Inspection Report
P.O. Box 19276
Springfield, Illinois 62794-9276

5. Any permittee shall notify any regulated small municipal separate storm water system owner (MS4 Community) that they have received coverage of a general ILR00 permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.

H. TERMINATION OF COVERAGE UNDER THIS PERMIT

Where all storm water discharges associated with industrial activity that have been authorized by this permit are eliminated, the operator of the facility may submit a termination request to the Agency at the address shown on Page 6 of this permit. The termination request shall include the name, address, telephone number, and location of the facility, and a description of actions taken to eliminate the storm water discharge or other justification for the request. Coverage under this permit is not terminated until the Agency acts on the termination request, and reports as described above are required until coverage is terminated.

1. The Agency may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. The Agency may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. The Agency may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application required by the Agency under this paragraph then the applicability of this permit to the individual NPDES permitted is automatically terminated at the end of the day specified for application submittal. The Agency may require an individual NPDES permit based on:

   a. information received which indicates the receiving water may be of particular biological significance pursuant to 35 Ill. Adm. Code 302.105(d)(6);

   b. whether the receiving waters are identified as impaired pursuant to the Agency's 303(d) listing and the site storm water is a potential contributing source of any parameter identified as a cause of that impairment;

   c. size of industrial site, proximity of site to the receiving stream, etc.

   The Agency may also require monitoring of any storm water discharge from any site to determine whether an individual permit is required.

2. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request, in accordance with the requirements of 40 CFR 122.28, to the Agency. The request shall be granted by issuing of an individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.

3. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the issue date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied coverage under an alternative NPDES general permit the applicability of this permit to the individual NPDES permitted is automatically terminated on the date of such denial, unless otherwise specified by the Agency.

I. REOPENER CLAUSE

1. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part H.I. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Permit modification or revocation will be conducted according to provisions of 35 Ill. Adm. Code, Subtitle C, Chapter I and the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5 and any other applicable public participation procedures.

3. The Agency will reopen and modify this permit under the following circumstances:

   a. the U.S. EPA amends its regulations concerning public participation;

   b. a court of competent jurisdiction binding in the State of Illinois or the 7th Circuit issues an order necessitating a modification of public participation for general permits; or

   c. to incorporate federally required modifications to the substantive requirements of this permit.

J. DEFINITIIONS

1. Coal pile runoff means the rainfall runoff from or through any coal storage pile.

2. Green Infrastructure means wet weather management approaches and technologies that utilize, enhance or mimic the natural hydrologic cycle processes of infiltration, evapotranspiration and reuse. Green infrastructure approaches currently in use include green roofs, trees and tree boxes, rain gardens, vegetated swales, pocket wetlands, infiltration planters, porous and permeable pavements, porous piping systems, dry wells, vegetated median strips, reforestation/revegetation, rain barrels and cisterns and protection and enhancement of riparian buffers and floodplains.

3. Land application site means an area where wastes are applied onto or incorporated into the soil surface for treatment or disposal.

4. Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application site, surface impoundment, injection well or waste pile.

5. Section 313 water priority chemical means a chemical or chemical categories which: 1) Are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) Are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

6. Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

7. Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.6 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

   Note that additional definitions are included in the permit Standard Conditions, Attachment H.

Attachment H
Standard Conditions
Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at á randomly-selected time over a period not exceeding 15 minutes.

24 Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8 Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

(1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

(2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.

(3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems **only** when necessary to achieve compliance with the conditions of the permit.

(6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit.

(9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) **Monitoring and records.**

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. This period may be extended by request of the Agency at any time.

(c) Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

(d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) **Signatory requirement.** All applications, reports or information submitted to the Agency shall be signed and certified.

(a) **Application.** All permit applications shall be signed as follows:

(1) **For a corporation:** by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation;

(2) **For a partnership or sole proprietorship:** by a general partner or the proprietor, respectively; or

(3) **For a municipality, State, Federal, or other public agency:** by either a principal executive officer or ranking elected official.

(b) **Reports.** All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

(c) **Changes of Authorization.** If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

(12) **Reporting requirements.**

(a) **Planned changes.** The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.

(b) **Anticipated noncompliance.** The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(d) **Monitoring reports.** Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

(2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.

(e) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit to be reported within 24 hours.

The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

(f) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12)(c), (d), or (e), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12)(e).

(g) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.

(13) **Transfer of permits.** A permit may be automatically transferred to a new permittee if:

(a) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date:

(b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees; and

(c) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.

(14) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:

(a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 ug/l);

(2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.

(3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or

(4) The level established by the Agency in this permit.

(b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.

(15) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:

(a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and

(b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(16) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:

(a) User charges pursuant to Section 204(b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;

(b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and

(c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.

(17) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.

(18) Any authorization to construct issued to the permittee pursuant to 35 Ill. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.

(19) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.

(20) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both.

(21) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(22) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit shall, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(23) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.

(24) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.

(25) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board.

(26) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.

(Rev.6-1-2007)

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General NPDES Permit No. ILR10
Stormwater Discharges from Construction Site Activities

NPDES Permit No. ILR10

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Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
www.epa.state.il.us

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit
For
Storm Water Discharges From Construction Site Activities

Expiration Date: July 31, 2018

Issue Date: July 30, 2013

Effective Date: August 1, 2013

In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder the following discharges are authorized by this permit in accordance with the conditions and attachments herein.

Alan Keller

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

Part I. COVERAGE UNDER THIS PERMIT

A. **Permit Area**. The permit covers all areas of the State of Illinois with discharges to any waters of the State.

B. **Eligibility**.

1. This permit shall authorize all discharges of storm water associated with industrial activity from a construction site that will result in the disturbance of one or more acres total land area or a construction site less than one acre of total land that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one or more acres total land area. This permit may authorize discharges from other construction site activities that have been designated by the Agency as having the potential to adversely affect the water quality of waters of the state. This permit also authorizes discharges from construction sites previously approved by the Agency under the previous version of ILR10 that are still occurring after the effective date of this permit, except for discharges identified under Part I.B.3 (Limitations on Coverage). Where discharges from construction sites were initially covered under the previous version of the ILR10, the Storm Water Pollution Prevention Plan must be updated/revised as necessary to ensure compliance with the provisions of this reissued ILR10 permit in accordance with Part II.A.2.

2. This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:

   a. the industrial source other than construction is located on the same site as the construction activity;

   b. storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and

   c. storm water discharges associated with industrial activity from the areas of the site where industrial activities other than construction are occurring (including storm water discharges from dedicated asphalt plants and dedicated concrete plants) are covered by a different NPDES general permit or an individual permit authorizing such discharges.

3. **Limitations on Coverage**. The following storm water discharges from construction sites are not authorized by this permit:

   a. storm water discharges associated with industrial activities that originate from the site after construction activities have been completed and the site has undergone final stabilization;

   b. discharges that are mixed with sources of non-storm water other than discharges identified in Part III.A (Prohibition on Non-Storm Water Discharges) of this permit and in compliance with paragraph IV.D.5 (Non-Storm Water Discharges) of this permit;

c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit or which are issued a permit in accordance with Part VI.N (Requiring an Individual Permit or an Alternative General Permit) of this permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges;

d. storm water discharges from construction sites that the Agency has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard; and

e. storm water discharges that the Agency, at its discretion, determines are not appropriately authorized or controlled by this general permit.

f. storm water discharges to any receiving water specified under 35 Ill. Adm. Code 302.105(d) (6).

C. **Authorization.**

1. In order for storm water discharges from construction sites to be authorized to discharge under this general permit a discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part II below, using an NOI form provided by the Agency.

2. Where a new contractor is selected after the submittal of an NOI under Part II below, or where site ownership is transferred, a new Notice of Intent (NOI) must be submitted by the owner in accordance with Part II.

3. Unless notified by the Agency to the contrary, dischargers who submit an NOI in accordance with the requirements of this permit are authorized to discharge storm water from construction sites under the terms and conditions of this permit in 30 days after the date the NOI is received by the Agency.

4. The Agency may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

Part II. NOTICE OF INTENT REQUIREMENTS

A. **Deadlines for Notification.**

1. To receive authorization under this general permit, a discharger must submit a completed Notice of Intent (NOI) in accordance with Part VI.G (Signatory Requirements) and the requirements of this Part in sufficient time to allow a 30 day review period after the receipt of the NOI by the Agency and prior to the start of construction. The completed NOI may be submitted electronically to the following email address: epa.constilr10swppp@illinois.gov

2. Discharges that were covered by the previous version of ILR10 are automatically covered by this permit. Where discharges associated with construction activities were initially covered under the previous version of ILR10 and are continuing, the Storm Water Pollution Prevention Plan must be updated/revised within 12 months of the effective date of this reissued permit, as necessary to ensure compliance with the provisions of the reissued ILR10. Updating of the SWPPP is not required if construction activities are completed and a Notice of Termination is submitted within 12 months of the effective date of this permit.

3. A discharger may submit an NOI in accordance with the requirements of this Part after the start of construction. In such instances, the Agency may bring an enforcement action for any discharges of storm water associated with industrial activity from a construction site that have occurred on or after the start of construction.

B. **Failure to Notify.** Dischargers who fail to notify the Agency of their intent to be covered, and discharge storm water associated with construction site activity to Waters of the State without an NPDES permit are in violation of the Environmental Protection Act and Clean Water Act.

C. **Contents of Notice of Intent.** The Notice of Intent shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit by all of the entities identified in paragraph 2 below and shall include the following information:

1. The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section (if the section, township and range is provided) that the construction site is located in;

2. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity;

3. The name, address and telephone number of the general contractor(s) that have been identified at the time of the NOI submittal;

4. The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water(s);

5. The number of any NPDES permits for any discharge (including non-storm water discharges) from the site that is currently authorized by an NPDES permit;

6. A description of the project, detailing the complete scope of the project, estimated timetable for major activities and an estimate of the number of acres of the site on which soil will be disturbed;

7. For projects that have complied with State law on historic preservation and endangered species prior to submittal of the NOI, through coordination with the Illinois Historic Preservation Agency and the Illinois Department of Natural Resources or through fulfillment of the terms of interagency agreements with those agencies, the NOI shall indicate that such compliance has occurred.

8. An electronic copy of the storm water pollution prevention plan that has been prepared for the site in accordance with Part IV of this permit. The electronic copy shall be submitted to the Agency at the following email address: epa.constilr10swppp@illinois.gov

9. Revised notice of intents shall be submitted for any substantial modifications to the project such as: address changes, new contractors, area coverage, additional discharges to waters of the state, or other substantial modifications.

D. **Where to Submit.**

Construction activities which discharge storm water that requires a NPDES permit must use an NOI form provided by the Agency. The applicable fee shall also be submitted. NOIs must be signed in accordance with Part VI.G (Signatory Requirements) of this permit. The NOI form may be submitted to the Agency in any of the following methods:

1. File electronically with digital signature at the following website address: http://dataservices.epa.illinois.gov/SWConstructionPermit/bowLogin.aspx

   Registration specific to the permittee is required in order to file electronically.

2. Submit complete NOI and SWPPP electronically to the following email address: epa.constilr10swppp@illinois.gov. Submit the NOI with original signature and fee by certified mail to the Agency at the following address:

   Illinois Environmental Protection Agency
   Division of Water Pollution Control, Mail Code #15
   Attention: Permit Section
   1021 North Grand Avenue East
   Post Office Box 19276
   Springfield, Illinois 62794-9276

E. **Additional Notification.** Construction activities that are operating under approved local sediment and erosion plans, land disturbance permits, grading plans, or storm water management plans, in addition to filing copies of the Notice of Intent in accordance with Part D above, shall also submit signed copies of the Notice of Intent to the local agency approving such plans in accordance with the deadlines in Part A above. See Part IV.D.2.d (Approved State or Local Plans). A copy of the NOI shall be sent to the entity holding an active General NPDES Permit No. ILR40 if the permittee is located in an area covered by an active ILR40 permit.

F. **Notice of Termination.** Where a site has completed final stabilization and all storm water discharges from construction activities that are authorized by this permit are eliminated, the permittee must submit a completed Notice of Termination that is signed in accordance with Part VI.G (Signatory Requirements) of this permit.

1. The Notice of Termination shall include the following information:

   a. The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section (if the section, township and range is provided) that the construction site is located in;

   b. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity;

   c. The name, address and telephone number of the general contractor(s);

   d. The date when construction was completed and the site was stabilized; and

   e. The following certification signed in accordance with Part VI.G (Signatory Requirements) of this permit:

      "I certify under penalty of law that all storm water discharges associated with construction site activity from the identified facility that are authorized by NPDES general permit ILR10 have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with construction site activity by the general permit, and that discharging pollutants in storm water associated with construction site activity to Waters of the State is unlawful under the Environmental Protection Act and Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act."

      For the purposes of this certification, elimination of storm water discharges associated with industrial activity means that all disturbed soils at the identified facility have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have otherwise been eliminated.

2. All Notices of Termination are to be sent to the Agency to the mailing address in Part II.D.1, using the form provided by the Agency, or electronically if the permittee submitted a Notice of Intent by electronic means.

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

A. **Prohibition on Non-Storm Water Discharges.**

1. Except as provided in Part I paragraph B.2 and paragraphs 2, 3 or 4 below, all discharges covered by this permit shall be comprised entirely of storm water.

2. a. Except as provided in paragraph b below, discharges of materials other than storm water must be in compliance with a NPDES permit (other than this permit) issued for the discharge.

b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharges is in compliance with Part IV.D.5 (Non-Storm Water Discharges): discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles where detergents are not used; waters used to control dust; potable water sources including uncontaminated waterline flushings; landscape irrigation drainages; routine external building washdown which does not use detergents; pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; uncontaminated air conditioning condensate; springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

3. The following non-storm water discharges are prohibited by this permit: concrete and wastewater from washout of concrete (unless managed by an appropriate control), drywall compound, wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps, solvents, or detergents, toxic or hazardous substances from a spill or other release, or any other pollutant that could cause or tend to cause water pollution.

4. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are allowable if managed by appropriate controls.

B. **Discharges into Receiving Waters With an Approved Total Maximum Daily Load (TMDL):**

Discharges to waters for which there is a TMDL allocation for sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation) are not eligible for coverage under this permit unless the owner/operator develops and certifies a SWPPP that is consistent with wasteload allocations in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions and/or Best Management Practices applicable to their discharges necessary for consistency with the TMDL within any timeframes established in the TMDL. If a specific numeric waste load allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation.

Please refer to the Agency website at: http://www.epa.state.il.us/water/tmdl/report-status.html

C. Discharges covered by this permit, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with construction site activity from the facility. In addition, the plan shall describe and ensure the implementation of best management practices which will be used to reduce the pollutants in storm water discharges associated with construction site activity and to assure compliance with the terms and conditions of this permit. The permittee must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. **Deadlines for Plan Preparation and Compliance.**

The plan shall:

1. Be completed prior to the start of the construction activities to be covered under this permit and submitted electronically to the Agency at the time the Notice of Intent is submitted; and

2. Provide for compliance with the terms and schedules of the plan beginning with the initiation of construction activities.

B. **Signature, Plan Review and Notification.**

1. The plan shall be signed in accordance with Part VI.G (Signatory Requirements), and be retained at the construction site which generates the storm water discharge in accordance with Part VI.E (Duty to Provide Information) of this permit.

2. Prior to commencement of construction, the permittee shall provide the plan to the Agency.

3. The permittee shall make plans available upon request from this Agency or a local agency approving sediment and erosion plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system. A list of permitted municipal separate storm sewer systems is available at: http://www.epa.state.il.us/water/permits/storm-water/ms4-status-report.pdf

4. The Agency may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 7 days from receipt of notification from the Agency, the permittee shall make the required changes to the plan and shall submit to the Agency a written certification that the requested changes have been made. Failure to comply shall terminate authorization under this permit.

5. A copy of the letter of notification of coverage along with the General NPDES Permit for Storm Water Discharges from Construction Site Activities or other indication that storm water discharges from the site are covered under an NPDES permit shall be posted at the site in a prominent place for public viewing (such as alongside a building permit).

6. All storm water pollution prevention plans and all completed inspection forms/reports required under this permit are considered reports that shall be available to the public at any reasonable time upon request. However, the permittee may claim any portion of a storm water pollution prevention plan as confidential in accordance with 40 CFR Part 2.

C. **Keeping Plans Current.** The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to Waters of the State and which has not otherwise been addressed in the plan or if the

storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under paragraph D.2 below, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the storm water pollution prevention plan. Amendments to the plan may be reviewed by the Agency in the same manner as Part IV.B above. Any revisions of the documents for the storm water pollution prevention plan shall be kept on site at all times.

D. **Contents of Plan.** The storm water pollution prevention plan shall include the following items:

1. **Site Description.** Each plan shall provide a description of the following:

   a. A description of the nature of the construction activity or demolition work;

   b. A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site storage of materials);

   c. An estimate of the total area of the site and the total area of the site that is expected to be disturbed by clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils and storage of materials, or other activities;

   d. An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;

   e. A site map indicating drainage patterns and approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking, areas of soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, locations of on-site or off-site soil stockpiling or material storage, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and

   f. The name of the receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site.

2. **Controls.** Each plan shall include a description of appropriate controls that will be implemented at the construction site and any off-site stockpile or storage area. The Illinois Urban Manual www.aiswcd.org/IUM or other similar documents shall be used for developing the appropriate management practices, controls or revisions of the plan. The plan will clearly describe for each major activity identified in paragraph D.1 above, appropriate controls and the timing during the construction process that the controls will be implemented. For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained and/or repaired until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed after final stabilization. The description of controls shall address as appropriate the following minimum components:

   a. **Erosion and Sediment Controls.** The permittee shall design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

      (i) Control storm water volume and velocity within the site to minimize soil erosion;
      (ii) Control storm water discharges, including both peak flowrates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
      (iii) Minimize the amount of soil exposed during construction activity;
      (iv) Minimize the disturbance of steep slopes;
      (v) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
      (vi) Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible; and
      (vii) Minimize soil compaction and, unless infeasible, preserve topsoil.

   b. **Stabilization Practices.** The storm water pollution prevention plan shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where practicable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporarily seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, staged or staggered development, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated, shall be included in the plan. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization of disturbed areas must be initiated within 1 working day of permanent or temporary cessation of earth disturbing activities and shall be completed as soon as possible but not later than 14 days from the initiation of stabilization work in an area. Exceptions to these time frames are specified as provided in paragraphs (i) and (ii) below:

      (i) Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
      (ii) On areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method can be used. Temporary stabilization techniques and materials shall be described in the SWPPP.

   c. **Structural Practices.** A description of structural practices utilized to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree practicable. The installation of these devices may be subject to Section 404 of the CWA.

(i) The following design requirements apply to sediment basins if such structural practices will be installed to reduce sediment concentrations in storm water discharges:

a. When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge.
b. Prevent erosion of the sediment basin using stabilization controls (e.g., erosion control blankets), at the inlet and outlet using erosion controls and velocity dissipation devices;
c. Sediment basins shall be designed to facilitate maintenance, including sediment removal from the basins, as necessary.

d. **Use of Treatment Chemicals.** Identify the use of all polymer flocculants or treatment chemicals at the site. Dosage of treatment chemicals shall be identified along with any information from any Material Safety Data Sheet. Describe the location of all storage area for chemicals. Include any information from the manufacturer's specifications. Treatment chemicals must be stored in areas where they will not be exposed to precipitation. The SWPPP must describe procedures for use of treatment chemicals and staff responsible for use/application of treatment chemicals must be trained on the established procedures.

e. **Best Management Practices for Impaired Waters**. For any site which discharges directly to an impaired water identified on the Agency's website for 303(d) listing for suspended solids, turbidity, or siltation the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations or the Illinois Urban Manual, the storm water pollution prevention plan shall adhere to a more restrictive design criteria. Please refer to the Agency's website at: (http://www.epa.state.il.us/water/tmdl/303d-list.html)

f. **Pollution Prevention.** The permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

(i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
(ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to storm water; and
(iii) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

g. **Other Controls.**

(i) Waste Disposal. No solid materials, including building materials, shall be discharged to Waters of the State, except as authorized by a Section 404 permit.
(ii) The plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
(iii) For construction sites that receive concrete or asphalt from off-site locations, the plan must identify and include appropriate controls and measures to reduce or eliminate discharges from these activities.
(iv) The plan shall include spill response procedures and provisions for reporting if there are releases in excess of reportable quantities.

h. **Best Management Practices for Post-Construction Storm Water Management.** Describe the measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Permittees are responsible for only the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with industrial activity have been eliminated from the site.

(i) The storm water pollution prevention plan and design and construction plans shall explicitly consider post-construction storm water management. Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). The Permittee must plan for and put in place storm water BMPs to retain the greatest amount of post-development storm water runoff practicable given the site and project constraints by installing one or more of the Best Management Practices (BMPs) as described in the Illinois Urban Manual.

The storm water pollution prevention plan shall include an explanation of the technical basis used to select the practices to control pollution where post-construction flows will exceed predevelopment levels.

(ii) Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

(iii) Unless otherwise specified in the Illinois Urban Manual (2012), the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

i. **Approved State or Local Plans.**

(i) The management practices, controls and other provisions contained in the storm water pollution prevention plan must be at least as protective as the requirements contained in the Illinois Urban Manual, 2012. Construction activities which discharge storm water must include in their storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion control plans or storm water management plans approved by local officials. Requirements specified in sediment and erosion control plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit. The plans shall include all requirements of this permit and include more stringent standards required by any local

approval. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.

(ii) Dischargers seeking alternative permit requirements are not authorized by this permit and shall submit an individual permit application in accordance with 40 CFR 122.26 at the address indicated in Part II.D (Where to Submit) of this permit, along with a description of why requirements in approved local plans or permits should not be applicable as a condition of an NPDES permit.

3. **Maintenance.**

a. The plan shall include a description of procedures to maintain in good and effective operating conditions, all erosion and sediment control measures and other Best Management Practices, including vegetation and other protective measures identified in the Storm Water Pollution Prevention Plan.

b. Where a basin has been installed to control sediment during construction activities, the Permittees shall keep the basin(s) in effective operating condition and remove accumulated sediment as necessary.

4. **Inspections.** Qualified personnel (provided by the permittee) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm or by the end of the following business or work day that is 0.5 inches or greater. Qualified personnel means a person knowledgeable in the principles and practices of erosion and sediment controls measures, such as a licensed Professional Engineer (P.E.), a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Erosion Sediment and Storm Water Inspector (CESSWI) or other knowledgeable person who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activities.

a. Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

b. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

c. Based on the results of the inspection, the description of potential pollutant sources identified in the storm water pollution prevention plan in accordance with Part IV.D.1 (Site Description) of this permit and the pollution prevention control measures identified in the plan in accordance with Part IV.D.2 (Controls) of this permit shall be revised as appropriate as soon as practicable after such inspection to minimize the potential for such discharges. Such modifications shall provide for timely implementation of any changes to the plan and pollution prevention control measures within 7 calendar days following the inspection.

d. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph b above shall be made and retained as part of the storm water pollution prevention plan for at least three years from the date that the permit coverage expires or is terminated. All inspection reports shall be retained at the construction site. The report shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit.

e. The permittee shall notify the appropriate Agency Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the Agency and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. Corrective actions must be undertaken immediately to address the identified non-compliance issue(s).

f. All reports of noncompliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements).

g. After the initial contact has been made with the appropriate Agency Field Operations Section Office, all reports of noncompliance shall be mailed to the Agency at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

5. **Non-Storm Water Discharges.** Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2 of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and insure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

E. **Additional requirements for storm water discharges from industrial activities other than construction, including dedicated asphalt plants, and dedicated concrete plants.** This permit may only authorize any storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:

1. The industrial source other than construction is located on the same site as the construction activity;

2. Storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and

3. Storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants [other than asphalt emulsion facilities] and dedicated concrete plants) are in compliance with the terms, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.

F. **Contractors.**

1. The storm water pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in paragraph 2 below in accordance with Part VI.G (Signatory Requirements) of this permit. All certifications must be included in the storm water pollution prevention plan except for owners that are acting as contractors.

2. **Certification Statement.** All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with paragraph 1 above shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water pollution prevention plan:

> "I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature in accordance with Part VI.G of this permit: the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

Part V. RETENTION OF RECORDS

A. The permittee shall retain copies of storm water pollution prevention plans and all reports and notices required by this permit, records of all data used to complete the Notice of Intent to be covered by this permit and the Agency Notice of Permit Coverage letter for a period of at least three years from the date that the permit coverage expires or is terminated. This period may be extended by request of the Agency at any time.

B. The permittee shall retain a copy of the storm water pollution prevention plan and any revisions to said plan required by this permit at the construction site from the date of project initiation to the date of final stabilization.

Part VI. STANDARD PERMIT CONDITIONS

A. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Illinois Environmental Protection Act and the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Failure to obtain coverage under this permit or an individual permit for storm water releases associated with construction activities is a violation of the Illinois Environmental Protection Act and the CWA.

B. **Continuation of the Expired General Permit.** This permit expires five years from the date of issuance. An expired general permit continues in force and effect until a new general permit or an individual permit is issued. Only those construction activities authorized to discharge under the expiring general permit are covered by the continued permit.

C. **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. **Duty to Provide Information.** The permittee shall furnish within a reasonable time to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, any information which is requested to determine compliance with this permit. Upon request, the permittee shall also furnish to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, copies of all records required to be kept by this permit.

F. **Other Information.** When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Agency, he or she shall promptly submit such facts or information.

G. **Signatory Requirements.** All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the Agency or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed.

1. All Notices of Intent shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) any person authorized to sign documents that has been assigned or delegated said authority in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer

having responsibility for the overall operations of a principal geographic unit of the agency.

2. All reports required by the permit and other information requested by the Agency shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described above and submitted to the Agency.

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

   c. **Changes to Authorization**. If an authorization under Part I.C (Authorization) is no longer accurate because a different individual or position has responsibility for the overall operation of the construction site, a new authorization satisfying the requirements of Part I.C must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

   d. **Certification**. Any person signing documents under this Part shall make the following certification:

      "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. **Penalties for Falsification of Reports**. Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or by both. Section 44(j)(4) and (5) of the Environmental Protection Act provides that any person who knowingly makes any false statement, representation, or certification in an application form, or form pertaining to a NPDES permit commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed $10,000 for each day of violation.

I. **Penalties for Falsification of Monitoring Systems**. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the CWA. The Environmental Protection Act provides that any person who knowingly renders inaccurate any monitoring device or record required in connection with any NPDES permit or with any discharge which is subject to the provisions of subsection (f) of Section 12 of the Act commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed $10,000 for each day of violation.

J. **Oil and Hazardous Substance Liability**. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA.

K. **Property Rights**. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

L. **Severability**. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

M. **Transfers**. This permit is not transferable to any person except after notice to the Agency. The Agency may require the discharger to apply for and obtain an individual NPDES permit as stated in Part I.C (Authorization).

N. **Requiring an Individual Permit or an Alternative General Permit**.

1. The Agency may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. Where the Agency requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the Agency shall notify the discharger in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Applications shall be submitted to the Agency indicated in Part II.D (Where to Submit) of this permit. The Agency may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the Agency under this paragraph, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified by the Agency for application submittal. The Agency may require an individual NPDES permit based on:

   a. information received which indicates the receiving water may be of particular biological significance pursuant to 35 Ill. Adm. Code 302.105(d)(6);

   b. whether the receiving waters are impaired waters for suspended solids, turbidity or siltation as identified by the Agency's 303(d) listing;

   c. size of construction site, proximity of site to the receiving stream, etc.

   The Agency may also require monitoring of any storm water discharge from any site to determine whether an individual permit is required.

2. Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the Agency at the address indicated in Part II.D (Where to Submit) of this permit. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.

3. When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an

alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to a discharger otherwise subject to this permit or the discharger is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee remains in effect, unless otherwise specified by the Agency.

O. **State/Environmental Laws.** No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

P. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all construction activities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

Q. **Inspection and Entry.** The permittee shall allow the IEPA, or an authorized representative upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated construction activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

R. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

S. **Bypasses and Upsets.** The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

Part VII. REOPENER CLAUSE

A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part I.C (Authorization) of this permit or the permit may be modified to include different limitations and/or requirements.

B. Permit modification or revocation will be conducted according to provisions of 35 Ill. Adm. Code, Subtitle C, Chapter I and the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5 and any other applicable public participation procedures.

C. The Agency will reopen and modify this permit under the following circumstances:

1. the U.S. EPA amends its regulations concerning public participation;

2. a court of competent jurisdiction binding in the State of Illinois or the 7th Circuit Court of Appeals issues an order necessitating a modification of public participation for general permits; or

3. to incorporate federally required modifications to the substantive requirements of this permit.

Part VIII. DEFINITIONS

"Agency" means the Illinois Environmental Protection Agency.

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Commencement of Construction or Demolition Activities" The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction or demolition activities.

"Construction Activities" Earth disturbing activities, such as clearing, grading and excavation of land. For purposes of this permit, construction activities also means construction site, construction site activities, or site. Construction activities also include any demolition activities at a site.

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.).

"Dedicated portable asphalt plant" A portable asphalt plant that is located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR 443.

"Dedicated portable concrete plant" A portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

"Dedicated sand or gravel operation" An operation that produces sand and/or gravel for a single construction project.

"Director" means the Director of the Illinois Environmental Protection Agency or an authorized representative.

"Final Stabilization" means that all soil disturbing activities at the site have been completed, and either of the two following conditions are met:

(i) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or

(ii) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

For individual lots in residential construction, final stabilization means that either:

(i) The homebuilder has completed final stabilization as specified above, or

(ii) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

"Large and Medium municipal separate storm sewer system" means all municipal separate storm sewers that are either:

(i) Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or

(ii) Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or

(iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

"NOI" means notice of intent to be covered by this permit (see Part II of this permit.)

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Associated with Industrial Activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all areas listed in the previous sentence (except access roads) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)- (xi)) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this paragraph);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28, 29, 311, 32, 33, 3441, 373;

(iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(l)) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator;

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but

limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42, 44, and 45 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under subparagraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;

(x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than one acre of total land area which are not part of a larger common plan of development or sale unless otherwise designated by the Agency pursuant to **Part I.B.1**.

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 31 (except 311), 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (i)-(x)).

"Waters" mean all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable.

"Work day" for the purpose of this permit, a work day is any calendar day on which construction activities will take place.

The following modifications have been made to the final permit from the previously issued General NPDES Permit ILR10:

1. I.B.1: A requirement that existing permittees may have to update/revise their Storm Water Pollution Prevention Plan (SWPPP). See also Section II.A.2 below

2. II.A.2: Provides that permittees must upgrade/revise their SWPPP within 12 months of the effective date of this permit. Projects which will be terminated within the next 12 months are not required to update/revise their SWPPP.

3. II.C.7: The requirement for consultation with the Illinois Historic Preservation Agency and the Illinois Department of Natural Resources was moved from Section I.C.3 to Section II.C.7.

4. II.C.9: Revised Notices of Intent for substantial modifications.

5. II.D: Where to submit Notices of Intent.

6. II.E: NOI shall be copied to local active MS4 permit holders.

7. II.F.1.d: Date of completion and stabilization now included in Notice of Termination (NOT).

8. II.F.2: Provides for electronic submission of NOT.

9. III.A.3: Prohibition of various non-storm water discharges in accordance with 40 CFR 450.

10. III.A.4: Allowance for groundwater dewatering in accordance with 40 CFR 450.

11. IV.B.5: Copy of Approval Letter must be posted at site.

12. IV.D.1.e: Inclusion of information concerning off-site stockpiling of soils or other materials in the site description.

13. IV.D.2.a: Delineation of erosion and sediment controls now specified in accordance with 40 CFR 450.

14. IV.D.2.b: Requirements for initiation of stabilization activities in accordance with 40 CFR 450.

15. IV.D.2.c: Design requirements for sediment basins added to permit.

16. IV.D.2.f: Pollution prevention measures now included in permit in accordance with 40 CFR 450.

17. IV.D.2.g: Provisions for control of other wastes now included in permit.

18. IV.D.2.h: Requirement to explicitly consider post-construction storm water management in the SWPPP.

19. IV.D.3.b. Requirement to keep sediment basins in operating condition.

20. IV.D.4.a: Clarified inspection requirements after construction has temporarily ceased or under frozen conditions.

21. IV.D.4.e: Specified that corrective actions must be undertaken immediately following an incident of non-compliance in accordance with 40 CFR 450.

22. VI.S: Bypass and Upsets provisions were added to the Standard Permit Conditions.

23. VIII: Definition of construction activities was added to permit.

24. VIII: Definition of work day was added to the permit.

25. General: References to the Illinois Environmental Protection Agency's Urban Manual were changed to Illinois Urban Manual (2012).

26. General: The word "facilities" in previous permit was changed to "construction activities" in the draft permit.

27. General: Various edits.

B-4

General NPDES Permit No. ILG87
Pesticide Application Point Source Discharges

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

PAT QUINN, GOVERNOR JOHN J. KIM, INTERIM DIRECTOR

217/782-0610

APR 05 2012

RECEIVED
APR - 9 2012

City of Rockford
Brad Holcomb
425 E. State St.
Rockford, IL 61104

RE: City of Rockford
NPDES Permit No. ILG870147
Notice of Coverage under the Pesticide Application Point Source Discharges General Permit

Permittee:

The Illinois Environmental Protection Agency has reviewed your NOI and determined that the pesticide application discharges described therein are appropriately covered by a General NPDES Permit issued by the Agency. A copy of the General Permit is enclosed.

The General Permit includes discharge limitations, monitoring, and reporting requirements. Failure to meet any portion of the permit could result in civil and/or criminal penalties. The Agency is ready and willing to assist you in interpreting any of the conditions of the permit as they relate specifically to your discharge.

The permit is applied to your discharge effective on the date of this letter or as identified by the conditions of the Permit. You have the right to appeal the Agency's decision to cover your discharge by the General Permit to the Illinois Pollution Control Board within a 35 day period following the date of this letter.

This letter shows your NPDES Permit number, please reference this number in all future correspondence. Should you have any questions concerning the Permit, please contact Terri LeMasters at 217/782-0610.

Sincerely,

Alan Keller

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:TML:ILG870147docx

Enclosure: General Permit

cc: Compliance Assurance Section
Records Unit
Rockford Region

NPDES Permit No. ILG87

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
www.epa.state.il.us

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit
For
Pesticide Application Point Source Discharges

Expiration Date: October 30, 2016

Issue Date: October 31, 2011

Effective Date: October 31, 2011

In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board and Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1), and the Clean Water Act, and the regulations thereunder the following discharges are authorized by this permit in accordance with the conditions and attachments herein.

This permit is available to operators who discharge to waters of the State from the application of biological pesticides or chemical pesticides that leave a residue, when the pesticide application is for one of the following pesticide use patterns:

1. Mosquito and Other Insect Pest Control
2. Weed and Algae Pest Control
3. Animal Pest Control
4. Forested Areas Pest Control
5. Other Pest Control Activities

Discharges may be authorized to any surface water of the State excluding waters identified as impaired by that pesticide or its degradates. This permit does not authorize discharges, to any waters of the State which are designated as a outstanding resource water by the Agency in accordance with 35 Ill. Adm. Code 302.105(b).

To receive authorization to discharge under this general permit, an operator must submit the proper application form to the Illinois Environmental Protection Agency. Authorization, if granted, will be by letter and include a copy of this permit.

Alan Keller, P.E.
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1.0 Coverage under this Permit

This permit covers any operator that meets the eligibility requirements identified in Part 1.1 and if so required, submits a Notice of Intent (NOI) in accordance with Part 1.2.

For the purpose of this permit, all operators are defined in Appendix A to be:

a. The person(s) with control over the hiring of a contract applicator, or making the decision to perform pesticide applications, including the ability to modify those decisions, that results in a discharge to waters of the State, and/or

b. The person(s) who performs the application of pesticides or who has day-to-day control of the pesticide application, that results in a discharge to waters of the State.

If the operator under part "a" of the definition is different than the operator actually performing the application of pesticides, only one of the two is required to obtain coverage under this permit.

This permit is not applicable for general use or restricted use pesticides that under Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), are not registered for application to or use in waters of the State.

Pursuant to section 12(f) of the Illinois Environmental Protection Act, no permit shall be required for any discharge for which a permit is not required under the Federal Water Pollution Control Act.

1.1 Eligibility

1.1.1 Activities Covered

This permit is available to operators who discharge to waters of the State from the application of (1) biological pesticides or (2) chemical pesticides that leave a residue (collectively called pesticides), when the pesticide application is for one of the following pesticide use patterns:

1. **Mosquito and Other Insect Pest Control** – to control public health/nuisance and other insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health/nuisance and other insect pests in this use category include but are not limited to mosquitoes and black flies.

2. **Weed and Algae Pest Control** – to control weeds, algae, and pathogens that are pests in water and at water's edge, include but are not limited to ditches and/or canals.

3. **Animal Pest Control** – to control animal pests in water and at water's edge. Animal pests in this use category include, but are not limited to fish, lampreys, insects, mollusks, and pathogens.

4. **Forested Areas Pest Control** – application of a pesticide to a forested area to control the population of a pest species, (e.g., insect or pathogen) where, to target the pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to water.

5. **Other Pest Control Activities** – any application of pesticides not identified above, which leave a residue, to waters of the State or at the water's edge.

A portion of every application of a pesticide over a water of the State will fall directly into the water of the State thereby requiring coverage under an NPDES permit. Any person who wishes to contest this determination must submit scientific data to prove that no quantity of the pesticide falls into a water of the State. A permit may not be necessary if IEPA receives scientific information which convinces the Agency that no portion of a chemical pesticide applied over a water of the State will fall into the water of the State.

A portion of every application of a pesticide into a water of the State will leave a residue in the water of the State thereby requiring coverage under an NPDES permit. Any person who wishes to dispute this determination must submit scientific data to prove that no quantity of the pesticide will remain as a residue in a water of the State. This information should include data to show what level of the pesticide can be detected in water, and at what level in

water the pesticide provides a pesticidal benefit. Such data should address the properties of the chemical pesticide under different water conditions (e.g., different pH, organic content, temperature, depth, etc.) that might affect the pesticide's properties. A permit may not be necessary if IEPA receives scientific information that convinces the Agency that a chemical pesticide applied into a water of the State will not remain as a residue in the water of the State.

1.1.2 Limitations on Coverage

1.1.2.1 Discharges to Water Quality Impaired Waters

Operators are not eligible for coverage under this permit for any discharges from a pesticide application to waters of the State if the water is identified as impaired by a substance which either is an active ingredient in that pesticide or is a degradate of such an active ingredient. For purposes of this permit, impaired waters are those that have been identified by the State pursuant to Section 303(d) of the Clean Water Act (CWA) as not meeting applicable State water quality standards or not meeting the intended use of the water body. Impaired waters for the purposes of this permit may include both waters with USEPA-approved or USEPA-established Total Maximum Daily Loads (TMDLs) and waters for which USEPA has not yet approved or established a TMDL. A list of the 303(d) waters is available on the Internet at www.epa.state.il.us/water/permits/pesticide/303d.html. If a discharge from a pesticide application would not be eligible under this permit because the water is listed as impaired for that specific pesticide, but there is evidence that shows the water is no longer impaired, operators may submit this information to IEPA and request that coverage be allowed under this permit.

1.1.2.2 Discharges to Waters Designated as Outstanding Resource Waters for Antidegradation Purposes

Operators are not eligible for coverage under this permit for discharges from a pesticide application to waters designated by the State as Outstanding Resource Waters for anti-degradation purposes under 35 Ill. Adm. Code 302.105(b).

1.1.2.3 Discharges Currently or Previously Covered by another Permit

Pesticide discharges are not eligible for coverage under this permit if any of the following circumstances apply:

a. The discharge is covered by another NPDES permit, or

b. The discharge was included in a permit that in the past 5 years has been or is in the process of being denied, terminated, or revoked by IEPA (this does not apply to the routine reissuance of permits every 5 years).

1.2 Authorization to Discharge under This Permit

1.2.1 How to Obtain Authorization

To obtain authorization under this permit, an operator must:

a. Meet the eligibility requirements identified in Part 1.1, and

b. Submit a complete and accurate Notice of Intent (NOI) consistent with the requirements of Parts 1.2.2 and 1.2.3.

1.2.2 Operators Required to Submit a Notice of Intent

The following operators are required to submit a Notice of Intent to obtain coverage under this general permit for discharges to waters of the State resulting from the application of pesticides:

a. Person(s), group, or entity with control over the hiring of a contract applicator, or making the decision to perform pesticide application, that will result in a discharge to waters of the State; or

b. Person(s), group, or entity performing the application of pesticides, that will result in a discharge to waters of the State.

Operators must submit an NOI to IEPA electronically. Operators should refer to www.epa.state.il.us/water/permits/pesticide/index.html for instruction on submitting the NOI. IEPA will post on the Internet, at www.epa.state.il.us/water/permits/pesticide/notices.html, all NOIs received. Late NOIs will be accepted, but authorization to discharge will not be retroactive. NOI submissions must be in accordance with the deadlines in Part 1.2.3.

Coverage will be available for the duration of the permit for operators who file an NOI, including the operator's employees, contractors, subcontractors, and other agents, for all activities identified on the NOI unless coverage is terminated pursuant to Parts 1.2.5 or 1.3. If a submitted NOI is not timely, accurate, or complete, then any employee, contractor, subcontractor or other entity that discharges without the required NOI is not covered by this permit.

The NOI form is available on the Internet at www.epa.state.il.us/water/permits/pesticide/forms.html.

1.2.3 Discharge Authorization Date

Unless modified, exempted, or stayed by legislative action or court order, discharges to waters of the State as a result of pesticide applications must be authorized under an NPDES permit. Operators that are eligible for coverage under Part 1.1 are authorized to discharge under this permit consistent with the NOI submission and the Table 1 below.

Table 1. Original NOI Submittal Deadlines and Discharge Authorization Date

Category	NOI Submittal Deadline	Discharge Authorization Date
Operators are required to submit an NOI prior to commencement of discharge.	At least 14 days prior to commencement of discharge.	No earlier than 14 days after IEPA posts on the Internet the receipt of the complete and accurate NOI.
Operators commencing discharge in response to a declared pest emergency situation as defined in Appendix A.	No later than 30 days after commencement of discharge.[1]	Immediately, for activities conducted in response to declared pest emergency situation.

To remain authorized, all operators must submit NOI changes, as necessary, consistent with Table 2 below.

Table 2. NOI Change of Information Submittal Deadlines and Discharge Authorization Date

Category	NOI Submittal Deadline	Discharge Authorization Date
Operators requiring permit coverage for a new use pattern or for a treatment area not within the pest management area, previously identified on a NOI submitted to IEPA.	At least 14 days prior to commencement of discharge in that newly identified treatment area.	No earlier than 14 days after IEPA posts on the Internet the receipt of the complete and accurate NOI.
Operators requiring permit coverage for a new use pattern or for a treatment area in response to a declared pest emergency situation not within the pest management area, previously identified on a NOI submitted to IEPA.	No later than 30 days after commencement of discharge.[1]	Immediately, for activities conducted in response to declared pest emergency situation.

[1] In the event that a discharge occurs prior to submitting an NOI, the operator must comply with all other requirements of this permit immediately.

Based on a review of the NOI or other information, IEPA may determine that additional technology-based and/or water quality-based effluent limitations are necessary, or deny coverage under this permit and require submission of an application for an individual NPDES permit, as detailed in Part 1.3.

Unless notified by the Agency to submit additional information, operators who submit an NOI in accordance with the requirements of this permit are authorized to discharge under the terms and conditions of this permit 30 days after the date the NOI is received by the Agency.

1.2.4 Continuation of this Permit

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 40 CFR 122.6 and 35 Ill. Adm. Code, Subtitle C, Chapter I and remain in force and effect. If a permittee was authorized to discharge under this permit prior to the expiration date, any discharges authorized under this permit will automatically remain covered by this permit until the earliest of the following:

a. A permittee is authorized for coverage under a reissued permit or a replacement of this permit, following the timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and in compliance with the requirements of the NOI;

b. The permittee submits a Notice of Termination (NOT) and that notice is processed consistent with Part 1.2.5.1;

c. An individual NPDES permit for a discharge resulting from application of a pesticide that would otherwise be covered under this permit is issued or denied;

d. IEPA issues a formal permit decision not to reissue this general permit, at which time IEPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease when coverage under another permit is granted/authorized; or

e. IEPA has informed the permittee that the discharge is no longer covered under this permit.

1.2.5 Terminating Coverage

1.2.5.1 Submitting a Notice of Termination

To terminate permit coverage, a permittee must submit a complete and accurate Notice of Termination. Permittees must submit the Notice of Termination electronically. Permittees should refer to www.epa.state.il.us/water/permits/pesticide/index.html for instruction on submitting the NOT. The authorization to discharge under this permit is terminated the day that a complete Notice of Termination is processed. If a permittee submits a Notice of Termination without meeting one or more of the conditions identified in Part 1.2.5.2, the Notice of Termination is not valid. Permittees are responsible for complying with the terms of this permit until authorization is terminated. If required to submit annual reports pursuant to Part 7, the permittee must file an annual report for the portion of the year up through the date of termination. The annual report shall be submitted with the completed Notice of Termination.

Permittees may not terminate coverage under this permit and reapply in order to remain below the annual treatment area thresholds.

The NOT form is available on the Internet at www.epa.state.il.us/water/permits/pesticide/forms.html.

1.2.5.2 When to Submit a Notice of Termination

A permittee must submit a Notice of Termination within 30 days after one or more of the following conditions have been met:

a. The permittee has ceased all discharges from the application of pesticides for which permit coverage was obtained and the permittee does not expect to discharge during the remainder of the permit term for any of the use patterns as identified in Part 1.1.1; or

b. The permittee has obtained coverage under an individual NPDES permit or an alternative NPDES general permit for all discharges required to be covered by an NPDES permit, unless the permittee obtained coverage consistent with Part 1.3, in which case coverage under this permit will terminate automatically.

1.2.6 Transfer of Permit Coverage

If a new operator takes over responsibility of pest control activities covered under an existing NOI, the new operator must submit the following:

a. A new NOI for the new operator; and

b. A letter from the existing permittee referencing the existing NPDES permit number, date of coverage, and requesting transfer of the permit.

1.3 Alternative Permits

1.3.1 Requiring Coverage under an Alternative Permit

In accordance with 40 CFR 122.64, 40 CFR 124.5, and 35 Ill. Adm. Code, Subtitle C, Chapter I, IEPA may require operators to apply for and/or obtain authorization to discharge under either an individual NPDES permit or an alternative NPDES general permit.

If IEPA requires an operator to apply for an individual NPDES permit, IEPA will notify the operator in writing that a permit application is required. This notification will include a brief statement of the reasons for the decision and will provide application information. In addition, for permittees whose discharges are authorized under this permit, any notice will set a deadline to file the permit application and will include a statement that on the effective date of the individual NPDES permit, coverage under this general permit will terminate. IEPA may grant additional time to submit the application if the operator submits a request setting forth reasonable grounds for additional time. If covered under this permit and the permittee fails to submit an individual NPDES permit application as required by IEPA, the applicability of this permit to such permittee is terminated at the end of the day specified by IEPA as the deadline for application submittal. IEPA may take enforcement action for any unpermitted discharge or violation of any permit requirement.

1.3.2 Operator Requesting Coverage under an Alternative Permit

If an operator does not want to be covered by this general permit, but needs permit coverage, the operator can apply for an individual NPDES permit. In such a case, the operator must submit an individual permit application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to IEPA. The request may be granted by issuance of an individual NPDES permit or authorization of coverage under an alternative NPDES general permit.

When an individual NPDES permit is issued, or the operator is authorized under an alternative NPDES general permit to discharge a pollutant to waters of the State as a result of a pesticide application, authorization to discharge under this permit is terminated on the effective date of the individual NPDES permit or the date of authorization of coverage under the alternative NPDES general permit.

1.4 Severability

Invalidation of a portion of this permit does not render the whole permit invalid. IEPA's intent is that the permit will remain in effect to the extent possible; if any part of this permit is invalidated, the remaining parts of the permit will remain in effect unless IEPA issues a written statement stating otherwise.

1.5 Other Federal and State Laws

Permittees must comply with all other applicable federal and state laws and regulations that pertain to application of pesticides. For example, this permit does not relieve the permittee of the responsibility of complying with the requirements or provisions of the Federal Insecticide, Fungicide, and Rodenticide Act and its implementing regulations to use registered pesticides consistent with the product's labeling. In fact, applications in violation of certain FIFRA requirements could also be a violation of this permit and therefore a violation of the CWA (e.g. exceeding label application rates). Additionally, other laws and regulations might apply to certain activities that are also covered under this permit (e.g., United States Coast Guard regulations).

1.6 Endangered Species Compliance

The location of the treatment areas must be submitted to the Illinois Department of Natural Resources (IDNR) EcoCAT website to determine if protected natural resources are in the vicinity, www.dnrecocat.state.il.us/ecopublic. Consultation with the Department is required under the Illinois Endangered Species Protection Act, 520 ILCS

10/11(b) and the Illinois Natural Areas Preservation Act, 525 ILCS 30/17, for all permittees covered by this permit unless exempted below.

The following applications are exempt from consultation unless there will be an adverse impact to a listed species or its essential habitat or to a Natural Area:

1. Per consultation regulations (17 Ill. Adm. Code, Part 1075) – annual, routine cultivation of existing agricultural lands; and maintenance of existing lawns, yards and ornamental plantings.

2. Per a Memorandum of Understanding between IEPA and IDNR – microbial larvicide applied to catch basins and storm sewers.

1.7 Reopener Clause

If there is evidence indicating potential or realized adverse impacts on water quality due to any pesticide discharge covered by this permit, the permittee may be required to obtain an individual permit or an alternative general permit in accordance with Section 1.3.1 of this permit or the permit may be modified to include different limitations and/or requirements.

Permit modification or revocation will be conducted according to provisions of 35 Ill. Adm. Code, Subtitle C, Chapter I and the provisions of 40 CFR 122.62, 122.63, 122.64, and 124.5 and any other applicable public participations procedures.

The Agency will reopen and modify this permit under the following circumstances:

a. The USEPA amends its regulations concerning public participation;

b. A court of competent jurisdiction binding in the State of Illinois or the 7th Circuit issues an order necessitating a modification of public participation for general permits; or

c. To incorporate federally required modifications to the substantive requirements of this permit.

2.0 Technology-Based Effluent Limitations

This part includes technology-based effluent limitations applicable to all permittees for any discharge authorized under this permit, with compliance required upon beginning such discharge. If the permittee is not the applicator, the technology-based effluent limitations are also applicable to the contract applicator.

If a permittee's discharge of pollutants results from the application of pesticides that is being used solely for the purpose of "pesticide research and development," as defined in Appendix A, the permittee must use such pesticide consistent with any applicable research plan and experimental use permit.

As stated in Part 1.5, this permit required all permittees to comply with other applicable federal or state laws and regulations that pertain to application of pesticides by the permittee.

2.1 Level 1: Technology- Based Effluent Limitations

All permittees must meet Level 1 of the technology-based effluent limitations in Part 2.1 to minimize the discharge of pesticides to waters of the State from the application of pesticides, through the use of Pest Management Measures, as defined in Appendix A. If the permittee is not the applicator, the Level 1 technology-based effluent limitations are also applicable to the contract applicator.

2.1.1 Use only the amount of pesticide and frequency of pesticide application necessary to control the target pest, using equipment and application procedures appropriate for this task.

2.1.2 Maintain pesticide application equipment in proper operating condition, including the requirement to calibrate, clean, and repair such equipment and prevent leaks, spills, or other unintended discharges.

2.1.3 Assess weather conditions (e.g. temperature, precipitation and wind speed) in the treatment area to ensure application is consistent with all applicable federal and state requirements.

2.2 Level 2: Technology-Based Effluent Limitations

Level 2 of the technology-based effluent limitations applies to permittees which exceed one or more of the annual (i.e. calendar year) treatment area threshold(s) listed in Table 3 below, as defined in Appendix A. If the permittee is not the applicator, the Level 2 technology-based effluent limitations are also applicable to the contract applicator.

Table 3. Annual Treatment Area Threshold

Section	Pesticide Use	Annual Threshold
2.2.1	Mosquitoes and Other Insect Pest Control	
	- Adult Mosquitoes and Other Insect Pests	6,400 acres of treatment area
	- Mosquito and Other Insect Aquatic Larviciding	80 acres of treatment area (i.e. surface area)
2.2.2	Weed and Algae Pest Control	
	- In Water	80 acres of treatment area (i.e. surface area)
	- At Water's Edge	20 linear miles of treatment area
2.2.3	Animal Pest Control	
	- In Water	80 acres of treatment area (i.e. surface area)
	- At Water's Edge	20 linear miles of treatment area
2.2.4	Forested Area Pest Control	6,400 acres of treatment area
2.2.5	Other Pest Control Activities	
	- Ground or Aerial	6,400 acres of treatment area
	- In Water	80 acres of treatment area (i.e. surface area)
	- At Water's Edge	20 linear miles of treatment area

For calculating the annual treatment area, count each treatment area only once, regardless of the number of pesticide application activities when applying with the same pesticide product. For example, applying pesticides 3 times a year to the same 3,000 acre site using the same pesticide product, the annual treatment area should be counted as 3,000 acres. If a different pesticide product is applied to the same treatment area, these activities would be counted as separate treatment areas for each different pesticide product. For example, applying pesticides 3 times a year to the same 3,000 acre site using a different pesticide product each time the annual treatment area should be counted as 9,000 acres.

For linear features (e.g., a canal or ditch) use the length of the linear feature whether treating in or adjacent to the feature. For example, when treating the bank on one side of a 10 mile long ditch, banks on both sides of the ditch, and/or water in the ditch, the total treatment area is 10 miles.

2.2.1 Mosquito and Other Insect Pest Control

This part applies to discharges from the application of pesticides for mosquito and other insect pest control as defined in Part 1.1.1.

a. Identify the Problem

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the permittee must do the following for each pest management area, as defined in Appendix A:

1. Establish densities for larval and adult mosquitoes or other insect pest populations or identify environmental condition(s), either current or based on historical data, to serve as action threshold(s) for implementing Pest Management Measures;

2. Identify target pest(s) to develop Pest Management Measures based on developmental and behavioral considerations for each pest;

3. Identify known breeding sites for source reduction, larval control program, and habitat management;

4. Analyze existing surveillance data to identify new or unidentified sources of mosquito or other insect pest problems as well as sites that have recurring pest problems; and

5. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions of Part 2.2.1.a.

b. Pest Management Options

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the permittee must select and implement efficient and effective means of Pest Management Measures that minimize discharges resulting from application of pesticides to control mosquitoes or other insect pests. In developing the Pest Management Measures for each pest management area, the permittee must evaluate the following management options, including a combination of these management options, considering impacts to water quality, impacts to non-target organisms, feasibility, and cost effectiveness:

1. No action
2. Prevention
3. Mechanical or physical methods
4. Cultural methods
5. Biological control agents
6. Pesticides

c. Pesticide Use

If a pesticide is selected to manage mosquitoes or other insect pests and application of the pesticide will result in a discharge to waters of the State, the permittee must:

1. Conduct larval and/or adult surveillance in an area that is representative of the pest problem or evaluate existing larval surveillance data, environmental conditions, or data from adjacent areas prior to each pesticide application to assess the pest management area and to determine when action threshold(s) is met;

2. Reduce the impact on the environment and on non-target organisms by applying the pesticide only when the action threshold(s) has been met;

3. In situations or locations where practicable and feasible for effective control, use larvicides as a preferred pesticide for mosquito or other insect pest control when the larval action threshold(s) has been met; and

4. In situations or locations where larvicide use is not practicable or feasible for efficacious control, use adulticides for mosquito or other insect pest control when the adult action threshold(s) has been met.

2.2.2 Weed and Algae Pest Control

This part applies to discharges from the application of pesticides for weed, algae, and pathogens as defined in Part 1.1.1.

a. Identify the Problem

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the permittee must do the following for each pest management area, as defined in Appendix A:

1. Identify areas with pest problems and characterize the extent of the problems, including, for example, water use goals not attained (e.g. wildlife habitat, fisheries, vegetation, and recreation);

2. Identify target pest(s);

3. Identify possible factors causing or contributing to pest problem (e.g., nutrients, invasive species, etc);

4. Establish any pest-specific and site-specific action threshold(s), as defined in Appendix A , for implementing Part 2.2.2.b; and

5. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions of Part 2.2.2.a.

b. Pest Management Options

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the permittee must select and implement efficient and effective means of Pest Management Measures that minimize discharges resulting from application of pesticides to control pests. In developing the Pest Management Measures for each pest management area, the permittee must evaluate the following management options, including a combination of these management options, considering impacts to water quality, impacts to non-target organisms, feasibility, and cost effectiveness:

1. No action
2. Prevention
3. Mechanical or physical methods
4. Cultural methods
5. Biological control agents
6. Pesticides

c. Pesticide Use

If a pesticide is selected to manage pests and application of the pesticide will result in a discharge to waters of the State, the permittee must:

1. Conduct surveillance in an area that is representative of the pest problem prior to each pesticide application to assess the pest management area and to determine when the action threshold(s) is met; and

2. Reduce the impact on the environment and non-target organisms by applying the pesticide only when the action threshold(s) has been met.

2.2.3 Animal Pest Control

This part applies to discharges from the application of pesticides for control of animal pests as defined in Part 1.1.1.

a. Identify the Problem

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the permittee must do the following for each pest management area, as defined in Appendix A:

1. Identify areas with pest problems and characterize the extent of the problems, including, for example, water use goals not attained (e.g. wildlife habitat, fisheries, vegetation, and recreation);

2. Identify target pest(s);

3. Identify possible factors causing or contributing to the problem (e.g., nutrients, invasive species);

4. Establish any pest-specific and site-specific action threshold(s), as defined in Appendix A, for implementing Part 2.2.3.b; and

5. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions of Part 2.2.3.a.

b. Pest Management Options

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each year thereafter prior to the first pesticide application during that calendar year, the permittee must select and implement efficient and effective means of Pest Management Measures that minimize discharges resulting from application of pesticides to control pests. In developing the Pest Management Measures for each pest management area, the permittee must evaluate the following management options, including a combination of these management options, considering impacts to water quality, impacts to non-target organisms, feasibility, and cost effectiveness:

1. No action
2. Prevention
3. Mechanical or physical methods
4. Biological control agents
5. Pesticides

c. Pesticide Use

If a pesticide is selected to manage pests and application of the pesticide will result in a discharge to waters of the State, the permittee must:

1. Conduct surveillance in an area that is representative of pest problem prior to each application to assess the pest management area and to determine when the action threshold(s) is met:; and

2. Reduce the impact on the environment and non-target organisms by evaluating site restrictions, application timing, and application method in addition to applying the pesticide only when the action threshold(s) has been met.

2.2.4 Forested Area Pest Control

This part applies to discharges from the application of pesticides for forested area pest control as defined in Part 1.1.1.

a. Identify the Problem

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application in that calendar year, the permittee must do the following for each pest management area, as defined in Appendix A:

1. Establish any pest-specific and site-specific action threshold(s), as defined in Appendix A, for implementing Part 2.2.4.b;

2. Identify target pest(s) to develop a Pest Management Measures based on developmental and behavioral considerations for each pest;

3. Identify current distribution of the target pest and assess potential distribution in the absence of Pest Management Measures; and

4. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions of Part 2.2.4.a.

b. Pest Management Options

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the permittee must select and implement efficient and effective means of Pest Management Measures that minimize discharges resulting from application of pesticides to control pests. In developing the Pest Management Measures for each pest management area, the permittee must evaluate the following management options, including a

combination of these management options, considering impacts to water quality, impacts to non-target organisms, feasibility, and cost effectiveness:

1. No action
2. Prevention
3. Mechanical/physical methods
4. Cultural methods
5. Biological control agents
6. Pesticides

c. Pesticide Use

If a pesticide is selected to manage forestry pests and application of the pesticide will result in a discharge to waters of the State, the permittee must:

1. Conduct surveillance in an area that is representative of the pest problem prior to each application to assess the pest management area and to determine when the pest action threshold(s) is met;

2. Reduce the impact on the environment and non-target organisms by evaluating the restrictions, application timing, and application methods in addition to applying the pesticide only when the action threshold(s) have been met; and

3. Evaluate using pesticides against the most susceptible developmental stage.

2.2.5 Other Pest Control Activities

This part applies to discharges from the application of pesticides not identified in Parts 2.2.1, 2.2.2, 2.2.3, or 2.2.4.

a. Identify the Problem

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application in that calendar year, the permittee must do the following for each pest management area, as defined in Appendix A:

1. Establish any pest-specific and site-specific action threshold(s), as defined in Appendix A, for implementing Part 2.2.5.b;

2. Identify target pest(s) to develop Pest Management Measures based on developmental and behavioral considerations for each pest;

3. Identify current distribution of the target pest and assess potential distribution in the absence of Pest Management Measures; and

4. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions of Part 2.2.5.a.

b. Pest Management Options

Prior to the first pesticide application covered under this permit that will result in a discharge to waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the permittee must select and implement efficient and effective means of Pest Management Measures that minimize discharges resulting from application of pesticides to control pests. In developing the Pest Management Measures for each pest management area, the permittee must evaluate the following management options, including a combination of these management options, considering impacts to water quality, impacts to non-target organisms, feasibility, and cost effectiveness:

1. No action
2. Prevention
3. Mechanical/physical methods

4. Cultural methods
5. Biological control agents
6. Pesticides

c. Pesticide Use

If a pesticide is selected to manage other activities not covered under the other four use patterns and application of the pesticide will result in a discharge to waters of the State, the permittee must:

1. Conduct surveillance in an area that is representative of the pest problem prior to each application to assess the pest management area and to determine when the pest action threshold(s) is met;

2. Reduce the impact on the environment and non-target organisms by evaluating the restrictions, application timing, and application methods in addition to applying the pesticide only when the action threshold(s) have been met; and

3. Evaluate using pesticides against the most susceptible developmental stage.

3.0 Water Quality-Based Effluent Limitations

All permittees must control discharges as necessary to meet applicable numeric and narrative State water quality standards, for any discharge authorized under this permit, with compliance required upon the beginning of such discharge. Discharges covered by this permit, alone or in combination with other sources, shall not cause a violation of any applicable water quality standards outlined in 35 Ill. Adm. Code 302, in light of the provisions of 35 Ill. Adm. Code 302.210(g).

If at any time a permittee becomes aware (e.g., through self-monitoring or by notification from the State), or IEPA determines, that the discharge causes or contributes to an excursion of applicable water quality standards, the permittee must take corrective action as required in Part 6, up to and including the ceasing of the discharge, if necessary.

4.0 Monitoring

4.1 Visual Monitoring Requirements

During any pesticide application or post-application surveillance of any pesticide application with discharges authorized under this permit, all permittees must, when considerations for safety and feasibility allow and while observing reentry periods for pesticides application, visually assess the area to and around where pesticides are applied for possible and observable adverse incidents, as defined in Appendix A, caused by application of pesticides, including the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use.

If the permittee is not the applicator, this section is also applicable to the contract applicator.

5.0 Pesticide Discharge Management Plan

Permittees which exceed one or more of the annual treatment area thresholds listed in Table 3 must prepare and submit a Pesticide Discharge Management Plan (PDMP). This section does not apply to the following:

1. Any application made in response to a declared pest emergency situation, as defined in Appendix A.

2. Permittees who meet the definition of a small entity, as defined in Appendix A.

3. Permittees conducting pesticide application activities pursuant to the Vector Control Act (410 ILCS 95) which are funded by, conducted in accordance with, or under the supervision of the Illinois Department of Public Health or an associated municipal, county or regional department of public health or public health district.

For the first year of the permit the PDMP must be submitted 90-days after the date of coverage under this permit. After October 31, 2012, the PDMP and all supporting documents must be submitted with the NOI. The PDMP must be submitted electronically in Adobe Acrobat format to epa.ILG87pestPDMP@illinois.gov.

The plan must be kept up-to-date thereafter for the duration of coverage under this general permit, even if the discharges subsequently fall below the applicable treatment area thresholds listed in Table 3.

The PDMP does not contain effluent limitations as the effluent limitations are specified in Parts 2 and 3 of the permit. The PDMP documents how the permittee will implement the effluent limitations in Parts 2 and 3 of the permit, including the evaluation and selection of Pest Management Measures to meet those effluent limitations in order to minimize discharges. In the PDMP, the permittee may incorporate by reference any procedures or plans in other documents that meet the requirements of this permit. If the permittee relies upon other documents to comply with the effluent limitations in this permit, such as a pre-existing pest management plan, the permittee must attach to the PDMP a copy of any portions of any documents that are used to document the implementation of the effluent limitations.

5.1 Contents of the Pesticide Discharge Management Plan

The PDMP must include the following elements:

a. Pesticide Discharge Management Plan Team
b. Problem Identification
c. Pest Management Options Evaluation
d. Response Procedures
    1. Spill Response Procedures
    2. Adverse Incident Response Procedures
e. Signature Requirements

5.1.1 PDMP Team

Permittees must identify all persons (by name and contact information) that compose the team as well as each person's individual responsibilities, including:

a. Person(s) responsible for managing pests in relation to the pest management area;

b. Person(s) responsible for developing and revising the PDMP; and

c. Person(s) responsible for developing, revising, and implementing corrective actions and other effluent limitation requirements.

5.1.2 Problem Identification

Permittees must document the following:

a. Pest problem description. Document a description of the pest problem at the pest management area, including identification of the target pest(s), source(s) of the pest problem, and source of data used to identify the problem in Parts 2.2.1, 2.2.2, 2.2.3, 2.2.4, and 2.2.5.

b. Action Threshold(s). Describe the action threshold(s) for the pest management area, including the data used in developing the action threshold(s) and method(s) to determine when the action threshold(s) has been met.

c. General location map. In the plan, include a general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) that identifies the geographic boundaries of the area to which the plan applies and location of the waters of the State.

d. Water quality standards. Document any water(s) identified as impaired by a substance which either is an active ingredient or a degradate of such an active ingredient.

5.1.3 Pest Management Options Evaluation

Permittees must document the evaluation of the pest management options, including combination of the pest management options, to control the target pest(s). Pest management options include the following: No action, prevention, mechanical/physical methods, cultural methods, biological control agent, and pesticides. In the evaluation, permittees must consider the impact to water quality, impact to non-target organisms, feasibility, cost effectiveness, and any relevant previous Pest Management Measures.

5.1.4 Response Procedures

Permittees must document the following procedures in the PDMP:

a. Spill Response Procedures – At a minimum, the permittees must have:

1. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases to waters of the State. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the PDMP team.

2. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies.

b. Adverse Incident Response Procedures – At a minimum, the permittees must have:

1. Procedures for responding to any adverse incident resulting from pesticide applications.

2. Procedures for notification of the adverse incident, both internal to the permittee agency/organization and external. Contact information for State permitting agency, nearest emergency medical facility, and nearest hazardous chemical responder must be in locations that are readily accessible and available.

5.1.5 Signature Requirements

Permittees must sign, date and certify the PDMP in accordance with Appendix B.

5.2 Pesticide Discharge Management Plan Modifications

Permittees must modify the PDMP whenever necessary to address any of the conditions for corrective action in Part 6.1 or when a change in pest control activities significantly changes the type or quantity of pollutants discharged. Changes to the PDMP must be made before the next pesticide application that results in a discharge, if practicable, or if not, no later than 90 days after any change in pesticide application activities. The revised PDMP must be signed and dated in accordance with Appendix B. Permittees must submit the modified PDMP electronically to epa.ILG87pestPDMP@illinois.gov.

5.3 Pesticide Discharge Management Plan Availability

Permittees must retain a copy of the current PDMP, along with all supporting maps and documents, at the address provided on the NOI. The PDMP and all supporting documents must be readily available and copies of any of these documents provided, upon request, to IEPA or to any local agency governing discharges or pesticide applications within their respective jurisdictions; and to representatives of any federal or state agencies. IEPA may provide copies of the PDMP or other information related to this permit that is in its possession to members of the public. Any Confidential Business Information (CBI), as defined in 40 CFR Part 2, may be withheld from the public provided that a claim of confidentiality is properly asserted and documented in accordance with 40 CFR Part 2; however, CBI must be submitted to IEPA, if requested, and may not be withheld from those staff within IEPA, or any other state or federal agency cleared for CBI review.

6.0 Corrective Action

All permittees must comply with the provisions of Part 6 for any discharges authorized under this permit, with compliance required upon the beginning of such discharge. If the permittee is not the applicator, this section is also applicable to the contract applicator.

6.1 Situations Requiring Revision of Pest Management Measures

Permittees must review and, as necessary, revise the evaluation and selection of Pest Management Measures consistent with Parts 2.1 and 2.2 for the following situations:

a. An unauthorized release or discharge associated with the application of pesticides (e.g., spill, leak, or discharge not authorized by this or another NPDES permit) occurs.

b. Permittee becomes aware, or IEPA concludes, that Pest Management Measures are not adequate/sufficient for the discharge to meet applicable State water quality standards;

c. Any monitoring activities indicate failure to meet applicable technology-based effluent limitations in Part 2.

d. An inspection or evaluation of activities by IEPA reveals that modifications to the Pest Management Measures are necessary to meet the effluent limitations in this permit.

e. Any permittee observes or is otherwise made aware of an adverse incident, as defined in Appendix A.

6.2 Corrective Action Deadlines

If a permittee determines that changes to the Pest Management Measures are necessary to eliminate any situation identified in Part 6.1, such changes must be made before or, if not practicable, as soon as possible after the next pesticide application that results in a discharge.

6.3 Effect of Corrective Action

The occurrence of a situation identified in Part 6.1 may constitute a violation of the permit. Correcting any situation identified in Part 6.1 does not absolve permittees of liability for any original violation. However, failure to comply with Part 6.2 constitutes an additional permit violation. IEPA will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

IEPA may impose additional requirements and schedules of compliance, including requirements to submit additional information concerning the condition(s) requiring corrective action or schedules and requirements more stringent than specified in this permit. Those requirements and schedules will supersede those of Parts 6.1 and 6.2 if such requirements conflict.

6.4 Adverse Incident Documentation and Reporting

6.4.1 Twenty-Four Hour Adverse Incident Notification

6.4.1.1 Adverse Incident Notification Required

If a permittee observes or is otherwise made aware of an adverse incident, as defined in Appendix A, which may have resulted from a discharge from a pesticide application, made by the permittee or a contract applicator, the permittee must immediately notify the Illinois Emergency Management Agency (IEMA) and USEPA, Region 5, Pesticide Program. This notification must be made by telephone within 24 hours of the permittee becoming aware of the adverse incident and must include at least the following information:

a. The caller's name and telephone number;

b. Permittees name and mailing address;

c. NPDES permit number;

d. The name and telephone number of a contact person, if different than the person providing the 24-hour notice;

e. How and when the permittee became aware of the adverse incident;

f. Description of the location of the adverse incident;

g. Description of the adverse incident identified and the pesticide product, including USEPA pesticide registration number, for each product applied in the area of the adverse incident; and

h. Description of any steps the permittee has taken or will take to correct, repair, remedy, clean-up, or otherwise address any adverse effects.

If a permittee is unable to notify IEMA within 24 hours, the permittee must do so as soon as possible and also provide an appropriate rationale why the permittee was unable to provide such notification within 24 hours.

The adverse incident notification and reporting requirements are in addition to what the registrant is required to submit under FIFRA section 6(a)(2) and its implementing regulations at 40 CFR Part 159.

6.4.1.2 Adverse Incident Notification Not Required

Reporting of adverse incidents is not required under this permit in the following situations:

a. A permittee is aware of facts that indicate that the adverse incident was not related to toxic effects or exposure from the pesticide application;

b. A permittee has been notified by IEMA and retains such notification, that the reporting requirement has been waived for this incident or category of incidents;

c. A permittee receives information of an adverse incident, but that information is clearly erroneous; or

d. An adverse incident occurs to pests that are similar in kind to potential target pests identified on the FIFRA label.

6.4.2 Fifteen Day Adverse Incident Written Report

Within fifteen (15) business days of a reportable adverse incident pursuant to Part 6.4.1, permittees must provide a written report of the adverse incident to the IEPA Compliance Assurance Section. Permittees must submit the 15-day adverse incident report electronically to epa.ILG87pest5day@illinois.gov. The adverse incident report must include at least the following information:

a. Information required to be provided in Part 6.4.1;

b. Date and time the permittee contacted IEMA notifying the Agency of the adverse incident, who the permittee spoke with at IEMA, and any instructions received from IEMA;

c. Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc);

d. A description of the circumstances of the adverse incident including species affected, estimated number of individual and approximate size of dead or distressed organisms;

e. Magnitude and scope of the affected area (e.g. estimate aquatic surface area or total stream distance affected);

f. Pesticide application rate; intended use site (e.g., on the bank, above waters, or directly to water), method of application; and name of pesticide product and USEPA pesticide registration number;

g. Description of the habitat and the circumstances under which the adverse incident occurred (including any available ambient water data for pesticides applied);

h. If laboratory tests were performed, an indication of what test(s) were performed, and when; additionally, a summary of the test results within 5 days after they become available if not available at the time of submission of the 15-day adverse incident report;

i. Description of actions to be taken to prevent recurrence of adverse incidents; and

j. Signature, date, and certification in accordance with Appendix B.

The Adverse Incident Report form is available on the Internet at www.epa.state.il.us/water/permits/pesticide/forms.html.

6.4.3 Adverse Incident to Federally Threatened or Endangered Species or Critical Habitat

Notwithstanding any of the other adverse incident notification requirements of this section, if a permittee or contract applicator becomes aware of an adverse incident affecting a federally listed threatened or endangered species or its federally designated critical habitat which may have resulted from a discharge from the permittee's pesticide application, the permittee must immediately notify the United States Fish and Wildlife Service (FWS). This information must be made by telephone, to the contacts listed on USFWS's website at www.fws.gov/offices, immediately upon the permittee becoming aware of the adverse incident, and must include at least the following information:

a. The caller's name and telephone number;

b. Permittee name and mailing address;

c. The name of the affected species;

d. How and when the permittee became aware of the adverse incident;

e. Description of the location of the adverse incident;

f. Description of the adverse incident and the pesticide product, including the USEPA pesticide registration number, for each product applied in the area of the adverse incident, and;

g. Description of any steps the permittee has taken or will take to alleviate the adverse impact to the species.

Additional information on federally listed threatened or endangered species and federally designated critical habitat is available from FWS (www.fws.gov) for terrestrial or freshwater species.

6.5 Reportable Spills and Leaks

6.5.1 Spill, Leak, or Other Unpermitted Discharge Notification

Where a leak, spill, or other release into waters of the State containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs in any 24-hour period, the permittee or contract applicator must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302. The permittee must also notify IEMA at (800) 782-7860. Both of these Agencies shall be notified immediately and as soon as the permittee has knowledge of the release. Contact information must be in locations that are readily accessible and available in the area where the spill, leak, or other unpermitted discharge may occur.

Local requirements may necessitate also reporting spills or leaks to local emergency response, public health, or drinking water supply agencies.

6.5.2 Fifteen-Day Spill, Leak, or Other Unpermitted Discharge Documentation

If a permittee becomes aware of a spill, leak, or other unpermitted discharge which initiates the notification requirements in Part 6.5.1 and results in an adverse incident, then the permittee must report the incident per the requirements in Parts 6.4.1 and 6.4.2. If the spill, leak, or other unpermitted discharges initiates the notification

requirements in Part 6.5.1, but does not result in an adverse incident, then permittee must document and retain the following information within 15 business days of becoming aware of the situation:

a. Information required to be provided in Part 6.5.1

b. Summary of corrective action taken or to be taken including date initiated and date completed or expected to be completed; and

c. Any measures to prevent recurrence of such a spill or leak or other discharge, including notice of whether PDMP modifications are required as a result of the spill or leak.

6.6 Other Corrective Action Documentation

For situations identified in Part 6.1, other than for adverse incidents (addressed in Part 6.4), or reportable spills or leaks (addressed in Part 6.5), permittees must document the situation requiring corrective action and the planned corrective action within fifteen (15) business days of becoming aware of that situation and retain a copy of this documentation. This documentation must include the following information:

a. Identification of the condition requiring the need for corrective action review, including any ambient water quality monitoring that assisted in determining that discharges did not meet water quality standards;

b. Brief description of the situation;

c. Date the problem was identified.

d. Brief description of how the problem was identified, how the permittee learned of the situation, and date the permittee learned of the situation;

e. Summary of corrective action taken or to be taken, including date initiated and date completed or expected to be completed; and

f. Any measures to prevent reoccurrence of such an incident, including notice of whether PDMP modifications are required as a result of the incident.

7.0 Recordkeeping and Annual Reporting

The recordkeeping and annual reporting requirements vary depending on whether a permittee meets the definition of a small entity, as defined in Appendix A, and/or exceeds one or more of the annual treatment area thresholds listed in Table 3.

Permittees must keep written records as required in this permit for all discharges covered under this permit. These records must be accurate and complete to demonstrate the permittees compliance with the conditions of this permit. Permittees may rely on records and documents developed for other obligations, such as requirements under FIFRA, and state or local pesticide programs, provided all requirements of this permit are satisfied.

IEPA recommends that all permittees covered under this permit keep records of acres or linear miles treated for all applicable use patterns covered under this general permit. The records shall be kept up-to-date to help the permittee determine if the annual treatment area thresholds, as identified in Part 2.2, are met during any calendar year.

7.1 Level 1: Recordkeeping

Level 1 recordkeeping applied to all permittees which must keep the following records:

a. A copy of the NOI submitted to IEPA, any correspondence exchanged between the permittee and IEPA specific to coverage under this permit, and a copy of the IEPA acknowledgment letter assigning the permit number;

b. A copy of this permit;

c. A copy of any Adverse Incident Reports (Part 6.4.2);

d. Rationale for any determination that reporting of an identified adverse incident is not required consistent with allowances identified in Part 6.4.1.2;

e. A copy of any corrective action documentation (Part 6.6);

f. A copy of any spill, leak, or other unpermitted discharge documentation (Part 6.5.2); and

g. Endangered Species Compliance Documentation

Permittees conducting pesticide application activities pursuant to the Vector Control Act (410 ILCS 95) which are funded by, conducted in accordance with, or under the supervision of the Illinois Department of Public Health or an associated municipal, county or regional department of public health or public health district are only required to perform Level 1 recordkeeping.

7.2 Level 2: Recordkeeping

Level 2 recordkeeping applies to permittees which exceed one or more of the annual treatment area thresholds listed in Table 3 and meet the definition of a small entity, as defined in Appendix A, must retain the following records at the address provided on the NOI. If the permittee is not the applicator, some of the records listed below shall be kept by the contract applicator.

a. Documentation of equipment calibration; and

b. Information on each treatment area to which pesticides are discharged, including:

1. Description of treatment area, by name and/or location including the size (acres or linear feet) of treatment area, as well as the closest named waters of the State to which pesticide(s) discharged are tributary;

2. Pesticide use pattern(s) (i.e., mosquito or other insect pest control, etc.)

3. Target pest(s) and explanation of need for pest control;

4. Description of pest management measures(s) implemented prior to the first pesticide application;

5. If different from the permittee, company name and contact information for contract applicator;

6. Name of each pesticide product used including the USEPA pesticide registration number;

7. Quantity of each pesticide product applied to each treatment area;

8. Pesticide application start and end date(s);

9. Whether or not visual monitoring was conducted during pesticide application and/or post-application and if not; why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides; and

10. Name of any waters of the State in the treatment area currently listed as impaired for pesticides on the 303(d) list. This should include the name of the pesticide for which it is impaired.

An evaluation worksheet for documenting this information for each treatment area is available on the Internet at www.epa.state.il.us/water/permits/pesticide/forms.html.

7.3. Level 3: Recordkeeping

Level 3 recordkeeping applies to permittees which exceed one or more of the annual treatment area thresholds listed in Table 3 and do not meet the definition of a small entity, as defined in Appendix A, must retain the following

records at the address provided on the NOI. If the permittee is not the applicator, some of the records listed below shall be kept by the contract applicator.

a. A copy of the PDMP, including any modifications made to the PDMP during the term of this permit;

b. A copy of the annual reports submitted to IEPA;

c. Documentation of equipment calibration; and

d. Information on each treatment area to which pesticides are discharged, including:

1. Description of treatment area, by name and/or location including the size (acres or linear feet) of treatment area, as well as the closest named waters of the State to which pesticide(s) discharged are tributary;

2. Pesticide use pattern(s) (i.e., mosquito or other insect pest control, etc.)

3. Target pest(s) and explanation of need for pest control;

4. Action threshold(s);

5. Method and/or data used to determine that action threshold(s) has been met;

6. Description of pest management measures(s) implemented prior to the first pesticide application;

7. If different from the permittee, company name and contact information for contract applicator;

8. Name of each pesticide product used including the USEPA pesticide registration number;

9. Quantity of each pesticide product applied to each treatment area;

10. Pesticide application start and end date(s);

11. Whether or not visual monitoring was conducted during pesticide application and/or post-application and if not; why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides; and

12. Name of any waters of the State in the treatment area currently listed as impaired for pesticides on the 303(d) list. This should include the name of the pesticide for which it is impaired.

7.4 Additional Recordkeeping Requirements for All Permittees

All required records must be documented as soon as possible but no later than 15 business days following completion each pesticide application. Permittees must retain any records required under this permit for at least 3 years from the date that coverage under this permit expires or is terminated. Permittees must make available to IEPA, including an authorized representative of IEPA, all records kept under this permit upon request and provide copies of such records, upon request.

7.5 Annual Reporting

Permittees which exceed one or more of the annual treatment area thresholds listed in Table 3 and do not meet the definition of a small entity, as defined in Appendix A, must submit an annual report to IEPA. Once the permittee meets the obligation to submit an annual report, the permittee must submit an annual report each calendar year thereafter for the duration of coverage under this general permit, whether or not the permittee has discharges from the application of pesticides in any subsequent calendar year. Permittees must submit the annual report electronically to epa.ILG87pestAnnRep@illinois.gov. The annual report must be submitted to IEPA no later than February 15th of the following year for all pesticide activities covered under this permit occurring during the previous calendar year. Annual reports are to be submitted beginning in 2012 for discharges from pesticide applications beginning prior to January 1, 2012.

Permittees conducting pesticide application activities pursuant to the Vector Control Act (410 ILCS 95) which are funded by, conducted in accordance with, or under the supervision of the Illinois Department of Public Health or an associated municipal, county or regional department of public health or public health district are not required to submit an annual report.

The annual report must include information for the calendar year, with the first annual report required to include activities for the portion of the calendar year after the effective date of the NOI. If the effective date is after December 1, the permittee is not required to submit an annual report for that first partial year but must submit annual reports thereafter, with the first annual report submitted also including information from the first partial year.

When permittees terminate permit coverage, as specified in Part 1.2.5, an annual report must be submitted for the portion of the year up through the date of termination. The annual report is due no later than 45-days after the termination date, or February 15th of the following year, whichever is earlier.

The annual report must contain the following information:

a. Permittee's name and contact information;

b. NPDES permit number;

c. Contact person name, title, e-mail address (if any), and phone number; and

d. For each treatment area, report the following information:

   1. Description of treatment area, by name and/or location including the size (acres or linear feet) of treatment area, as well as the closest named waters of the State to which pesticide(s) discharge are tributary;

   2. Pesticide use pattern(s) (i.e., mosquito and other insects, etc.) and target pest(s);

   3. Company name(s) and contact information for the pesticide applicator(s), if different from the permittee;

   4. Total amount of each pesticide product applied for the reporting year by the USEPA pesticide registration number(s) and by application method (e.g., aerially by fixed-wing or rotary aircraft, broadcast spray, etc.);

   5. Whether this pest control activity was addressed in the PDMP prior to pesticide application;

   6. If applicable, an annual report of any adverse incidents as a result of these treatment(s), for incidents, as described in Part 6.4.1; and

   7. If applicable, description of any corrective action(s), including spill responses, resulting from pesticide application activities and the rationale for such action(s).

The Annual Report form is available on the Internet at www.epa.state.il.us/water/permits/pesticide/forms.html.

8.0 Contact Information and Mailing Addresses

Permittees must submit the following documents to the email addresses listed below.

a. PDMP to epa.ILG87pestPDMP@illinois.gov

b. Annual Reports to epa.ILG87pestAnnRep@illinois.gov

c. Within 15 business days of becoming aware of an adverse incident, permittees must send all incident reports under Part 6.4 to epa.ILG87pest5day@illinois.gov

All other written correspondence concerning discharges covered under this permit and directed to the IEPA, including individual NPDES permit applications, must be sent to the IEPA Headquarters address listed below.

Note: If IEPA notifies dischargers (either directly, by public notice, or by making information available on the Internet) of other reporting options that become available at a later date (e.g., electronic submission), permittees may take advantage of those options, in accordance with the instructions provided by IEPA, to satisfy the reporting requirements of this permit.

8.1 IEPA Headquarters Address

Illinois Environmental Protection Agency
Division of Water Pollution Control, Mail Code #15
Attention: Permit Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
www.epa.state.il.us./water/permits/pesticide/index.html

8.2 USEPA, Region 5 Address

United States Environmental Protection Agency
Region 5
Attention: Pesticide Program
77 W. Jackson Blvd.
Chicago, IL 60604

Appendix A
Definitions, Abbreviations, and Acronyms

A.1. DEFINITIONS

Action Threshold – the point at which pest populations or environmental conditions cannot be tolerated necessitating that pest control action be taken based on economic, human health, aesthetic, or other effects. An action threshold may be based on current and/or past environmental factors that are or have been demonstrated to be conducive to pest emergence and/or growth, as well as past and/or current pest presence. Action thresholds are those conditions that indicate both the need for control actions and the proper timing of such actions.

Active Ingredient – any substance (or group of structurally similar substances if specified by the Agency) that will prevent, destroy, repel or mitigate any pest, or that functions as a plant regulator, desiccant, or defoliant within the meaning of FIFRA sec. 2(a). [40 CFR 152.3] Active ingredient also means a pesticidal substance that is intended to be produced and used in a living plant, or in the produce thereof, and the genetic material necessary for the production of such a pesticidal substance. [40 CFR 174.3]

Adverse Incident – means an unusual or unexpected incident that a permittee or contract applicator has observed upon inspection or of which the permittee otherwise become aware, in which:

1. There is evidence that a person or non-target organism has likely been exposed to a pesticide residue, and
2. The person or non-target organism suffered a toxic or adverse effect.

The phrase toxic or adverse effects includes effects that occur within waters of the State on non-target plants, fish or wildlife that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue, and may include:

- Distressed or dead juvenile and small fishes
- Washed up or floating fish
- Fish swimming abnormally or erratically
- Fish lying lethargically at water surface or in shallow water
- Fish that are listless or nonresponsive to disturbance
- Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants
- Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.)

The phrase, toxic or adverse effects, also includes any adverse effects to humans (e.g., skin rashes) or domesticated animals that occur either from direct contact with or as a secondary effect from a discharge (e.g., sickness from consumption of plants or animals containing pesticides) to waters of the State that are temporally and spatially related to exposure to a pesticide residue (e.g., vomiting, lethargy).

Annual Treatment Area Threshold – an area (in acres) or in linear distance (in miles) in a calendar year to which a permittee is authorizing and/or performing pesticide applications in that area for activities covered under this permit.

Applicator – any person(s) who performs the application of a pesticide or who has day-to-day control of the application (i.e., they are authorized to direct workers to carry out those activities) that results in a discharge to waters of the State.

Biological Control Agents – these agents are organisms that can be introduced to operator sites, such as herbivores, predators, parasites, and hyperparasites. [Source: USFWS IPM Guidance, 2004]

Biological Pesticides (also called biopesticides) – include microbial pesticides, biochemical pesticides and plant-incorporated protectants (PIP). Microbial pesticide means a microbial agent intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or dessicant, that (1) is a eucaryotic microorganism including, but not limited to, protozoa, algae, and fungi; (2) is a procaryotic microorganism, including, but not limited to, Eubacteria and Archaebacteria; or (3) is a parasitically replicating microscopic element, including but not limited to, viruses. [40 CFR 158.2100(b)] Biochemical pesticide mean a pesticide that (1) is a naturally-occurring substance or structurally-similar and functionally identical to a naturally-occurring substance; (2) has a history of exposure to humans and the environment demonstrating minimal toxicity, or in the case of a synthetically-derived biochemical pesticides, is equivalent to a naturally-occurring substance that has such a history; and (3) has a non-toxic mode of action to the target

pest(s). [40 CFR 158.2000(a)(1)] Plant-incorporated protectant means a pesticidal substance that is intended to be produced and used in a living plant, or in the produce thereof, and the genetic material necessary for production of such a pesticidal substance. It also includes any inert ingredient contained in the plant, or produce thereof. [40 CFR 174.3]

Chemical Pesticides – all pesticides not otherwise classified as biological pesticides.

Contract Applicator – any person(s) who make contractual pesticide applications for which they or their employer receives compensation (e.g., pest control companies).

Cultural Methods – manipulation of the habitat to increase pest mortality by making the habitat less suitable to the pest.

Declared Pest Emergency Situation – an event defined by a public declaration by a federal, state, or local governmental body or agency of a pest problem determined to require control through application of a pesticide beginning less than ten days after identification of the need for pest control. This public declaration may be based on:

1. Significant risk to human health;
2. Significant economic loss; or
3. Significant risk to:
   i. Endangered species,
   ii. Threatened species,
   iii. Beneficial organisms, or
   iv. The environment.

Director – means the Director of the Illinois Environmental Protection Agency or an authorized representative.

Discharge – when used without qualification, means the "discharge of a pollutant." [40 CFR 122.2]

Discharge of a pollutant – any addition of any "pollutant" or combination of pollutants to "waters of the State" from any "point source," or any addition of any pollutant or combination of pollutants to the water of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft that is being used as a means of transportation. This includes additions of pollutants into waters of the State from: surface runoff that is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. [Excerpted from 40 CFR 122.2]

USEPA Approved or Established Total Maximum Daily Loads (TMDLs) – "USEPA Approved TMDLs" are those that are developed by the State and approved by USEPA. "USEPA Established TMDLs" are those that are issued by USEPA.

Facility or Activity – any NPDES "point source" (including land or appurtenances thereto) that is subject to regulation under the NPDES program. [40 CFR 122.2]

Impaired Water (or "Water Quality Impaired Water" or "Water Quality Limited Segment") – a water is impaired for purposes of this permit if it has been identified by the State pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 CFR 130.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

Inert Ingredient – any substance (or group of structurally similar substances if designated by the Agency), other than an active ingredient, that is intentionally included in a pesticide product. [40 CFR 152.3] Inert ingredient also means any substance, such as a selectable marker, other than the active ingredient, where the substance is used to confirm or ensure the presence of the active ingredient, and includes the genetic material necessary for the production of the substance, provided that genetic material is intentionally introduced into a living plant in addition to the active ingredient. [40 CFR 174.3]

Mechanical/Physical Methods – mechanical tools or physical alterations of the environment, for pest prevention or removal.

Minimize – to reduce and/or eliminate pesticide discharges to waters of the State through the use of Pest Management Measures to the extent technologically available and economically practicable and achievable.

Non-target Organisms – includes the plant and animal hosts of the target species, the natural enemies of the target species living in the community, and other plants and animals, including vertebrates, living in or near the community that are not the target of the pesticide.

Operator – for the purpose of this permit, means any person(s) associated with the application of a pesticide that results in a discharge to waters of the State that meets either or both of the following two criteria:

a. The person(s) with control over the hiring of a contract applicator, or making the decision to perform pesticide applications, including the ability to modify those decisions, that results in a discharge to waters of the State, or

b. The person(s) who performs the application of pesticides or who has day-to-day control of the pesticide application, that results in a discharge to waters of the State.

Outstanding Resource Water – is a surface water body or water body segment that is of exceptional ecological or recreational significance and must be designated by the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 102.Subpart H.

Permittee – an operator that has obtained coverage under this general permit.

Person – any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, state agency, or any other legal entity, or their legal representative, agent or assigns.

Pest – consistent with 40 CFR 152.5, any organism under circumstances that make it deleterious to man or the environment, if it is:

a. Any vertebrate animal other than man;

b. Any invertebrate animal, including but not limited to, any insect, other arthropod, nematode, or mollusk such as a slug and snail, but excluding any internal parasite of living man or other living animals;

c. Any plant growing where not wanted, including any moss, alga, liverwort, or other plant of any higher order, and any plant part such as a root; or

d. Any fungus, bacterium, virus, or other microorganism, except for those on or in living man or other living animals and those on or in processed food or processed animal feed, beverages, drugs (as defined in FFDCA sec. 201(g)(1)) and cosmetics (as defined in FFDCA sec. 201(i)).

Pest Management Area – the area of land, including any water, for which the permittee has responsibility for and is authorized to conduct pest management activities as covered by this permit (e.g., for a permittee who is a mosquito control district, the pest management area is the total area of the district).

Pest Management Measure – any practice used to meet the effluent limitations that comply with manufacturer specifications, industry standards and recommended industry practices related to the application of pesticides, relevant legal requirements and other provisions that a prudent permittee would implement to reduce and/or eliminate pesticide discharges to waters of the State.

Pesticide – means (1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant, and (3) any nitrogen stabilizer, except that the term "pesticide" shall not include any article that is a "new animal drug" within the meaning of section 201(w) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(w)), that has been determined by the Secretary of Health and Human Services not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of section 201(x) of such Act (21 U.S.C. 321(x)) bearing or containing a new animal drug. The term "pesticide" does not include liquid chemical sterilant products (including any sterilant or subordinate disinfectant claims on such products) for use on a critical or semi-critical device, as defined in section 201 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321). For purposes of the preceding sentence, the term "critical device" includes any device that introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body and the term "semi-critical device" includes any device that contacts intact mucous membranes but

which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. [FIFRA Section 2(u)]

The term "pesticide" applies to insecticides, herbicides, fungicides, rodenticides, and various other substances used to control pests. The definition encompasses all uses of pesticides authorized under FIFRA including uses authorized under sections 3 (registration), 5 (experimental use permits), 18 (emergency exemptions), 24(c) (special local needs registrations), and 25(b) (exemptions from FIFRA).

Note: Drugs used to control diseases of humans or animals (such as livestock and pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration. Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators and thus are not pesticides. Biological control agents, except for certain microorganisms, are exempted from regulation under FIFRA. (Biological control agents include beneficial predators such as birds or ladybugs that eat insect pests, parasitic wasps, fish, etc).

This permit uses the term "pesticide" when referring to the "pesticide, as applied." When referring to the chemical in the pesticide product with pesticidal qualities, the permit uses the term "active ingredient."

Pesticide Product – a pesticide in the particular form (including composition, packaging, and labeling) in which the pesticide is, or is intended to be, distributed or sold. The term includes any physical apparatus used to deliver or apply the pesticide if distributed or sold with the pesticide.

Pesticide Research and Development – activities undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development).

Pesticide Residue – includes that portion of a pesticide application that is discharged from a point source to waters of the State and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

Point Source – any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff. [40 CFR 122.2]

Pollutant – dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. [Excerpted from 35 Ill. Adm. Code 301.340] For purposes of this definition, a "biological pesticide" is considered a "biological material," and any "pesticide residue" resulting from use of a "chemical pesticide" is considered a "chemical waste." [Excerpted from 40 CFR 122.2]

Small Entity – any (1) public entity that serves a population of 10,000 or less, (2) a person(s) applying pesticides on private property where they or any member of their immediate family reside or property that they own or lease, or (3) a private enterprise that does not exceed the Small Business Administration size standard as identified at 13 CFR 121.201.

Target Pest – the organism(s) toward which pest management measures are being directed.

Total Maximum Daily Loads (TMDLs) – a TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount of the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges, load allocations (LAs) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. [See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7]

Treatment Area – the entire area, whether over land or water, where a pesticide application is intended to provide pesticidal benefits within the pest management area. In some instances, the treatment area will be larger than the area where pesticides are actually applied. For example, the treatment area for a stationary drip treatment into a canal includes the entire width and length of the canal over which the pesticide is intended to control weeds. Similarly, the treatment area for a lake or marine area is the water surface area where the application is intended to provide pesticidal benefits.

Waters – all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this state.

Water Quality Impaired – see 'Impaired Water'.

Water Quality Standards – a water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. Water quality standards also include an antidegradation policy and implementation procedures. See 35 Ill. Adm. Code 302.

Wetlands - means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. [40 CFR 122.2]

A.2. ABBREVIATIONS AND ACRONYMS

CFR	Code of Federal Regulations
CWA	Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq*)
FFDCA	Federal Food, Drug, and Cosmetic Act
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §136 *et seq*
FWS	United States Fish and Wildlife Service
IDNR	Illinois Department of Natural Resources
IEPA	Illinois Environmental Protection Agency
IEMA	Illinois Emergency Management Agency
IPM	Integrated Pest Management
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NRC	National Response Center
ORW	Outstanding Resource Water
PDMP	Pesticide Discharge Management Plan
TMDL	Total Maximum Daily Load
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
WQS	Water Quality Standard

Appendix B
Standard Permit Conditions – Attachment H

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8-Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

(1) **Duty to comply**. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.

(2) **Duty to reapply**. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.

(3) **Need to halt or reduce activity not a defense**. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(4) **Duty to mitigate**. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(5) **Proper operation and maintenance**. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

(6) **Permit actions**. This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(7) **Property rights**. This permit does not convey any property rights of any sort, or any exclusive privilege.

(8) **Duty to provide information**. The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.

(9) **Inspection and entry**. The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) **Monitoring and records**.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.

(c) Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The individual(s) who performed the sampling or measurements;

(3) The date(s) analyses were performed;

(4) The individual(s) who performed the analyses;

(5) The analytical techniques or methods used; and

(6) The results of such analyses.

(d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) **Signatory requirement**. All applications, reports or information submitted to the Agency shall be signed and certified.

(a) **Application**. All permit applications shall be signed as follows:

(1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation:

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

(b) **Reports**. All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

(c) **Changes of Authorization**. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) **Certification**. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(12) **Reporting requirements**.

(a) **Planned changes**. The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.
Notice is required when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).

(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal

sites not reported during the permit application process or not reported pursuant to an approved land application plan.

(b) **Anticipated noncompliance.** The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) **Transfers.** This permit is not transferable to any person except after notice to the Agency.

(d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(e) **Monitoring reports.** Monitoring results shall be reported at the intervals specified elsewhere in this permit.
(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).
(2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
(3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.

(f) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:
(1) Any unanticipated bypass which exceeds any effluent limitation in the permit.
(2) Any upset which exceeds any effluent limitation in the permit.
(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.
The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24-hours.

(g) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).

(h) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.

(13) **Bypass.**
(a) Definitions.
(1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
(2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).

(c) Notice.
(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).

(d) Prohibition of bypass.
(1) Bypass is prohibited, and the Agency may take enforcement action against a permittee for bypass, unless:
(i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(iii) The permittee submitted notices as required under paragraph (13)(c).
(2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).

(14) **Upset.**
(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant

evidence that:
(1) An upset occurred and that the permittee can identify the cause(s) of the upset;
(2) The permitted facility was at the time being properly operated; and
(3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).
(4) The permittee complied with any remedial measures required under paragraph (4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

(15) **Transfer of permits.** Permits may be transferred by modification or automatic transfer as described below:
(a) Transfers by modification. Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
(b) Automatic transfers. As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:
(1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
(2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
(3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.

(16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
(a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
(1) One hundred micrograms per liter (100 ug/l);
(2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
(3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
(4) The level established by the Agency in this permit.
(b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.

(17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
(a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
(b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a sour introducing pollutants into the POTW at the time of issuance of the permit.
(c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
(a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
(b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
(c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.

(19) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.

(20) Any authorization to construct issued to the permittee pursuar to 35 Ill. Adm. Code 309.154 is hereby incorporated b reference as a condition of this permit.

(21) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.

(22) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both.
Additional penalties for violating these sections of the Clean Water Act are identified in 40 CFR 122.41 (a)(2) and (3).

(23) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(25) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.

(26) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.

(27) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board or any court with jurisdiction.

(28) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.

(. 7-9-2010 bah)

Appendix C. – 2014 Annual Report

ROCKFORD

Timothy Hanson
Director
Public Works Department

VIA ELECTRONIC TRANSMISSION
epa.ms4annualinsp@illinois.gov
melissa.parrot@illinois.gov

March 31, 2015

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section

Subject: NPDES Permit No. ILS000001

Dear Sir or Madam:

The City of Rockford hereby submits its annual report for the subject stormwater permit. If you have any questions please contact our Stormwater Program Manager, Brad Holcomb, at 779-348-7611 or by email at brad.holcomb@rockfordil.gov.

Very truly yours,

Tim Hanson
City of Rockford
Public Works Director

425 East State Street Rockford, Illinois 61104-1068 USA
(815) 987-5570 (815) 967-7058 fax **www.rockfordil.gov**

THE CITY OF
ROCKFORD
ILLINOIS, USA

ANNUAL REPORT
Calendar Year 2014
CITY OF ROCKFORD, ILLINOIS
MUNICIPAL SEPARATE STORM SEWER SYSTEM

NPDES Permit No. ILS000001

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1. INTRODUCTION

This report is prepared in compliance with the City of Rockford's NPDES Stormwater Permit No. ILS000001. The report contains information for calendar year 2014. Part V.C of the NPDES permit requires a system-wide report containing the following sections:

Required Information	See Herein
1. Status of SWMP	Chapter 2
2. SWMP Modifications	Chapter 3
3. Revisions to the Assessments of Controls and Fiscal Analysis	Chapters 3
4. Overall Summary of Data	Appendices B & C
5. Annual Expenditures	Chapter 3
6. Summary of Enforcement Actions, Inspections and Public Education Programs	Chapters 2 & 3
7. Identification of Water Quality Improvements or Degradation	Appendices B & C
8. Locations of Monitoring Outfalls	Appendix A
9. Summary of SWMP Experiences	Chapter 3
10. Summary of Effectiveness and Accuracy of Monitoring Program	Chapter 3

2. STATUS OF SWMP

Part III in the permit, Schedules for Implementation and Compliance, requires the City to provide summaries of implementation components of the Stormwater Management Program (SWMP):

- Structural Controls
- Erosion & Sedimentation Controls, Construction Site Runoff and Post-Construction Stormwater Management Program
- Roadways
- Flood Control
- Pesticide, Herbicide, and Fertilizer Application
- Illicit Discharge and Improper Disposal
- Industrial and High Risk Runoff
- Public Education, Pollution Prevention and Good Housekeeping

The activities undertaken in these areas and status of compliance with permit conditions are described in this chapter of the report.

During 2014, the City's stormwater management program accomplished a myriad of new and continuing objectives which are detailed within this report.

2.1 STRUCTURAL CONTROLS

This section addresses Parts II.A.2 and III.A of the Permit.

The City continues to inspect and maintain data on basins and other features of the stormwater system. The City regularly updates its spatial and tabular databases that record inspections, complaints and maintenance items, master planning, and compliance with NPDES permit conditions. Details from a January 2015 overview of the most important databases for structural controls are in Table 1.

Table 1
CITY OF ROCKFORD STORM SEWER INFORMATION SYSTEM

Theme	Database Fields / Features	Comment
Detention Structure	Location, current water depths (wet ponds), area, ID link to inspections	Documents detention structures, all but 7 of which are privately owned and maintained
Detention Basin Storm event Inspection	Detention structure No., crew, date, last rainfall, sediment present, floatables present, water present, inspection ID	396 records
Culvert	Location, material type, ID, shape, length, upstream and downstream invert elevations, size, other	3,291 records
Storm Sewer	Location, ID, shape, size	26,909 records
Manholes	Installation date, diameter, frame material, condition, inspection date, inspector	8,386 records (7,297 Active)
Inlets	Installation date, type, inspection date, inspector	20,694 records
Outfalls	Size, material, end structure, drainageway	928 records

Per the permit, the City must operate and maintain any stormwater structural controls for which they are the owner or operator in a manner so as to reduce the discharge of pollutant loading. In compliance with the permit, the City of Rockford continually maintains their stormwater system, including basin improvements. Appendix D has information about City-owned or City-operated stormwater control basins and structures including an update of recent maintenance activities and improvements:

In 2013 the City evaluated Alpine Dam, Page Park Dam and Levings Lake Dam and no longer considers these to be part of the detention basin list. They are inspected and maintained in accordance with the Right-of-Way & Drainageway Inspection and Maintenance Standard Operating Procedures. Similarly, the City re-evaluated 1623 Log Cabin and 1740 Colorado and determined these are drainageways and not detention basins and will be inspected and maintained as such.

The City regularly evaluates the storm sewer system for opportunities to improve water quality and quantity concerns of the system. Table 2 shows a yearly summary of inlet maintenance and repairs.

TABLE 2
YEARLY COMPARISON OF INLET MAINTENANCE AND REPAIRS

Year	Number of Inlets Deducted	Number of Manholes Deducted	Number of Inlets Repaired	Number of Manholes Repaired	Feet of Storm Drains Cleaned	Inlets & Manholes Installed & Repaired Through CIP
2012	175	16	55	13	3,583	647
2013	85	0	110	5	1,271	561
2014	112	22	130	22	2,638	636

- The State of Illinois completed reconstruction of the entire storm sewer system along West State Street from Kilburn to Sunset Avenue that began in 2013.
- In 2014 the City completed construction on Morgan Street Bridge, removing piers from the Rock River and reconstructing the storm sewer system from Seminary St. to S. Main Street.
- State of Illinois began reconstruction of South Main Street including stormsewer system.

Per Permit Part II.A.2.b, the City must establish and implement a program to monitor basins on a periodic basis to assess maintenance efforts. In 2011, the City of Rockford stormwater staff visually inspected all detention and retention basins. The City is using this information to identify maintenance needs, and satisfy requirements of the permit. In 2012, the City sent letters basin owners requesting they address any maintenance deficiencies. Neighborhood associations regularly request technical assistance from the Department of Public Works to improve their facilities, and to the extent possible, the City provides this assistance at no cost to the associations.

In April of 2013, the City performed a storm event inspection on all known detention basins within the City. The City sent letters to each basin owner detailing maintenance needs and the timeframe to complete the repairs. In 2014, the City performed follow-up inspections on 46 detention basins to determine if maintenance had been completed. All other detention basins had maintenance in progress or had been completed. Twenty-six detention basins required a second notice being sent. All detention basins will be inspected again in 2015. There were no storm events of 4 inches or greater in a 24 hour period to require a storm event inspection.

Currently the City's only enforcement method is related to notes on the recorded plat which has made it difficult to send property owners to Code Hearings. The City has rewritten its stormwater ordinance and has developed an enforcement plan to address these issues. These are scheduled for review by the City Council in 2015.

Table 3 indicates major improvements to detention basins and drainageways resulting from inspections. All of these entities worked closely with the City to address these maintenance items:

Table 3
LARGE DETENTION BASIN MAINTENANCE PROJECTS

Year	Site Location	Cooperating Agency/Company	Project Type
2013	E. State & Roxbury	OSF Medical Center, completed in 2014	Repairs to detention basin and creek relocations
2013	Harrison Park	Harrison Park Homeowners Association	Repair and maintenance of the inlet structure with the installation of gabion baskets.
2013	3815 Harrison Ave.	Rosecrance	Repair and maintenance of detention basin.
2013	Forest Hills & Riverside	Walmart	Detention Basin Maintenance
2013	East State St. & Sundae	First Rockford Group	Repair of drainage channel
2013	Renaissance Corners	Renaissance Development Inc.	Drainage improvements and detention basin repairs
2013	Logistics Detention Pond	Logistics Parkway, LLC & Cord Construction, completed in 2014	Basin expansion and clearing
2014	Perryville Promenade & Spring Crossing Detention ponds	First Rockford Group	In-series, multi-stage detention facilities

OSF Medical Campus Detention Repairs

Logistics Park Detenion basin during construction and after seed germination.

Part II.A.2.d of the permit requires the City to identify eroding stream channels in its jurisdiction and remediate them. In the fall of 2013 the City began creek walks in conjunction with outfall inspections to review creek conditions. These walks include locating obstructions in the creek which may inhibit flows as well as areas with significant erosion. These creek walks were completed in 2014 and are currently being reviewed though no life safety concerns were noted during the inspections. Bank stabilization and channel repair projects are under design in 2014 and proposed to be under construction in 2015.

OSF Medical Campus creek repairs completed in 2014.

Harrison Avenue drainage ditch repair completed in 2014.

2.2 EROSION AND SEDIMENTATION CONTROL, CONSTRUCTION SITE RUNOFF AND POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM

This section addresses Parts II.A.3 and III.A of the Permit.

The City began updating its stormwater ordinance (Ord. No. 2006-157-0) in 2014 and anticipates approval in 2015. As part of this ordinance change the City has also created an Enforcement Response Plan. This is in response to revisions to IEPA's General Construction Permit (ILR10) as well as the State and Federal post construction management requirements.

In 2014, 149 site development permit applications were received and reviewed by Department of Public Works staff for application of proper construction site erosion controls. Most projects did not require Stormwater Pollution Prevention Plans (SWPPP), but erosion and sedimentation control plans were reviewed. Many projects were not built but staff reviewed all permit applications for compliance with the ordinance. Appendix E lists project reviews that had or needed to have SWPPPs.

In 2014 the City performed 205 drive-thru erosion and sediment control reviews and erosion and sediment control inspections. Drive-thru inspections are visual assessments of a construction site and takes into account site cleanliness and condition of in-place BMP's. An erosion and sediment control inspection is a review of the SWPPP, erosion and sediment control plan, inspection records, and site conditions. Table 4 gives a yearly review of plan reviews and inspections. Appendix D gives dates of these inspections and generalities of follow-up actions. These inspections are performed in compliance with Permit Parts II.A.3.a.iii.

ESC inspection performed by City Stormwater staff

Table 4

Plan Review and Erosion and Sediment Control Yearly Comparison

Year	# Plans Reviewed	# Drive Through Inspections	# Full ESC Inspections	# Requiring Follow Up Inspections	# Submitted to Code Enforcement
2012	100	NA *	59	27	0
2013	127	154	62	109	0
2014	149	110	95	152	2 **

*Drive through inspections were not tracked

**Stop work orders issued for improper permitting

Permit Parts II.A.3.a.vi and a.vii require the City to develop a field guide for inspection of construction site BMPs and to provide appropriate soil erosion education and training for developers, development engineers, and construction site operators. The City references the Illinois Urban Manual and IDOT's Erosion and Sediment Control Field Guide for Construction Inspections, as their primary field guides for doing inspections.

The Stormwater & Environmental Team (SWET) also developed a Stormwater & Environmental Field Guide for Public Works Engineering Division staff. This guide includes information regarding erosion and sediment control requirements on City of Rockford Projects, Illicit Discharge Detection and Elimination procedures for reporting, and any other pertinent stormwater related topics. This guide has been reviewed and updated and reviewed with the City's Public Works Engineering staff annually.

In April of 2014 the City hosted its annual water pre-con training session for contractors and consultants. During this training the City reviewed erosion and sediment control requirements. In addition, City staff spoke at the annual Winnebago/Boone County Soil and Water Conservation District erosion and sediment control seminar where they discussed the City's enforcement procedures for erosion and sediment control inspections.

In 2014, select City staff participated in numerous stormwater related training opportunities. This demonstrates the City's compliance with Permit Parts II.A.3.a.vi and a.vii. Table 5 includes training activities in other aspects of stormwater management, included here for conciseness.

Table 5

STAFF & PUBLIC OFFICIAL TRAINING IN 2014

Training	Date	Sponsor	Staff	Hrs.
Stormwater Staff Meeting (Review of stormwater program and objectives for the week)	Weekly	SWET	Brad Holcomb, Dean Kurth, Marcy Leach, Ryan Lundburg, Jason Irvin, Jamie Rott, Kelly Nokes, Justin Emerson	1.5
Industrial Stormwater Permit Guide (online training)	1/22 & 2/4, 2014	PNEAC, www.pneac.org/stormwater/	Brad Holcomb, Jason Irvin	1
Introduction to CRS	1/21/2014	ASFPM	Brad Holcomb	1
Liability & Taking Issues in Floodplain Management	1/24/2014	ASFPM	Marcy Leach, Brad Holcomb, Dean Kurth	1.5
Industrial program staff training (review of IHRRI SOP, Inspection procedures, database, document management)	2/5/2014	Brad Holcomb(COR)	Jason Irvin	1
Southwest Wisconsin Erosion Control/Stormwater Quality Conference	3/4/2014	Stetson Building Products	Marcy Leach, Brad Holcomb, Dean Kurth, Ryan Lundberg, Jason Irvin	6

Table 5

STAFF & PUBLIC OFFICIAL TRAINING IN 2014

Training	Date	Sponsor	Staff	Hrs.
Introduction to the Toxics Release Inventory and the 2012 TRI National Analysis Report	3/5/2014	USEPA	Brad Holcomb, Dean Kurth	1.5
Innovative Transportation Stormwater Management; Green Infrastructure in Road Projects	3/6/2014	USEPA	Brad Holcomb, Jason Irvin	2
USACOE Flood Risk Management Outreach Meeting	3/6/2014	ACOE	Marcy Leach, Dean Kurth	4
SWCD ESC Workshop	3/19/2014	Winnebago, Boone, Dekalb County SWCD's	Ryan Lundberg, Marcy Leach, Jason Irvin, Brad Holcomb (speaker), Warren Stahl, Del Black, Dean Kurth	4
Water & Stormwater Pre-con	4/03/2015	Water Dept. & SWET	Marcy Leach (speaker), Dean Kurth, Pablo Solares, Brad Holcomb (speaker), Kelly Nokes, Warren Stahl, Tyler Nelson, Justin Emerson, Tim Hinkens, Rick Rundblade, Del Black, Jen Jackson, Ashley Bernard, Jamie Rott, Jason Irvin	2
More Bang for the Buck: Integrating Green Infrastructure into Existing Public Works Projects	5/6/2014	USEPA	Brad Holcomb, Ryan Lundberg	1.5
Construction Kick-off & Illicit Discharge Detection and Elimination Program	5/21/2014	City of Rockford - SWET	Managers, technicians, engineers (19 attendees)	1
NHMA International Practitioners Symposium	June 22-27, 2014	NHMA, Association of State Floodplain Managers	Marcy Leach (speaker)	14
On the Road to Reuse: Residential Demolition Bid Specification Tool	6/26/2014	USEPA	Dean Kurth, Ryan Lundberg	1.5
Stormwater Training Streets & Code Enforcement	7/30/2014	City of Rockford - SWET	Neighborhood Enforcement Specialists, Street Division staff (25 attendees)	1
The Case for Changes in Stormwater Management	8/26/2014	RMAP, NLI, BCCD, WCSWCD, Winnebago County	Matt Vitner, Marcy Leach (speaker), Dean Kurth, Patrick Hayes, Kerry Partridge	4
Stormwater Program Presentation to Alderman	9/15/2014	SWET - Marcy Leach Presenter	Aldermen: Frost, Beck, McNamara, Beach	0.5

Table 5
STAFF & PUBLIC OFFICIAL TRAINING IN 2014

Training	Date	Sponsor	Staff	Hrs.
Stormwater Program Presentation to aldermen	9/16/2014	SWET - Marcy Leach Presenter	Aldermen: Chiarelli, Hill, Hervey, Thompson-Kelly	0.5
Stormwater Program Presentation to aldermen	9/17/2014	SWET - Marcy Leach Presenter	Alderman: McNealy	0.5
Stormwater Program Presentation to aldermen	9/22/2014	SWET - Marcy Leach Presenter	Alderman: Getchius	0.5
Stormwater Program Presentation to aldermen	9/25/2014	SWET - Marcy Leach Presenter	Alderman: Oddo	0.5
Stormwater Program Presentation to State Senators & Representatives	10/8/2014	SWET - Marcy Leach Presenter	Senator Stadelman & Representatives Wallace & Cabello	0.5
Stormwater Program Presentation to State Senators & Representatives	10/9/2014	SWET - Marcy Leach Presenter	Senator Syverson & Representative Sosnowski	0.5
Stormwater Program Presentation	10/23/2014	SWET - Marcy Leach Presenter	City of Rockford Public Works Department Supervisors	0.25
2014 Chicagoland Geothermal Seminar	11/6/2014	Geothermal Alliance of Illinois	Matt Vitner, Marcy Leach, Brad Holcomb	6
Erotex Ground Control Conference	11/12/2014	Erotex - (Erosion Control BMP supplier)	Marcy Leach, Dean Kurth, Brad Holcomb, Ryan Lundberg	8
Green Infrastructure for Localized Flood Management	12/2/2014	USEPA - Webcast	Brad Holcomb	1.5
Understanding Flood Zone Determinations	12/4/2014	Association of State Floodplain Managers	Marcy Leach, Brad Holcomb	1.5
Stormwater Pollution Prevention Plans for Industrial Facilities: Drafting and Implementation Guidance	12/10/2014	Lorman Education Services	Brad Holcomb	1.5
Illinois EPA Rockford Region MS4 Seminar	12/11/2014	Illinois EPA	Brad Holcomb, Dean Kurth, Tyler Nelson, Jeremy Carter, Jamie Rott, Ryan Lundberg, Jason Irvin, Warren Stahl, Harry Noble, Tyler Pearson, Gio Giacomazzo	4

The City is also required by the permit to continue to respond to citizen complaints. In 2014, the City did not receive any complaints from citizens regarding erosion controls (or the lack thereof); these complaints are typically logged and responded to by staff.

Permit Part II.A.3.b requires the City to use a comprehensive master planning approach to minimize the discharge of pollutants from areas of development and redevelopment after construction is completed. Further, paragraph (i) of this section specifically requires the City to use the master planning approach to identify stormwater management issues on a watershed scale. A stormwater watershed assessment was completed in 2008, and the master planning process continues. In 2012, the City's master planning consultant completed steady and unsteady-state models of Keith Creek and in 2013 watershed assessments were completed for Madigan and Buckbee Creeks. The City continues to complete projects based on those assessments. In 2014, the City began a drainage watershed study of the Airport East Watershed. The study is intended to be used to update the City's 2006 FEMA maps to properly dictate the limits of the floodplain for this watershed and determine potential water quality and quantity improvement projects.

In addition, the City has also developed several standard operating procedures. By developing standard operating procedures the City has made their stormwater program more efficient and effective. In addition, these procedures are part of the Stormwater Master Plan which continues to be in development by a local consultant and scheduled for completion in 2015.

Standard Operating Procedures for the following areas were developed or updated:

- Erosion and Sedimentation Control, Plan Review and Regulatory Inspections
- Stormwater & Environmental Education
- Illicit Discharge Detection and Elimination
- Detention Basin Inspections
- Industrial High Risk Runoff Inspection Program
- Pesticide, Herbicide and Fertilizer Applications for City Employees
- Street Sweeping
- Monitoring and Sampling of Stormwater
- Right-of-Way Maintenance

This same consultant is also revising the City's Stormwater Technical Manual which is a guide to assist developers and applicant in complying with the City's stormwater ordinance and the technical requirements of the stormwater permit application.

Permit Part II.A.3.b.iii requests that the City require multi-stage runoff control to protect channel stability from erosion. In 2012, the City made additional progress on the Harmon Park Flood Control Project which includes multi-stage runoff control incorporating in-series detention and drainageway systems. Construction of two additional basins and a grassed swale began in 2012 and were completed in 2013. There has been minimal development in 2014 within the City limits that would require or benefit from multi-stage runoff control. Most construction included small building or parking lot additions where the City worked with the property owners to include landscaping that would benefit water quality. A recent project that was completed in 2013 was the Swedish American Cancer Project that incorporates both a retention and detention system and bioswales. An example of retrofitting an existing basin for multi-stage control, the City worked with the Harrison Park Neighborhood Association to incorporate an erosion control gabion system at the inlet to the pond that also is designed to be an energy dissipater and retain silt and debris to minimize the amount that enters in the detention pond.

In 2014, City staff worked with the developer of Perryville Promenade Subdivision and their consultants to design in-series, multi-stage detention facilities. This was to preserve land for retail building including a large Meier grocery store and to work around wetlands located in the center of the site. This type of design is not typical for the City but it was an opportunity to retrofit two existing private detention ponds located on the east and west sides of a county highway. The project consists of four detention ponds and two sediment traps. This was the first project requiring the formal post construction management plan as required under the draft stormwater management ordinance.

Permit Part II.A.3.b.v requests that the City monitor facilities during dry weather, conduct field surveys, and work with private owners of existing facilities and neighborhood organizations to assess performance. As referenced in Section 2.1, the City performed a storm event inspection on all known detention basins in April of 2013. Those with deficiencies were given notifications. In 2014 there were no storm events requiring detention basins to be inspected. All detention basins will be inspected again in 2015.

These activities demonstrate compliance with Part II.A.3.b.v.

2.3 ROADWAYS

This section addresses Parts II.A.4 and III.A of the Permit.

Subsequent to 2012, all street sweeping activities within the City of Rockford were performed internally. During this period, the city owned and maintained 7 street sweepers at all times although it was an aging fleet in need of replacement. In the four years prior to 2012, the annual cost to the city for personnel, equipment and disposal was $850,000 to $950,000 per year. In August of 2011, it was decided to outsource street sweeping to a contractor in an effort to realize a savings in overall annual costs for this city service while at the same time reassigning manpower resources to the Forestry Section of the Street Division. As a result, city street sweeping costs were reduced to $560,000 for the year 2012 and all sweeping cycles were completed. Street sweeping has gone through an evolution of practices over the past 25 years to include once or twice a year sweeping to a continuous city-wide street sweeping operation throughout the warm weather season. The current practice described in the Street Sweeping SOP evolved as a compromise between the various extremes in order to suit both budget and lower staffing issues.

The City of Rockford once again outsourced street sweeping in 2014. The records are tabulated in Table 6 and a 5-year comparison is shown in Table 7. In total, the contractor performed sweeping on 2,309 miles of roads, removing approximately 2,595 tons of debris, keeping these pollutants out of the MS4.

Table 6

CITY OF ROCKFORD 2014 STREET SWEEPING PROGRAM

Month	Quantity (tons)*	Street Sweeping Miles (Outside Central Business District)*	Central Business District Miles
January	0	0	0
February	0	0	0
March	54	0	24
April	441	332	48
May	501	316	48
June	428	311	24
July	162	105	72
August	13	0	48
September	131	163	48
October	334	323	48
November	250	189	48
December	283	138	24
Total	2597	1877	432

*Quantities rounded to nearest tenth

Table 7

YEARLY COMPARISON OF STREET SWEEPING OPERATIONS

Year	Quantity(tons)	Miles (Outside CBD)	Miles (CBD)
2009	4720	2626	1367
2010	3951	2304	1306
2011	3345	1427	1077
2012	1989	1877	408
2013	1751	1581	432
2014	2597	1877	432

2009 through 2011 tonnage numbers are based on the City having a street sweeping dump location at the City Yards. This dump location was utilized by the other Divisions within Public Works for truck cleanout and small debris cleanup; therefore the tonnage numbers include those quantities as well. The mileage difference in the Central Business District (CBD) is due to the City in 2009-2011 utilizing 1-2 sweepers nightly for 7 months to clean the area. The contractor is able to sweep the CBD in 3 nights twice a month and still maintain a clean environment downtown. The decrease in tonnage and miles for 2013 is due to the contractor only completing 85% of the contract since the winter weather hit Rockford earlier in the year than expected. In 2014, all street sweeping cycles were completed.

Each year prior to and through the winter season the City analyzes its salt supply and the rate it is being applied during the operations. If needed the amount of salt ordered, used and applied is adjusted. The City chooses to use salt for de-icing operations since using sand is harsh on the street sweepers and spreaders. Since the City is responsible for keeping the gutters, storm structures and ditches clean using sand for de-icing operations puts undue burden on the City staff, budget and equipment and is counter-productive to stormwater management. Salt shortages may force the City to use sand similar to year 2009, but this is a last resort option. Table 8 provides details for the City's deicing program for the last six years.

Table 8

CITY OF ROCKFORD DEICING PROGRAM

Year	Snow Accumulation	Salt Used	Salt/Snow	Sand Used	Mixed Salt & Sand
2009	37 inches	16,150 tons	436 tons/in	800 tons	0
2010	43 inches	22,900 tons	533 tons/in	0	100 tons
2011	32.6 inches	7,200 tons	221 tons/in	0	0
2012	25.1 inches	8,100 tons	323 tons/in	0	0
2013	49 inches	18,933 tons	386 tons/in	0	0
2014	47.5 inches	17,808 tons	378 tons/in	0	0

Deicing material use varies not only with snow accumulations, but with ice, freezing rain, and ambient temperatures. In 2014, the City evaluated salt usage for sidewalks on City owned properties. The product used during the 2012/2013 season had to be applied twice as much as previous products to be effective. During the 2013/2014 season another product was used but still had to use 50% more product than wanted. For the 2014/2015 season the City decided to pay slightly more for Powerthaw. This is an eco-friendly product that allows the City to get desired effects by using less of the product.

Permit Part II.A.3.d., requires the City to conduct a study of alternate side parking. During the first NPDES permit period, the City evaluated alternate side parking. The decision was made that alternate side parking will only be in effect for snow emergencies: parking on odd days will be on odd sides of the street and vice versa. This ordinance is enforced through ticketing. A second alternate side parking study was written into the last NPDES permit. Though a study was not performed, odd/even parking for sweeping has been considered and evaluated from a theoretical standpoint;, however, it has been dismissed as being approximately 60% more costly with no City of Rockford ordinance in place that would allow city staff to enforce parking violations. Additionally, city aldermen have been reluctant to discuss a year-long odd/even parking ordinance as they feel it would put an undue hardship on citizens. Because of this the City has requested that this language be removed from the new permit.

2.4 FLOOD CONTROL

This section addresses Parts II.A.5 and III.A of the Permit.

2.4.1 Narrative Evaluation

In recent years, in the aftermath of flooding events, the City has planned and built multi-stage flood control structures in the Harmon Park neighborhood. In 2011, 1623 Log Cabin and 1740 Colorado drainageways were constructed. In 2012, construction on two new drainageways (2003 Montana & 2208 Colorado) began and was completed in 2013. In 2013, the City acquired and demolished 3 additional properties in the Harmon Park area and one more in 2014. In 2014, the City also renewed talks with the Rockford Park District regarding a regional detention facility at Harmon Park.

Designs were completed in 2014 for additional work to be completed in Harmon Park Phase 4b in 2016.

Colorado Avenue drainageway connecting to existing downstream channel.

The City has an ongoing drainage improvement program as part of its Capital Improvement Program (CIP). The City incorporates stormwater requirements within its Subdivision Ordinance and Stormwater Ordinance. Tables 9 and 10 lists some of the flood control and drainage projects completed in 2014.

Table 9

FLOOD CONTROL AND DRAINAGE PROJECTS COMPLETED IN 2014

Project	Description
Tallwood Ave.	Inserted HDPE liner to replace corroded corrugated metal pipe.
Kennon Road	Flood mitigation: Reconstructed road, added storm sewer, and drywell to better control run-off.
Harrison Ditch	Replaced failed concrete ditch
Junction Road Ditch Repair	Stabilized failed drainage ditch
1741 South Trainer Road	Flood mitigation: installed inlets and storm sewer at 1741 Trainer Road to better control significant rain events.
Pierpont Ave. Box Culvert Cleaning	Cleaned sediment from box culvert to improve functionality of drainage system.
Deer Path Shoulder	Shoulder Stabilization: Added rip rap to shoulder to better control erosion.
Wesleyan Ditch	Temporary stabilization: Installed rip rap in areas where concrete ditch has failed.

Pierpont Avenue box culvert and ditch cleanout & concrete channel construction.

Tallwood Avenue Liner to replace corroding metal pipe.

In 2014 the City continued to improve local drainage by clearing channels of debris and accumulated silt that were known to restrict conveyance. Table 10 tabulates these projects.

Table 10
SILT AND DEBRIS REMOVAL FROM DRAINAGEWAYS IN 2014

Date	Address (Watershed location)	Silt/Debris Removed (tons)	Operation
Multiple Occasions	Arden Court (Keith Creek)	3	Clean Drainage Ditch
Multiple Occasions	Kishwaukee & Sandy Hollow Trash Rack (Southeast) permitted floatable location	3	Trash rack clean out
Multiple Occasions	Trash Rack Clean Out	3.75	Removal of debris from trash racks
5/13/2014	Schnucks off Charles Street (Keith Creek)		Removal of limbs and logs at 3 bridges
7/30/2014	New Towns & Javelin Detention Basin, (Keith Creek)	37.66	Removal of silt and reshaping of basin.
8/12/2014	Logistics Park Drainageway (Airport East)		Removal of overgrowth and cut down trees
10/20/2014	Alpine Dam (Keith Creek), permitted floatables location	30 (RPD removed 10)	Removal of silt and reshape bank
10/31/2014	Spring Brook & Spring Lake (Spring Creek)	31.8	Removal of silt and reshape drainage
10/31/2014	Charles & Hunter	90	Removal of silt
11/12/2014	Woodbine & Gordon (Madigan Creek)	8.81	Removal of silt and reshape drainage

Before and after photos of silt removal from Alpine Dam

In 2014 (or in recent years), the City has also:

- Continued to be a part of the Resilient Neighbors Network (RNN) of the National Hazard Mitigation Association. RNN is a peer-to-peer sharing network intended to strengthen and expand local hazard mitigation programs, including flooding.
- Between 2006 and 2013, the City of Rockford and the Rockford Local Development Corporation (RLDC) have acquired and demolished over 115 properties and relocated the residents along Keith Creek in an ongoing effort to restore the floodplain and reduce future flood damage. In 2013, the City acquired and demolished 25 structures.
- Along Keith Creek at Kishwaukee Avenue the City completed a large flood control project in 2010. The channel was relocated to improve performance, and pools and riffles were installed. At this park, the City has removed two industrial buildings, six residential buildings, and a parking lot from the floodplain.
- A detailed hydraulic analysis of Keith Creek from Alpine Dam downstream to the Rock River has been completed and is incorporated into the preliminary FEMA flood risk maps.
- Worked with the Illinois State Water Survey on a hydrologic and hydraulic study of the Rock River and sub-watersheds in the City's jurisdiction. The study has been completed and preliminary flood risk maps have been released for public comment.
- The City notified property owners and held a public meeting with FEMA regarding new floodplain maps for the Rockford and Winnebago County area.
- Over the past several years the City completed bank stabilization at various locations with more under design for 2015. Primarily the work has been completed on Keith Creek such as at the Schnucks on Charles Street (gabions in 2012 & yearly brush cleanout) and the 5th Street wall.
- Continued designs for repairs to the concrete channel in the Southeast/Buckbee Creek Watershed.
- With the help of the Rockford Park District, continued twice annual cleaning of floatables and other debris from Alpine Dam trash rack and other stormwater structures and channels.
- Ongoing maintenance of storm sewer system, including street sweeping, inlet cleaning and repairs and storm pipe cleaning and repairs.
- In 2012 & 2013, five new automated samplers were purchased to replace old samplers as well as a turbidity meter, a colorimeter and 2 waterproof cameras and in 2014 a GPS unit and drone was purchased.
- The City reviewed and approved 15 floodplain encroachment permits.
- In conjunction with Winnebago County the City adopted the revised Countywide Multi-Hazard Mitigation Plan.

- The City revised its Emergency Operations Plan including a revision of the debris management and flood control section.

Per Permit Part II.A.5.a, the City must review and revise as appropriate its Stormwater Technical Manual, Subdivision Ordinance, and Flood Hazard Reduction Ordinance to include water quality standards and runoff control with respect to flooding and stormwater detention/control facilities. In 2014 the City completed a draft rewrite of the Stormwater Ordinance which is under review and expected to be adopted in 2015. The City has, also, begun a revision to the Stormwater Technical Manual.

Per Permit Part II.A.5.b, the City must continue to study the incorporation of trash racks on the outlet structure of Alpine Dam. It must also conduct and document feasibility studies of retrofitting the City's existing flood control devices to provide additional pollutant removal. Alpine Dam has a trash rack, but plans and specifications have been prepared for repairs to the dam.

In 2009 the City retrofitted the basins at Elliot Golf Course and in 2014 the City, in cooperation with a local contractor, completed expansion of the Logistics Park pond. This pond is also under design for additional retrofits. Though not City flood control structures, over the past several years the City installed trash racks at Holmes and Harrison, Arden Ct., Homewood, Delcy and Brookview, Greenleaf and Forestview, Weymouth and Lansdale, and at Parkview and Crabapple. Most of these are privately maintained. The City, also, has a trash rack located at Kishwaukee and Sandy Hollow at the Southeast (Buckbee Creek) drainage ditch.

The permit condition at Part II.A.5.c. requires the City coordinate regional flood control planning with surrounding communities. A regional detention facility, the I-90/Riverside detention pond, was constructed in 2011 through a public-private partnership led by the Village of Loves Park, but included City of Rockford, Winnebago County, Boone County, and the Rockford Memorial Hospital. The Winnebago County Watershed Improvement Plan Steering Committee (WCWIPSC) is a consortium of municipalities that include the City of Rockford. The WCWIPSC aims to effectively reduce nonpoint source pollution inputs in the watershed, attain water quality standards; improve habitat, and engage a wide range of audiences in the their efforts. WCWIPSC has undertaken a study of the Buckbee and Madigan Creek watersheds, with an aim of preparing an action plan for nonpoint source pollution control. Watershed Improvement Plans have been completed for both watersheds and in 2014 the committee met to discuss implementation of the plans and to obtain funding to complete projects. Also in 2014, elected officials and staff from throughout Winnebago and Boone Counties met to discuss regional stormwater management. In another regional effort, FEMA funded a hydrologic and hydraulic study to update flood maps of the lower Rock River, including large portions of the City's MS4 area. Drafts were completed in 2013 and public meetings were held in 2014 to answer questions of property owners affected by the map revisions. In 2014, the City continued to work closely with the Rockford School District for stormwater improvements as they complete their district wide facility improvement efforts.

Permit Part II.A.5.d., requires the City to investigate ways to significantly reduce "nuisance" flooding. Under the Inlet Reconstruction Program, City crews and contractors continued to reconstruct problem inlets, having rebuilt 130 in 2014 as well as 22 manholes. The City also repaired and/or replaced 636 inlets under the capital improvement program. Additionally, catch basins and laterals are regularly deducted, in 2014, 134 inlets and manholes and 2,638 feet of laterals were cleaned. Finally, the City

continues with a proactive approach to clearing creek channels and drainageways. Channel clearing activities have included: Keith Creek (2010-2011), Kent Creek (2012), Northwest Drainage Ditch (2012) and the Kent Creek South Diversion Channel (2013) and Logistics Park Drainageway in 2014. Just over 200 tons of accumulated sediment and debris were removed from open channels in 2014 including 9.75 tons of material removed from trash racks. It is anticipated that detention basins that were maintained as part of the inspections completed in 2011 and 2013 will also significantly reduce nuisance flooding. These activities demonstrate compliance with Part II.A.5.d.

A separate jurisdictional body, the Rockford Park District has a sustainability approach to stormwater management in its development, construction, operation, and repair and replacement of parks and facilities. Recent redevelopment at Sinnissippi Park on Rockford's riverfront included the installation of pervious pavers in the parking lot, green roof, and bioswale at the Nicholas Conservatory and Gardens, and the installation of native plant buffers along the riverfront and to filter runoff at the Eclipse Lagoon.

The City worked with the Rockford Public School District in 2013 & 2014 and was able to resolve several nuisance flooding complaints through the renovations to school buildings and sites. The City will continue to work with the School District in 2015 as the renovations continue.

2.5 PESTICIDE, HERBICIDE, AND FERTILIZER (PHF) APPLICATION

This section addresses Parts II.A.6 and III.A of the Permit.

On October 31, 2011, the City of Rockford was issued an NPDES Permit for pesticide use (ILG870147). This permit is issued to operators who discharge to waters of the State from the application of biological pesticides that leave a residue. The City's activities in the areas of weed control, mosquito control, and other areas are subject to the limitation in this permit. The City of Rockford has sent letters to area applicators informing them of their obligations to comply with this regulation.

The City monitors the use and application of PHF by Public Works Department and its contractors. The City also monitors its stormwater and streams for nutrients and the aquatic effects thereof. Only City personnel that are licensed by the State are allowed to apply PHF, consistent with State regulations and label instructions, but most herbicides used on City facilities are applied by contractors for the Streets Division. All herbicides and pesticides are mixed and applied at a rate not to exceed the recommended amounts on the Safety Data Sheets.

Based on present conscientious practices, the City has not seen the need to modify its ordinances or to initiate actions to control the use of PHFs on City lands. Each year, Street Maintenance Division contractors apply herbicides to raised medians, paved ditches, and sidewalks. In addition, cut brush and trees stumps are treated along areas being cleared to minimize regrowth. Table 11 lists the herbicide products used in 2014 by the Street Maintenance Division.

Table 11

CITY OF ROCKFORD HERBICIDE USAGE IN 2014

Product & Packaging	Amount Used	Active Ingredient
Makaze – 2.5 Gal jug	100 gal	Glyphosate
Oust – 3lb bottle	5lb	Sulfometuron methyl
Perspective – 1lb 4oz bottle	8lb 6oz	Aminocyclopyrachlor & Chlorsulfuron
Aquaneat – 2.5 gal jug	12.5 gal	Glyphosate – form of isopropylamine salt
Milestone – 2.5 gal jug	7.5 gal	Aminopyralid
Attach – 2.5 gal jug	5 gal	No Hazardous Chemical
Pathfinder II – 2.5 gal jug	20 gal	Triclopyr
Mizer – 2.5 gal jug	7.5 gal	No Hazardous Chemical
Signal colorant – 1 gal jug	4 gal	No hazardous chemical
Treeage – 1 liter jug	13 liters	Emamectin Benzoate
ZenithWSP – 1.6oz packets	19.2oz	Immidicloprid

The Street Maintenance Division performed testing on medians along Charles Street in 2011 to assess efficiency of reduced herbicide application rates. Chemical usage was reduced by 50% along these medians; weed regrowth was apparent, but the Division received no complaints. In 2012, the Division treated the median area by reducing the application rate by only 25% and found no regrowth. The City continues to monitor its application rates and makes adjustments as needed.

The City has printed and continues to distribute an educational brochure on PHF use around water bodies. The brochures are available to the general public in the lobby of City Hall, the Department of Public Works, at special events, and other public locations (library, coffee shops, etc.).

On October 22, 2013 the Rockford Park District Board of Commissioners approved a sustainability policy for the District. The purpose of this policy is to embrace the principles and practices of sustainability to insure that RPD assets will remain and be preserved for future generations.

The Rockford Park District uses only state-certified applicators to maintain approximately 180 sites (golf courses, ball fields, parks), of which about 45 sites require PHF applications. The extracted narrative below is the Rockford Park District's PHF policy (see environmental policy statement at http://www.rockfordparkdistrict.org/index.php/facilities/parks/natural-resources)

> "...to eliminate or restrict the use of pesticides and herbicides. We have determined that pesticides should only be used in critical areas. Critical areas are defined as:
>
> Circumstances where destructive pests (insects, diseases, funguses, etc.) either create health hazards for human beings or damage to the environment.
>
> - High-use turf areas that require specific management practices for their intended use (irrigation, fertilization, weed control, aeration, reseeding, etc.) such as golf courses, athletic areas, special use facilities with high impact such as Magic Waters, riverfront esplanades and parks. However, general dandelion spraying is not performed in neighborhood parks unless it is part of a specific turf management program.

- During the spring and fall when [we] normally receive calls from citizens requesting dandelion spraying in neighborhood parks or in other areas that will not be sprayed, staff should explain that we have adopted an environmental policy, will review their request and make a determination based on approved policy."

2.6 ILLICIT DISCHARGES AND IMPROPER DISPOSAL

This section addresses Parts II.A.7 and III.A of the Permit.

In 2011 the Rockford City Council amended the City's stormwater ordinance to include specific requirements to prevent, control, and reduces stormwater pollutants by the use of best management practices (Chapter 109 Stormwater and Surface Water Management, Article II). This amendment specifically demonstrates compliance with Part II.A.7 of the permit.

City stormwater management staff has developed standardized operating procedures for Illicit Discharge, Detection and Elimination (IDDE) Program.

Public Works staff regularly performs inspections for illicit discharges and improper disposal. In 2014 the City completed 35 IDDE reports (Appendix F.). Inspection data are recorded in field logs and electronic databases. Supplemental dry weather inspections are performed on an as-needed basis by the City during stormwater quality monitoring and the Rock River Water Reclamation District during their operation and maintenance activities.

The City also performs quarterly water quality testing and biennial bioassessments of the MS4 receiving streams as part of screening for illicit discharges and improper disposal under the presumption that the effects of such pollution would be evident in those chemical and biological surveys. The results of the water quality testing and bioassessment are provided in the appendices to this report. The bioassessments were completed in 2012 and 2014.

The City completed initial outfall inspections in 2011 and in 2014 the City completed another set of inspections. These inspections began in the fall of 2013 and were completed in 2014. The City purchased a GPS unit which was programmed to complete the inspections in 2014. While these inspections are presently being reviewed, investigations were initiated for any outfalls showing indicators of illicit discharges.

The City intends to complete these inspections in even years but begin during the previous fall for better viewing of outfall during leaf off conditions. The basic procedure at each outfall is to take a picture of the outfall and, if necessary, mark location on the map. Outfall data includes: a description of the outfall (e.g., pipe material, diameter), a description of physical indicators of potential illicit discharges for both flowing and non-flowing outfalls. For outfalls with indicators an illicit discharge investigation will be implemented as indicated in the Illicit Discharge Detection and Elimination Standard Operating Procedures.

The City, in cooperation with the Illinois EPA and Rock River Water Reclamation District, collects household hazardous wastes (HHW) as well as PHF, used tires, and used motor oil. Aerosols, corrosives, oxidizers, solvents, oil-based and latex paints, waste oils, pesticides, batteries, fluorescent lamps, and insulin disposal service are all accepted. Radioactive wastes, compressed gases, and explosives are not accepted. The collection program is available to all City residents and is publicized on the Illinois EPA's web site (http://www.epa.state.il.us/land/hazardous-waste/household-haz-waste/hhwc-schedule.html). In 2014, there were approximately over 445,684 pounds of household hazardous waste collected at the Rockford site (1552 drums), but it is a regional facility and not all the waste was from Rockford. In 2014, about 75 % of the vehicles (7055) dropping off HHW were registered to Rockford residents.

The City and the Park District participate in civic clean-ups of streams and drainage ways to remove improperly disposed debris. Annually the District hosts EarthBeat Volunteers from a local church to assist with creek clean ups to remove trash and debris. In 2014, the crews cleaned up along Kent Creek at from Auburn St to School Street and along Keith Creek within 10th Avenue Park.

Table 12

Illicit Discharge Detection and Elimination Yearly Comparison

Year	Number of Complaints / Reports	# Illicit Discharges	# Unknown	Non-Illicit Discharges	Number Submitted to Code Enforcement	HazMat Responses by Rockford Fire Dept.
2012	22	NA*	NA*	NA*	0	4
2013	25	NA*	NA*	NA*	0	4
2014	35	15	6	14	0	2

*More Detailed data collection put in place in 2014 and not readily available in previous years

2.7 SPILL PREVENTION AND RESPONSE

This section addresses Parts II.A.8 of the Permit. The Rockford Fire Department is the "First Emergency Responder" in the City. In compliance with Part II.A.8.a, the Fire Department's records were searched for all incidents of a material spill that may have entered the storm sewer system within the MS4 service area (personal communication, Captain Ken Eitenmiller, Rockford Fire Department). In 2014, there were 2 spills encountered by the Fire Department that could have entered the storm sewer system within the MS4 service area (Table 13). In 2014 the Fire Department updated the Hazardous Materials Standard Operating Procedures within the 2014 Emergency Operations Plan.

Table 13

HAZARDOUS MATERIAL RESPONSES BY THE ROCKFORD FIRE DEPARTMENT IN 2014

Date	Incident #	Location	Chemical	Incident Description
08/05/2014	14-0015560	4423 Manchester Dr.	Ground Pad-mounted ComEd Transformer	15-25 gallons drained from transformer with small amount getting to storm sewer drain and none noted at storm pipe to creek. Cleaned up by ComEd contractor
08/09/2014	14-0015817	2007 Kishwaukee St.	Industrial Structure Fire	Unknown quantity of acidic (deluded sulfuric acid) runoff into storm sewer from fire suppression efforts.

Following the incident that occurred at 2007 Kishwaukee Street, members of the Stormwater Environmental Team assisted in locating the stormsewer and the path the runoff of fire suppression waters took. Tests by the environmental consultant hired by the property owners indicated the fire suppression water did not reach waters of the state.

Permit Part II.A.8.b requires the City to include a summary of 'spill prevention' activities in the Annual Report. Currently, most industries are responsible for their own training and education. Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training is required by most industries; and, spill containment/prevention procedures have been developed by most industries. The Fire Department visits industrial facilities to develop a Pre-fire Plan Survey which includes such information as egress/ingress routes, location and types of chemicals on-site, combustible and flammable materials, special hazards, fire suppression methods, facility maps, emergency contact information, etc. The City has an active recycling campaign, thereby indirectly removing possible spill material from the environment. Overall, the City has not experienced many industrial spills.

City staff also serves on the Winnebago County Local Emergency Planning Committee (LEPC) which is made up of local officials who are required to develop a local chemical emergency response plan and to provide public education and information.

2.8 INDUSTRIAL AND HIGH RISK RUNOFF

This section addresses Parts II.A.9 and III.A of the Permit.

The City of Rockford continued its Industrial and High Risk Facility Inspection Program (IHRI) in 2014. The City made a concerted effort to broaden their database to make sure it has a better representation of the locations of industries and other potential high risk runoff facilities within City limits. These databases provide likely locations for industrial and high risk runoff and are currently the basis for future inspections. The City then prioritized these facilities based on potential for stormwater pollution. The City now has a database of over 6,700 industrial and commercial facilities, restaurants, fueling stations, and businesses. The City reviews and reprioritizes these facilities annually and is committed to inspecting all high priority facilities and 50% of the medium priority facilities each permit term. Inspections can also be triggered by citizen complaints, city crew field reports, stormwater monitoring data reviews, or other information suggesting a need for inspections or monitoring. Table 14 indicates the number of industrial and commercial facilities in Rockford and their ranking.

Table 14

Industrial Facility Database & Priority Rankings

Year	# High Priority Facilities	# Medium Priority Facilities	# Low Priority Facilities
2013	355	NA*	NA*
2014	385	416	5929

*Facilities not prioritized

The permit requires the City to review and evaluate industries to ensure they do not have unpermitted discharges entering the City's storm system. The Illinois EPA is responsible for implementing industrial stormwater permitting and for compliance with the associated SWPPPs. No SWPPPs are sent to the City for review by the permittees. However, during inspections the City staff request to see any SWPPPs, and record whether a SWPPP is present or missing from each facility.

City stormwater staff performed 122 industrial stormwater inspections during 2014. Appendix G is a summary report on the findings and follow-up actions. Table 15 provides a yearly comparison for industrial stormwater inspections.

Table 15

Industrial High Risk Runoff Stormwater Inspections Yearly Comparison

Year	Number of Inspections	# Requiring Follow Up Inspections	# Submitted to Code Enforcement
2012	55	6	0
2013	60	25	0
2014	122	67	2

The majority of facilities requiring follow-up inspections were due to lack of permitting with regards to the Illinois EPA's industrial stormwater program. Many facilities also had the wrong Standard Industrial Classification (SIC) based on their operations which indicated they needed permitting.

As noted in the 2012 annual report one activity involved a site undergoing voluntary clean-up located at 650 Race Street in Rockford. IDNR Conservation officer first noticed an oily sheen on the surface of the Rock River on October 9, 2012, and reported the matter to Illinois EPA. The Agency forwarded this report to the City, and their stormwater inspectors performed an industrial inspection on the Megafab facility at 650 Race Street on October 12. On this same day, the City's HazMat Response Team inspected the site. Inspections revealed nothing to indicate the source of the sheen. Oil booms were immediately installed and a subsurface investigation begun. Subsequently, free petroleum product has been observed at the water table. A former industrial user apparently has left this contamination at the property. Remediation is underway and groundwater and surface water monitoring continues.

The City continues to monitor this site while it to goes through the site remediation program in cooperation with the Illinois EPA. In 2014, additional contaminated material was removed from the site and additional tanks have been located under the buildings. These are being investigated. In speaking with the local IEPA contact (Thomas Williams), he recommended the City continue to monitor the site but to allow IEPA to pursue enforcement actions.

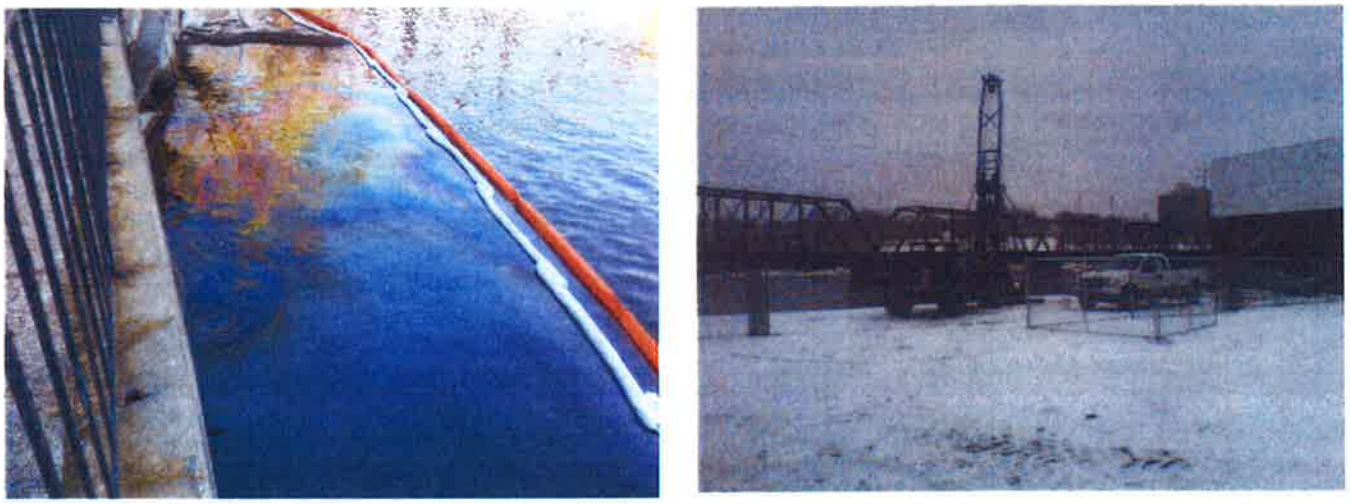

Photo 10. City stormwater Inspectors monitored a voluntary cleanup site along the Rock River in 2012 where oil seeped from an industrial property.

2.9 PUBLIC EDUCATION, POLLUTION PREVENTION AND GOOD HOUSEKEEPING

This section addresses Parts II.A.10 and III.A of the Permit.

The City of Rockford continues to expand programs on public education, pollution prevention and good housekeeping. The City currently advertises these through brochures, workshops and speaking events, newspaper inserts, and its web site. A list of these events is noted in Table 16.

Table 16

PUBLIC EDUCATION ON STORMWATER POLLUTION PREVENTION IN 2014

Venue/ Audience	Type of Presentation/Training	Notes
Rock Stat / General public	Public transparency meeting to review City Department goals and accomplishments. This is recorded and shown on public television & online	Stormwater program is presented on a bi-monthly basis.
Neighborhood residents/ 25 per month	Keith Creek Neighborhood Association	Topics vary
City residents	Brochure Distribution (Winnebago County SWCD, Rockford Park District, City Hall	Topics vary based on location
City residents	City of Rockford Stormwater website	Topics vary
Contractors, engineers, developers, government, consultants / 100 attendees	Erosion and Sediment Control Seminar	ESC Plan Review and Regulatory Inspections Standard Operating Procedures
Contractors, engineers, developers, government, consultants, City staff / 50 attendees	Water & Stormwater Pre-Construction Meeting	City's Erosion and Sediment Control Policies & Procedures
General Public/ 300	National Night Out	Display table
High School Students/400	Academy Expo	Display table & presentation for a career fair
City of Rockford Alderman, State Senators & Representatives / 16	Stormwater Program Presentation	Stormwater Program Requirements
General Public	CITY/FEMA Flood Maps Open House	Public Participation to review revised Flood Plain maps for the City of Rockford and Winnebago County

In 2014, the City distributed nearly 2,700 pamphlets or brochures. These included the following titles:

- Yard Waste
- Water Friendly Landscaping
- Recycling
- Residential Deicing
- Pet Waste
- Illicit Discharge
- Hazardous Materials
- Pesticide, Herbicide, Fertilizer
- Fats, Oils, Grease
- Erosion and Sediment Control
- Concrete Waste
- Stream Corridor Protection and Maintenance
- Rain Barrels
- City's Stormwater Management Program
- Floodplain Brochures (note: 900 brochures were mailed directly to property owners affected by floodplain map changes)

All of these brochures focus on protection of water quality and are available to the general public in the lobby of City Hall, in the Department of Public Works. Brochures can also be found at the Rockford Park District and the Winnebago County SWCD.

The City also purchased two Enviroscape models to provide further education throughout the City. One depicts the cause and effects on non-point source pollution runoff and the other is for point source pollution runoff.

The City of Rockford continues to provide information on its Stormwater and Environmental link on its website. This link can be found at: http://rockfordil.gov/public-works/engineering-cip/stormwater.aspx. This Stormwater page provides stormwater education on a variety of topics including but not limited to:

- Erosion and Sediment Control
- Industrial High Risk Runoff
- Illicit Discharge Detection and Elimination
- Minimizing Pollution Around Your Home
- Watershed Assessment Data
- Reporting links for complaints
- Floodplain Map Changes (on front page of City website to alert and educate the public)

These demonstrate the City's compliance with the permit condition to publicize, promote and facilitate improved stormwater management in Rockford.

Recycling data for the last few years is found in Table 17 and suggests that residents are recycling a consistent portion of Rockford's solid waste stream.

Table 17

CITY OF ROCKFORD RECYCLING PROGRAM

Year	Refuse(tons)	Recycled (tons)	Yard Waste (tons)	Portion Diverted from Landfill
2008	53,875	7,239	15,854	30%
2009	51,786	6,830	16,620	31%
2010	49,739	6,736	14,490	30%
2011	48,038	6,886	14,811	31%
2012	45,497	6,604	12,440	30%
2013	45,970	6,499	13,226	30%
2014	47,314	7,250	11,994	29%

The City has renewed its contract with its current refuse hauling vendor who has agreed to provide larger recycle bins with the hope recycling tonnages will increase in coming years.

As mentioned earlier, the City cooperates with the Illinois EPA for the collection of household hazardous wastes (HHW) as well. In 2014, there were approximately over 445,684 pounds of household hazardous waste collected at the Rockford site (1552 drums), but it is a regional facility and not all the waste was from Rockford. In 2014, about 75% of the vehicles (7055) dropping off HHW were registered to Rockford residents. The City has renewed this service with Clean Harbors to continue with this service for the next several years. Table 18 provides a 5 year summary of the HHW collections.

Table 18

Summary of Household Hazardous Waste (HHW) Collection Site

Year	Pounds of HHW Collected	# Drums	% Vehicles Rockford Residents
2010	495,000	2,054	76
2011	444,000	1520	75
2012	424,620	1,915	76
2013	431,285	1,567	75
2014	445,684	1,552	75

3. SWMP FISCAL MATTERS, EFFECTIVENESS, AND OTHER ISSUES

3.1 ANNUAL EXPENDITURES

City expenditures for 2014 for SWMP activities are tabulated below. Table 19 also includes budgeted costs for 2014.

Table 19

SWMP FISCAL INFORMATION

Item(s)	Budget Source	2013 (Actual)	2014 (Actual)	2015 (Budgeted)
Street Sweeping	Street	$323,288.51	$403,265	$473,335
Sewer Repair/Inlet Cleaning	Street	$575,553.22	$485,874	$693,002
Bridge, Dam, Ditch Maintenance	Street	$75,158.41	$67,265	$91,000
City-Wide Inlet Repair	CIP	$0.00	$164,950	$150,000
Stormwater City-Wide Drainage Fund	CIP	$437,474.00	$78,493.58	$450,000
Stormwater Sampling and Testing	General	$31,026.00	$26,057.85	$25,000
Stormwater (Other Projects)	CIP	$792,584 *	$178,707.71 **	$560,000
Stormwater (Other Projects)	IDOT	***	$2,043,647.22	----------
Stormwater Maintenance & Monitoring	CIP	----------	---------	$120,000
City-Wide Bank Stabilization	CIP	----------	----------	$500,000
Stormwater Miscellaneous Consultant Contract	General	----------	---------	$50,000
Bridge/ Box Culvert Projects	CIP/State/Federal	----------	---------	$2,425,000

* Includes Main & Auburn Roundabout Project

** Does not include Airport and Falcon Rd Project (City, Airport, EDA, EDP, TARP Funds) - will be included in 2015

*** Completed reconstruction of W. State St. but no financial info from IDOT on stormwater improvements

2014 Stormwater (Other Projects) is S. Main St. Reconstruction Project

3.2 PROGRAM REVIEW

The status of Rockford's SWMP implementation and compliance is reviewed in Section 2. During 2014, the City's stormwater management program accomplished a myriad of new and continuing objectives, most notably:

- As part of the continued development of the Stormwater Master Plan the City completed and revised standard operating procedures for the following areas:
  - Erosion and Sedimentation Control, Plan Review and Regulatory Inspections
  - Stormwater & Environmental Education
  - Illicit Discharge Detection and Elimination
  - Detention Basin Inspections
  - Industrial High Risk Runoff Inspection Program
  - Pesticide, Herbicide and Fertilizer Applications for City Employees
  - Street Sweeping
  - Monitoring and Sampling of Stormwater
  - Right of Way and Drainageway Maintenance
- In 2013, completed steady and unsteady state hydraulic models of Keith Creek as part of ongoing master planning efforts. These models continue to be reviewed.
- Furthered flood control efforts in the Harmon Park neighborhood by completing construction on reinforced grass-lined drainageway.
- 149 site development permit applications were received and reviewed, including Stormwater Pollution Prevention Plans (where the developments required them)
- Performed 110 drive thru erosion and sediment control reviews and 95 construction site erosion and sedimentation control inspections
- Received no complaints from citizens regarding erosion controls (or the lack thereof)
- 112 inlets and 22 manholes and 2,638 feet of storm drains were vacuumed to improve performance
- 152 inlets and manholes were repaired
- Removed over 200 tons of accumulated silt, debris, and floatables from open channels
- Prevented over 2,595 tons of solids from entering the stormwater system through street sweeping
- Performed 35 inspections for illicit discharge and/or improper disposal
- The Fire Department's HAZMAT Response Team investigated two incidents where hazardous materials may have entered the stormwater system
- Performed 122 inspections of industrial and potentially high risk runoff sites
- Distributed nearly 2,700 various pamphlets and brochures and gave numerous seminars or presentations to the general public, businesses, and civic groups
- Sampled five wet weather events for stormwater pollutant load assessment
- Analyzed 20 tributary samples (base flow events) for 18 different pollutants
- Completed outfall inspections and walked approximately 33 miles of creek.
- Performed follow up inspections on 46 detention basins & sent second notices on 26.

- City stormwater staff is working to integrate GIS and Infor/Hansen asset management software in order to better manage stormwater related inspections, work orders, maintenance, and inventory of each Stormwater asset.
- The City purchased a GPS unit for use for outfall and detention pond inspections and for stormwater drainage system asset data collection.
- The City purchased a Phantom 2 Vision Quad Copter Plus. This is a radio controlled copter with a mounted camera to take aerial photos. Stormwater staff envisions utilizing this tool following natural disasters to get an aerial view of damage or to inspect areas that would be dangerous for City staff to access.

The most recent five-year permit period expired in November 30, 2009. An application for a new permit was submitted to the Illinois EPA in June 2009, followed by supplemental correspondence in September 2009 and March 2012. In July of 2013, the City received a draft permit from Illinois EPA and submitted comments with suggested revisions. The City was informed the permit was under further review by the agency. In December of 2014 the draft permit went out to public comment by the IEPA. The City submitted comments to the permit and continues to wait for a revised permit to be issued.

3.3 EFFECTIVENESS OF CONTROLS

The current stormwater monitoring program was started in the 1990s. Monitoring stations were constructed and automation equipment purchased. But routine monitoring did not begin until summer 2003. Storm event and dry-weather screening of water quality began in 2003 and continues through the present. Appendices A, B, and C contain these data and interpret their effectiveness.

Bioassessments of five streams fecal coliform bacteria concentrations regularly exceed the General Use Water Quality Standard and contact recreation use is not supported. Appendix C presents some evidence of improved macroinvertebrate communities in two streams receiving stormwater discharges. Bioassessments at T-2, South Kent Creek, and T-4, Keith Creek at Dahlquist Park, indicate improving trends in biotic integrity. No other stream sites show indications of biotic improvement or degradation.

All of the programs implemented to improve water quality in the creeks and Rock River should provide some quantitative evidence of improvement in future years. This data will be reported, as it becomes apparent.

3.4 ENFORCEMENT ACTIONS

In 2007 the US EPA began an audit of NPDES Permit ILS000001. A report was issued the following year (SAIC 2008). Implementation of the US EPA's recommendations continues. In December 2010, the US EPA again contacted the City regarding its follow-up activities for improving compliance with the NPDES Permit, those discussions have continued throughout 2014 and final resolution is expected in 2015.

REFERENCES

SAIC. 2008. Municipal Separate Storm Sewer System (MS4) Audit, Rockford, Illinois September 18-20 and October 2-3, 2007. Prepared for US EPA Region 5, Chicago, Illinois by SAIC, Lakewood, Colorado.

APPENDICES A-C

APPENDIX A - WATER QUALITY MONITORING DATA

In 2014 the city collected five complete sets of wet weather samples for stormwater pollutant load assessment and analyzed 20 tributary samples (base flow events) for 18 different pollutants

This appendix reprints storm water quality monitoring data collected by the City over the last five years, 2010 through 2014. A map is attached showing the five monitoring locations, and a table providing chemical and microbiological data.

The City of Rockford's NPDES storm water permit cites five locations for monitoring. The City has prepared these locations and installed automatic samplers and rain gages. Much of the monitoring process is defined in the permit.

Table A-1

STORM WATER MONITORING LOCATIONS

Outfall	Latitude	Longitude	Locations	Watershed Description
R1 (001)	42.30576	89.09617	Paradise Boulevard Section 11, T44N, R1E	225-ac residential and open space
R2 (002)	42.27045	89.09043	Market St & North First Section 23, T44N, R1E	50-ac commercial, offices, and residential
R3 (003)	42.26955	89.04381	Fairview Blvd and Crosby St Section 19, T44N, R2E	510-ac residential
R4 (004)	42.23405	89.07985	8th St and Wills St Section 36, T44N, R1E	780-ac industrial, commercial, and residential
R5 (005)	42.23266	89.02128	Forest View Rd and 28th Ave Section 5, T43N, R2E	80-ac light industrial

Additionally, the wet weather screening requirements of the permit include two locations for monitoring and collection of floatables. These locations are at Alpine Dam and at the intersection of Kishwaukee and Sandy Hollow. The City cleaned the Kishwaukee/Sandy Hollow location on three occasions in 2014 and removed 3 tons of debris. The Rockford Park District cleaned the Alpine Dam trashrack three times during 2014 and removed 10 tons of debris. The City cleaned the Alpine Dam trashrack and spillway once, and removed 20 tons of debris.

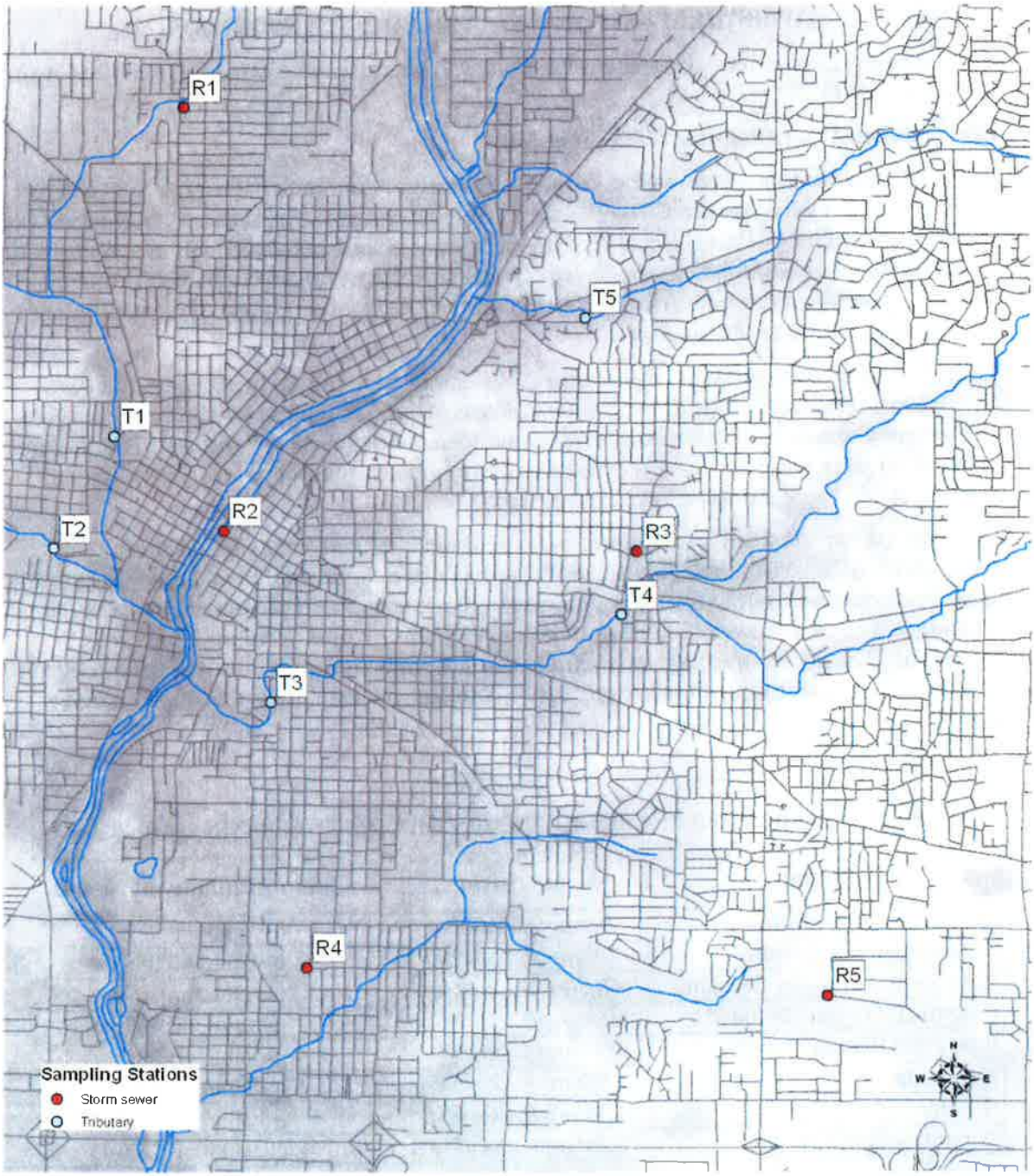

Figure A.1. Map of Storm Sewer and Tributary Sampling Locations

APPENDIX B – STORM WATER POLLUTANT LOADS

This appendix summarizes the storm water pollutant concentrations and loads from the City of Rockford's MS4.

B.1 Storm Water Pollutant Concentrations

During 2014, nine storm events were sampled and analyzed for one or more pollutants. Figure A.1 maps the sampling locations. To examine trends and compute event mean concentrations of storm water pollutants, data collected in 2014 were merged into the greater dataset that the City has assembled from prior year's monitoring efforts. The dataset ranges back to 2003 but we opted to utilize the most recent five-year period for estimating event mean concentrations and storm water pollutant loads for 2014.

The storm water concentrations with normal distributions were tested by one-way ANOVA (Analysis of Variance), while those groups that were non-normal (nor could be transformed to approximate normality) were tested using the non-parametric Kruskal-Wallis test. The 5-year grand means were generally used as estimates of event mean concentrations (EMC). For all inference tests, the significance level, α, was 0.05.

In general, the grand means are assumed to be our best current estimate for event mean concentrations. Table B-1 includes the results of the testing for the null hypothesis, H_0, that all mean concentrations for the five monitoring stations are equal. In those instances where the sampling station means were found not to be equal, multiple pairwise comparisons were performed. The ANOVA testing and multiple pairwise comparisons allowed the City to identify those drainage areas having higher storm water pollutant concentrations than other drainage areas.

Table B-1

MEAN STORM WATER POLLUTANT CONCENTRATIONS (2010-2014)

Pollutant	Grand Mean	Test of Equality of Means
Total Suspended Solids	96 mg/L (N=56)	p-value = 0.472
Total Dissolved Solids	125 mg/L (N=48)	p-value = 0.058
Biochemical Oxygen Demand	18.5 mg/L (N=54)	p-value = 0.152
Chemical Oxygen Demand	88.7 mg/L (N=53)	p-value = 0.651
Fats, Oils, Grease	9.05 mg/L (N=57)	p-value = 0.085
Ammonia	0.32 mg/L (N=55)	p-value = 0.946
Nitrate	0.46 mg/L (N=56)	p-value = 0.165
Total Kjeldahl Nitrogen	1.20 mg/L (N=51)	p-value = 0.214
Total Nitrogen	1.30 mg/L (N=51)	p-value = 0.254
Total Phosphorus	0.64 mg/L (N=54)	p-value = 0.003
Copper	0.146 mg/L (N=56)	p-value = 0.733
Zinc	0.135 mg/L (N=56)	p-value = 0.021
Lead	0.016 mg/L (N=56)	p-value = 0.366
Hardness	44 mg/L (N=51)	p-value = 0.583

Below are discussions of each pollutant. Following that are estimates of storm runoff volume for the MS4 area and storm water pollutant loads for 2014.

B.1.1 Total Suspended Solids

The boxplot is a convenient method to display medians, quartiles, maxima, minima and outliers. Figure B.1 is a boxplot of total suspended solids (TSS) concentrations observed at the five automated storm sewer stations over the 2010-2014 monitoring period. The vertical (or interquartile) ranges of the "boxes" reflect the 25th and 75th quartiles of the distribution. The lines, or whiskers, extend upward to the maximum concentration observed at each site and downward to the minimum. The median is shown as a horizontal line within the shaded box. Potential outliers are shown as asterisks.

Station R5, which reflects the drainage of an 80-acre watershed with large areas of light industry, has the highest mean TSS concentration, 264 mg/L. This mean is severely affected by one measurement on April 13, 2014 of 1,398 mg/L, shown as an outlier in Figure B.1. The Rockford Airport recorded 1.21 inches of rain on April 13, 2014 (a record for that day). Several other pollutants at this monitoring station and elsewhere spiked on April 13, 2014, as noted in subsequent sections. Station R1, reflecting a 225-acre residential and open space drainage had the lowest mean TSS concentration, 28 mg/L.

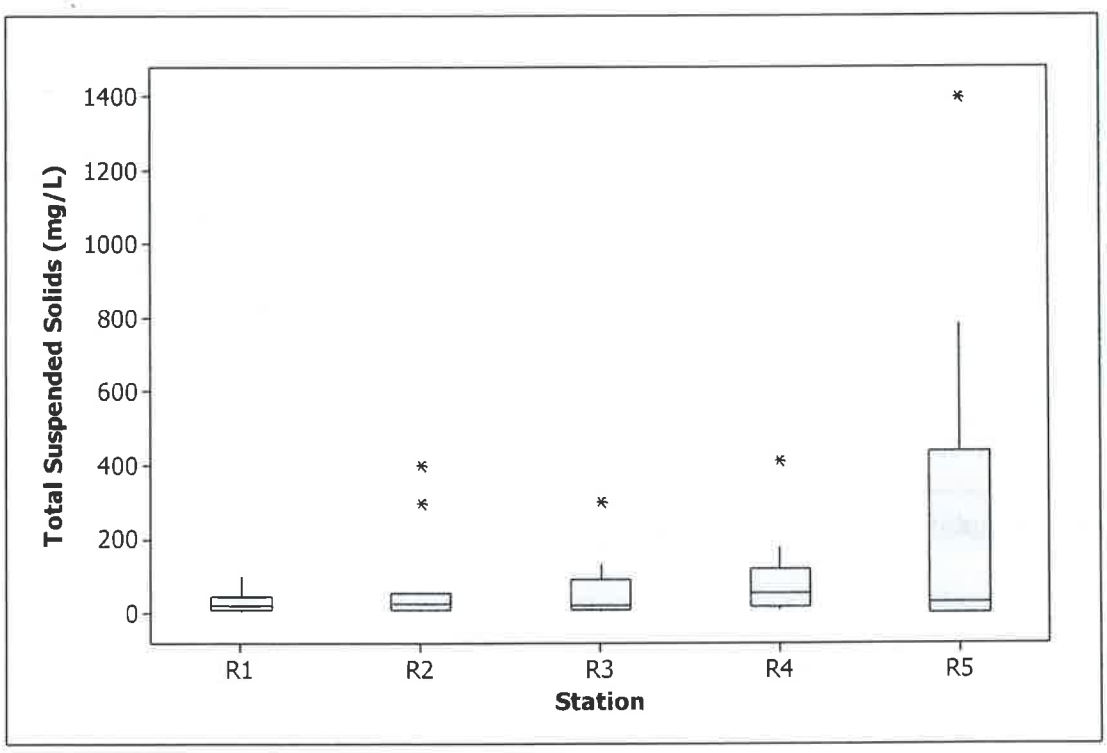

Figure B.1. Boxplot of TSS Concentrations, 2010-2014

In view of the inequality of variances among the stations (attributed in large part to the high concentration of TSS at R5 on April 13, 2014), we ln-transformed the TSS data prior to

comparison of station means using ANOVA. We found that the ln-transformed concentrations at the five stations are equal among the 5 stations (p-value = 0.472).

The grand mean TSS concentration is 96 mg/L and will be used as the event mean concentration (EMC) in the estimation of pollutant loads.

B.1.2 Total Dissolved Solids

Total dissolved solids (TDS) in storm water during the 2010-2014 study period are plotted in Figure B.2. ANOVA indicates that the ln-transformed means are marginally the same at all monitoring sites (p-value = 0.058). Again, the mean at R5 is strongly influenced by the measurement of April 13, 2014, which was 616 mg/L.

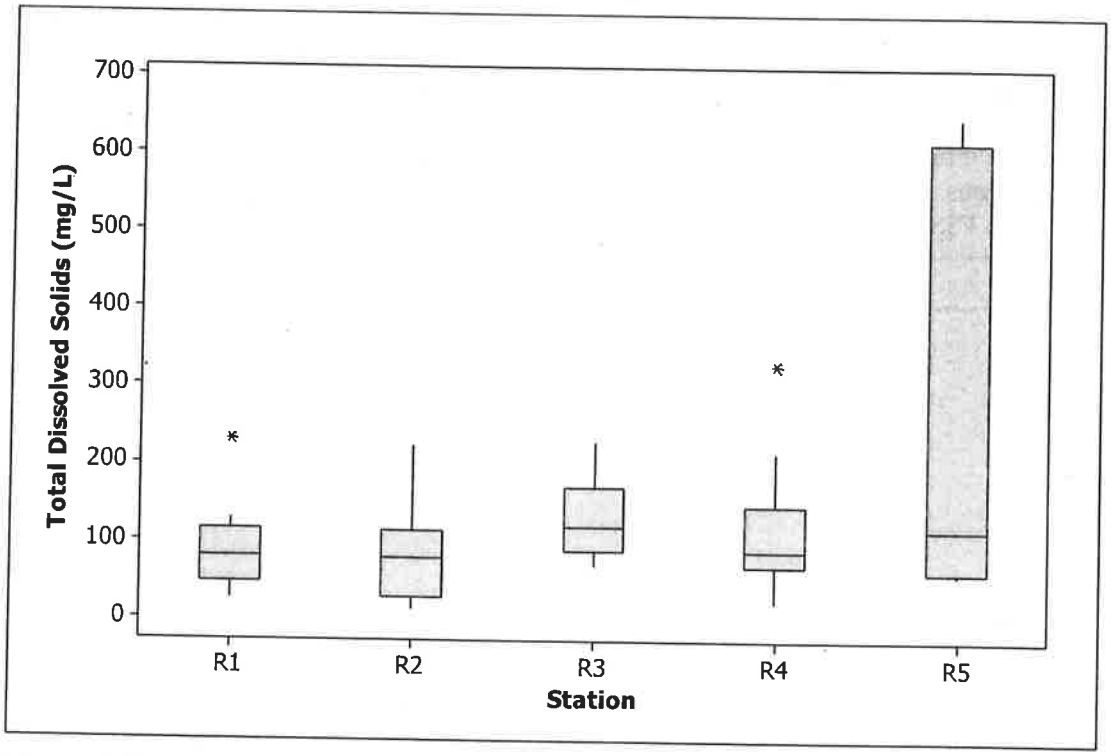

Figure B.2. Boxplot of TDS Concentrations, 2010-2014

The grand TDS concentration for the most recent 5-year period is 125 mg/L and will be used as the event mean concentration (EMC) in the estimation of pollutant loads.

B.1.3 Oxygen Demand

The monitoring program included analysis of 5-day biochemical oxygen demand (BOD) and COD, chemical oxygen demand. Figures B.3 and B.4 are boxplots of these measurements, combining data from the five most recent years of storm water monitoring.

ANOVA testing of ln-transformed BOD concentrations found that the station means are equivalent (p=0.152). The grand mean BOD concentration is 18.5 mg/L and is our best estimate of event mean BOD concentration in the Rockford MS4.

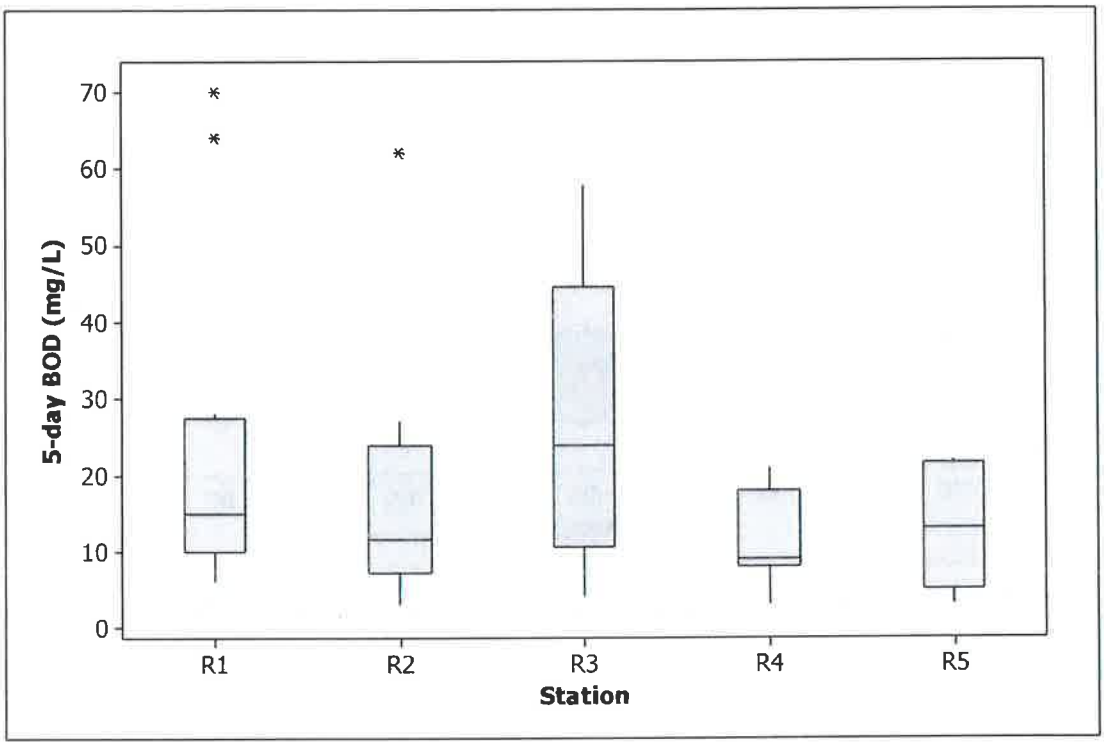

Figure B.3. Boxplot of Biochemical Oxygen Demand Concentrations, 2010-2014

ANOVA testing of ln-transformed COD concentrations found that the probability that station means are equivalent is not significant (p=0.651). The grand mean COD is 89 mg/L and is a reasonable estimate of event mean concentration in the Rockford MS4.

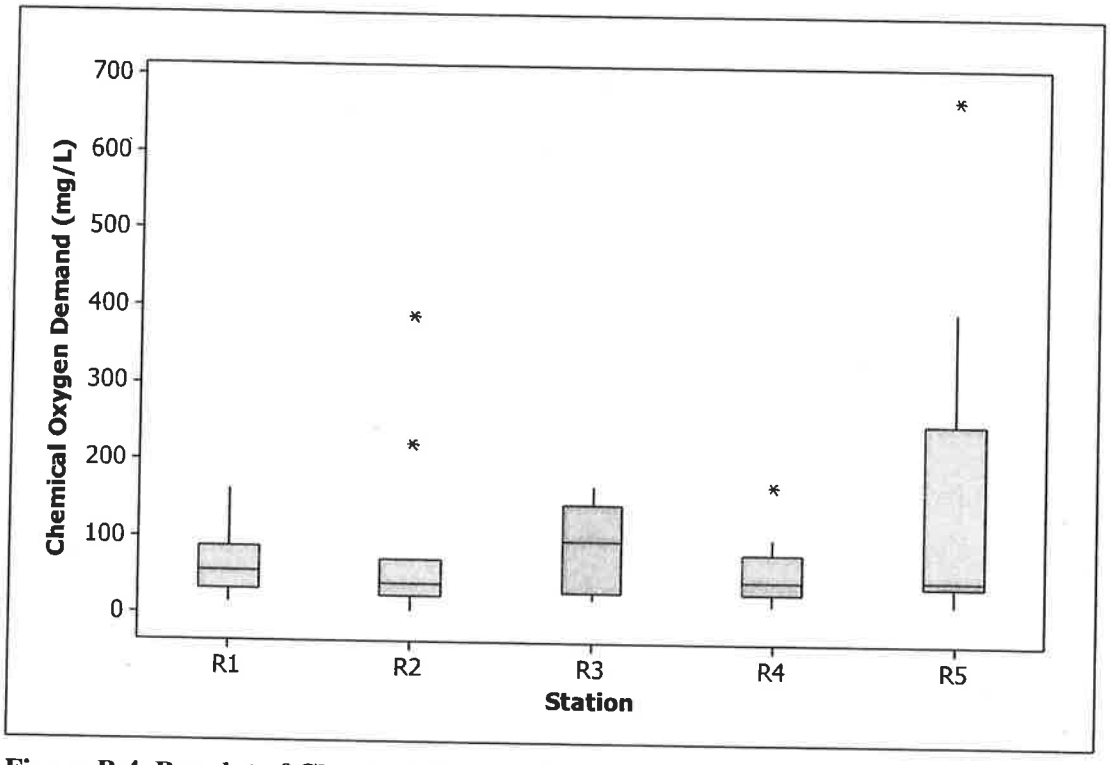

Figure B.4. Boxplot of Chemical Oxygen Demand Concentrations, 2010-2014

B.1.4 Nitrogen and Phosphorus

Nutrients analyzed as part of routine monitoring storm water quality included ammonia, nitrate, total Kjeldahl N (TKN) and total phosphorus. Total nitrogen is estimated from TKN and nitrate. Ammonia and nitrate-nitrite each had several observations that were less than the method detection limits (MDL), and in those cases, we replaced the detection limits with values that were 50% of the MDL.

Plots of ammonia, nitrate-nitrite, TKN, total nitrogen, and total phosphorus are shown in Figures B.5 through B.8.

Ammonia can be an indicator of sewage, so the City continues to utilize this contaminant in assessing potential illicit connections in the MS4. ANOVA using ln-transformed ammonia concentrations indicates that means of the five stations are equal (p-value = 0.946); the grand mean, 0.32 mg/L, is therefore the estimate of ammonia EMC.

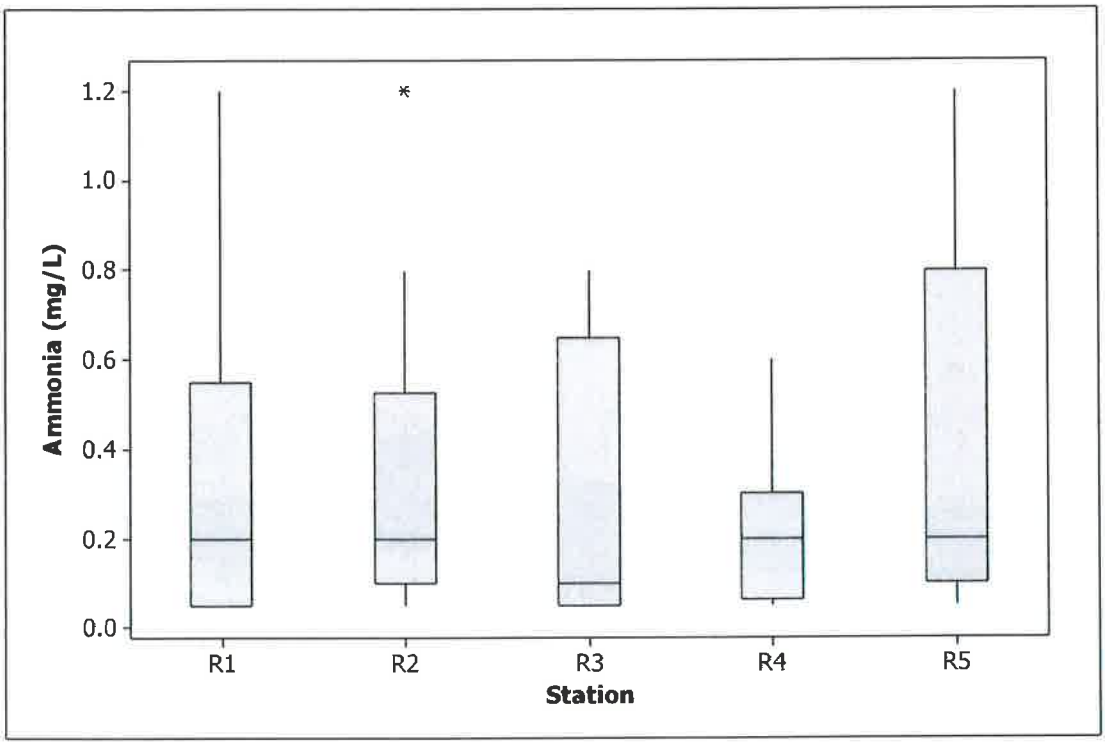

Figure B.5. Boxplot of Ammonia in Storm Water, 2010-2014

Table B-2 gives summary statistics for nitrate in storm water. ANOVA using ln-transformed measurements indicate that mean nitrate concentrations are equal among the five stations (p=0.165). The grand mean nitrate concentration is 0.46 mg/L; this value will be used as the EMC.

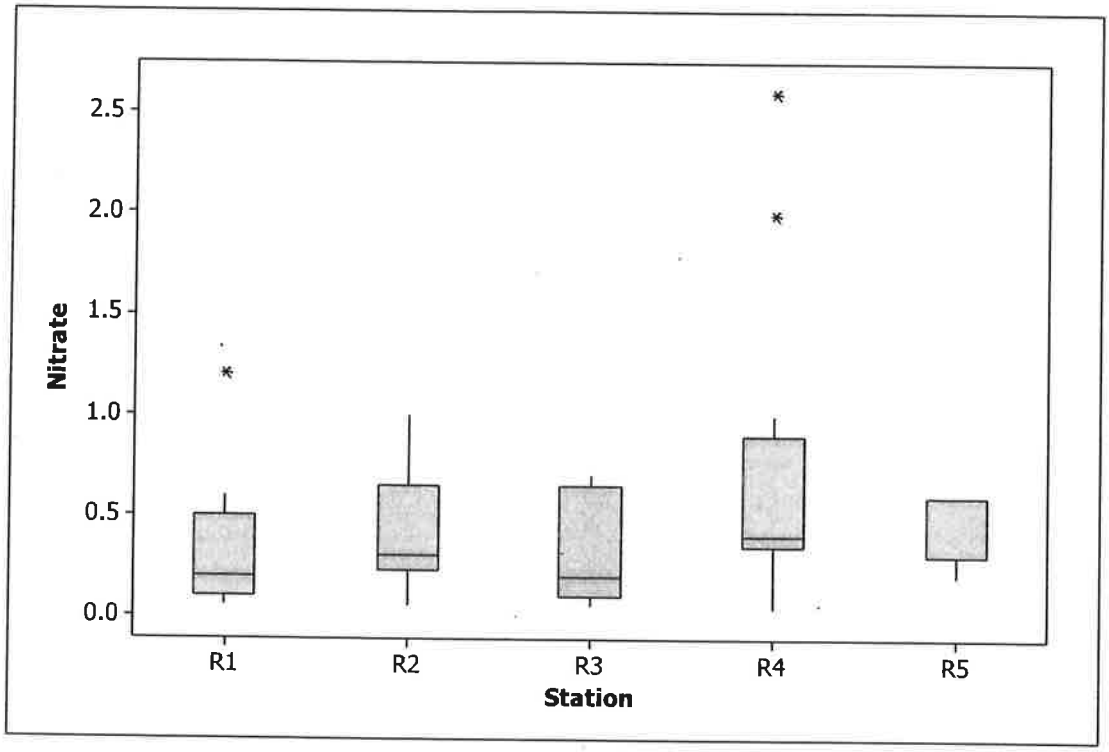

Figure B.6. Boxplot of Nitrate in Storm Water, 2010-2014

Table B-2

NITRATE+NITRITE (mg/L) IN STORM WATER (2010-2014)

Station	N	Mean	Median
R1	13	0.335	0.2
R2	12	0.421	0.3
R3	9	0.328	0.2
R4	13	0.765	0.4
R5	9	0.389	0.3
All stations	56	0.46	0.30

TKN in the storm water quality database has 51 measurements over the past 5 years. Figure B.7 is a boxplot of TKN measurements at the five storm water stations. ANOVA testing using ln-transformed values indicates that station means are equivalent (p-value = 0.214). The grand mean TKN concentration will be used as the EMC (1.20 mg/L).

Mean total nitrogen concentrations (Figure B.8) are not statistically different between the five stations (p-value = 0.254). The grand mean in storm water is 1.30 mg/L and will be used as the EMC for load estimates.

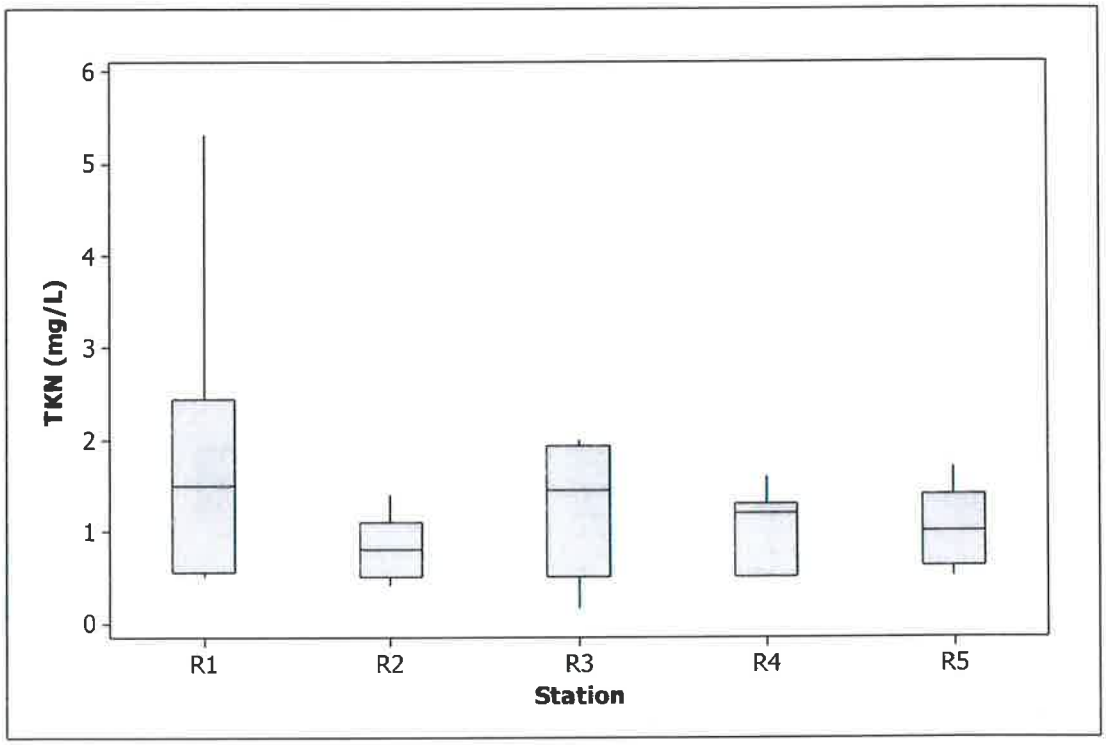

Figure B.7. Boxplot of TKN in Storm Water, 2010-2014

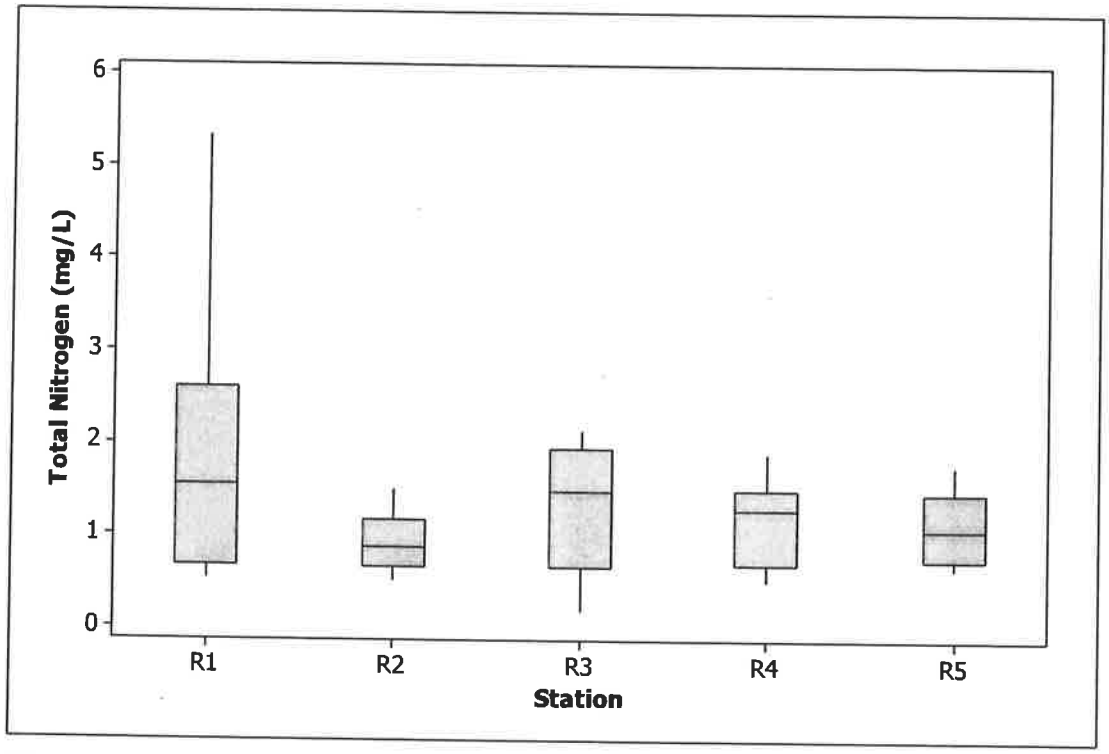

Figure B.8. Boxplot of Total Nitrogen in Storm Water, 2010-2014

Figure B.9 is a boxplot of total phosphorus measurements in storm water. ANOVA testing of 54 ln-transformed total phosphorus values indicates that there is a statistical difference between the five station means (p-value = 0.003). Tukey pairwise comparisons indicate that the significant only differences among station means is that R3 is greater than R2 (Table B-3). This is essentially due to the unusually high measurement of 10 mg/L at R3 on April 13, 2014.

The grand mean phosphorus concentration in storm water is 0.64 mg/L.

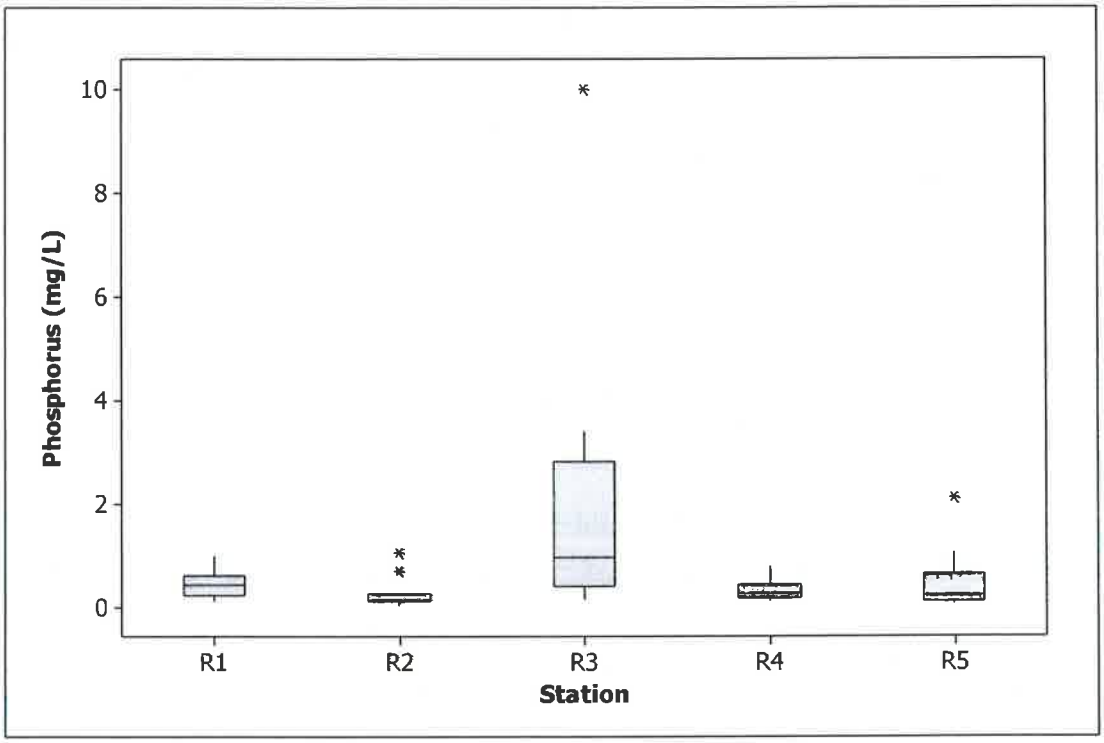

Figure B.9. Boxplot of Phosphorus in Storm Water, 2010-2014

Table B-3

TOTAL PHOSPHORUS (mg/L) IN STORM WATER (2010-2014)

Station	N	Mean	Median
R1	13	0.433	0.44
R2	12	0.258	0.145
R3	8	2.200	0.955
R4	12	0.331	0.26
R5	9	0.470	0.22
All stations	54	0.639	0.245

B.1.5 Heavy Metals

The metals analyzed in storm water samples include copper (Cu), cadmium (Cd), lead (Pb), and zinc (Zn). All analyses were for total metal concentrations; the samples were not filtered prior to analysis.

On April 13, 2014, copper at R1, R2, and R4 each measured 2.0 mg/L, a value much higher than historical measurements. This has notably increased the EMC used for copper this year.

Fifty two out of 56 Cd measurements over the past 5 years have been less than the method detection limit (MDL); one detection each at stations R1, R2, R3, and R4. Descriptive statistics for Cd were therefore not computed.

Concentrations of other metals with observations less than the MDL were replaced by one-half of the MDL. Boxplots of the observations are shown in Figures B.10 through B.12. Table B.4 summarizes the metals data.

Station R4, adjacent to a storage yard and tool manufacturing facility, has been previously identified as a potential source of lead and zinc (Figures B.11 and B.12). As mentioned earlier, this industrial property was inspected in 2012 and has since installed controls to reduce storm water pollutant loads.

Table B4

SUMMARY STATISTICS FOR METALS IN STORM WATER (mg/L)

Metal	N	Mean	Minimum	Maximum
Copper	56	0.1464	0.005	2.000
Lead	56	0.0157	<0.005	0.228
Zinc	56	0.1352	0.013	0.662

ANOVA testing of the ln-transformed copper concentrations indicates that the means are equal (p-value = 0.733). Copper in Rockford MS4 storm samples averages 0.146 mg/L, which will be used as the EMC for estimating Cu loads.

ANOVA testing indicates ln-transformed zinc concentrations are not equal among all five stations (p-value = 0.021). Tukey's pairwise comparisons indicate that mean concentrations of Zn at R3 are significantly less than concentrations at R5.

ANOVA testing indicates the ln-transformed lead concentration means are equal among all five stations (p-value=0.366). Lead in Rockford MS4 storm samples averages 0.016 mg/L, which will be used as the EMC for estimating Pb loads.

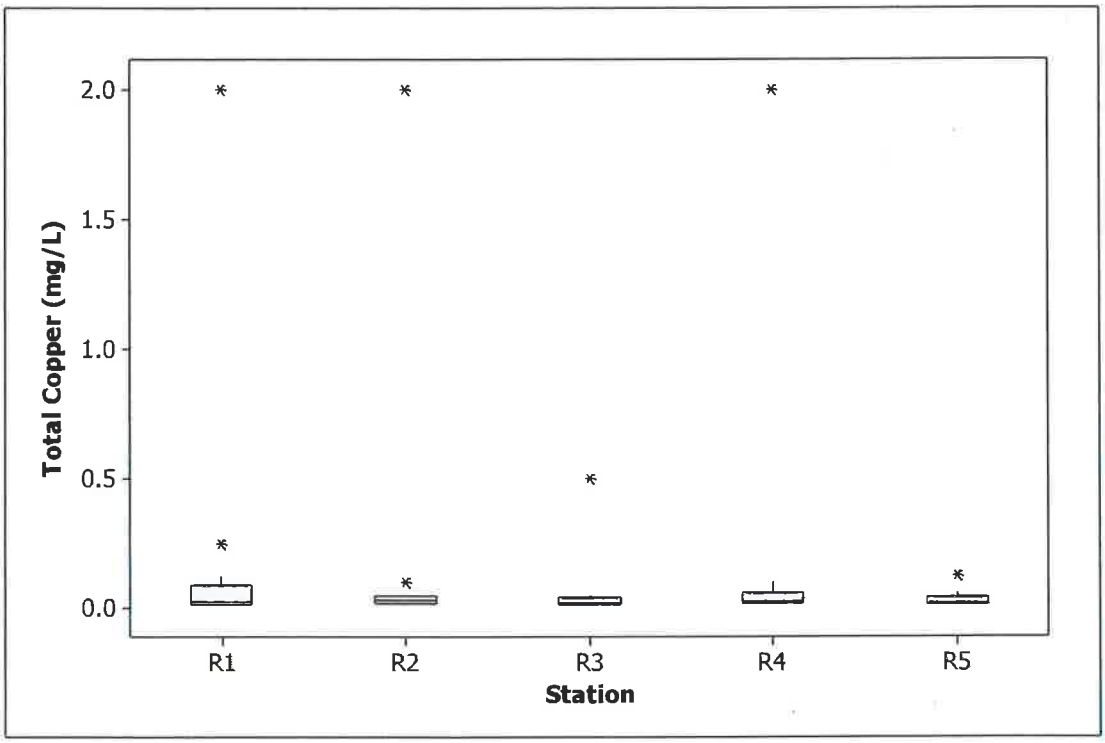

Figure B.10. Boxplot of Copper in Storm Water, 2010-2014

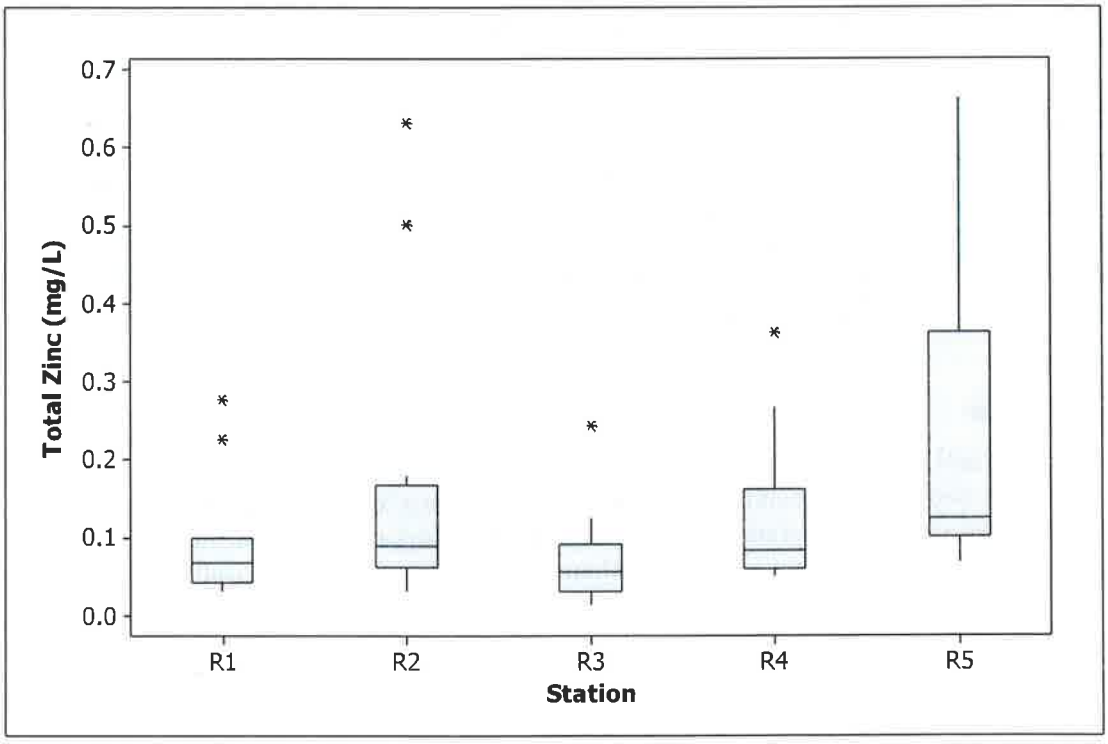

Figure B.11. Boxplot of Zinc in Storm Water, 2010-2014

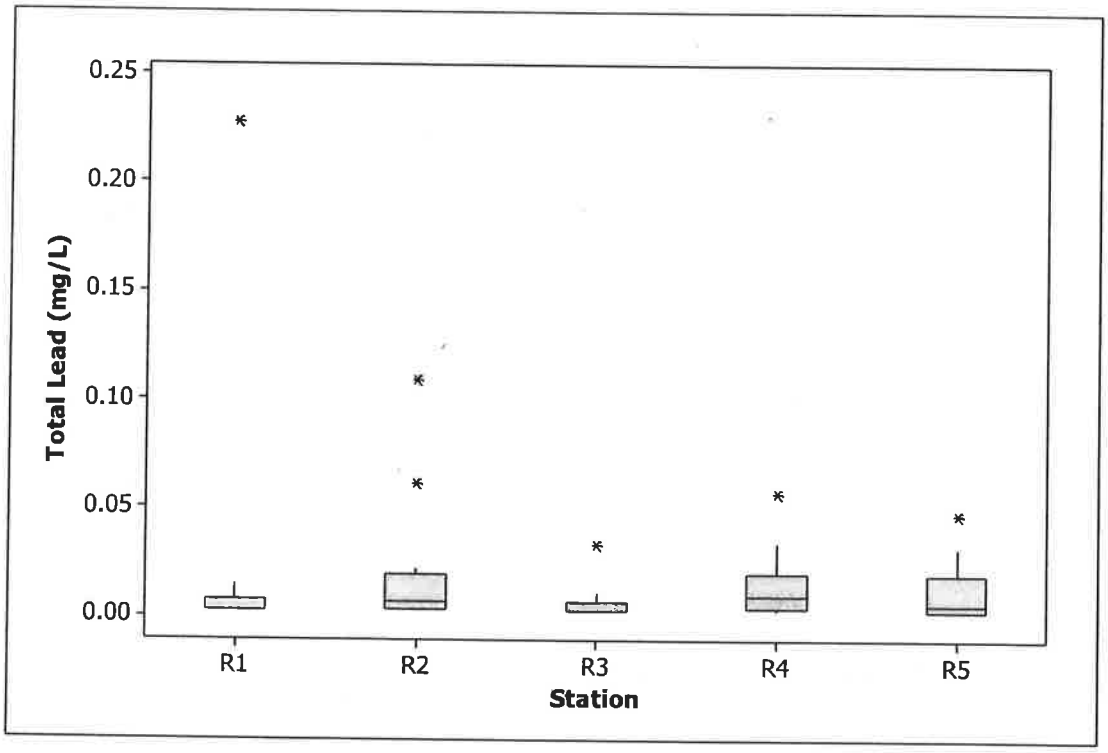

Figure B.12. Boxplot of Lead in Storm Water, 2010-2014

B.1.6 Bacteria

On many occasions, fecal coliform bacteria results are flagged as being greater than the serial dilution series was able to quantify. Therefore, were used nonparametric statistics to analyze these data. We have 49 observations of fecal coliform bacteria in storm water grab samples over the past 5 years. Krustal-Wallis testing indicates that the medians among the stations are equal (p-value = 0.608). The grand median is 5,080 CFU/100 mL.

B.1.7 Hardness

Hardness is routinely analyzed because the toxicities of many metals are hardness-dependent and a hardness value is required to evaluate compliance with surface water quality standards. Hardness in storm water had a grand mean concentration of 44.0 mg/L (as $CaCO_3$). ANOVA indicates that hardness concentrations are equal among the five sampling stations (p-value = 0.583).

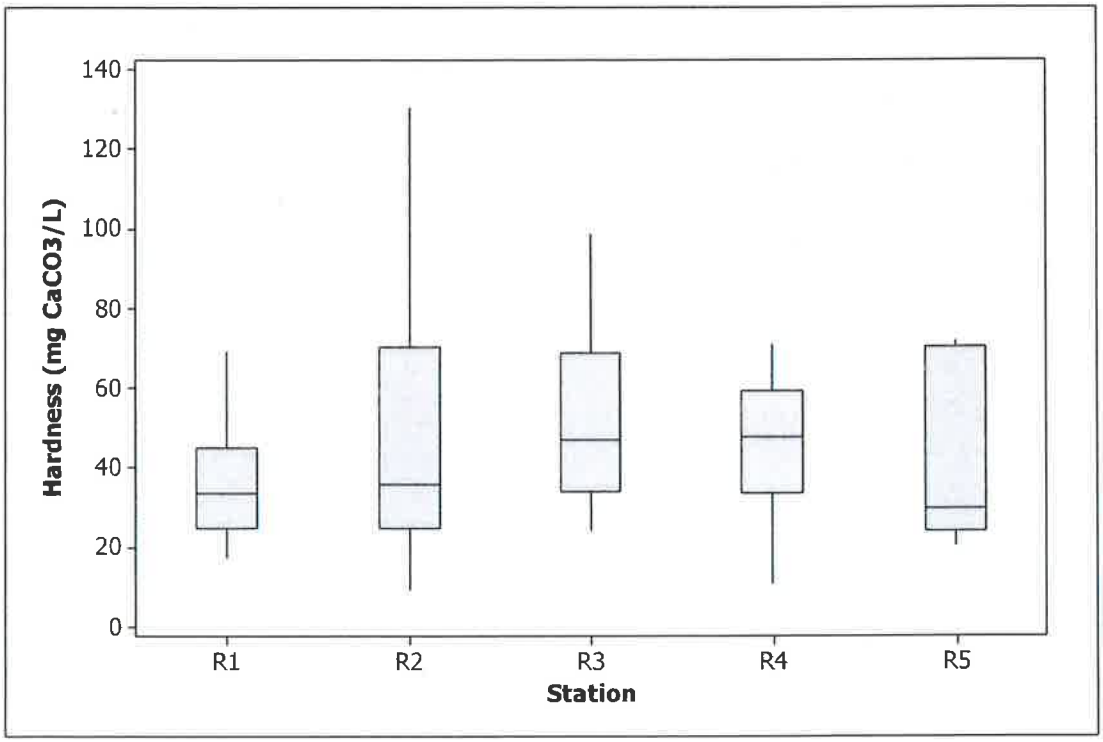

Figure B.13. Boxplot of Hardness in Storm Water, 2010-2014

B.1.8 Fats, Oil, Grease

Analysis of fats, oil and grease (FOG) in storm water is included in the monitoring program as well. All but 22 out of the 57 measurements of FOG were less than the MDL. We were unable to transform the FOG data to remove heteroscedasticity, so nonparametric statistical tests were performed. The Krustal-Wallis test indicated that median concentrations of FOG were marginally equivalent among the five stations (p-value = 0.085). The grand mean FOG is 9.0 mg/L and the median is 5.0 mg/L.

B.2 Storm Events and Runoff

Forty years of precipitation at the Rockford Airport average 36.3 inches annually. In 2014 Rockford received 33.5 inches of precipitation, over 123 days of the year. In comparison to the long term average, 2012 was a dry year, 2011 was a wet year, and 2010, 2013 and 2014 had precipitation amounts closer to the long-term average (Table B-5).

Daily precipitation records for 2014 are plotted in Figure B.14, together with the dates that storm water was sampled.

The automatic sampling stations are triggered by rain gages at each location. They are tipping bucket-type gages and do not record rain amounts other than the number of tips since the meter was last reset. The samplers are programmed to sample after the first 0.10-inch of rain is measured, and then to pump storm water into the sample bottle in proportion to the amount of

rainfall (i.e., the number of bucket tips), thereby collecting a precipitation-weighted sample. Data in Tables B-5 and B-6 and Figure B.14 are from the recording gage at the Rockford International Airport. Rainfall across the MS4 area is not necessarily consistent with that measured at the airport. Because rainfall is not evenly distributed across Rockford, not all stations are triggered during all storm events. And, from time to time, the samplers have mechanical problems and water samples may not be collected or have to be discarded. Mechanical problems most commonly arise from flooding of the underground vault that house the samplers, from battery outages, or failures of fuses.

Table B-5

PRECIPITATION AT ROCKFORD AIRPORT

DAYS OF PRECIPITATION, 0.01 INCHES OR MORE													
	Yrs	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
1961-93	43	9	8	11	12	11	10	10	9	9	9	9	10	118
2003	1	6	4	13	8	14	9	9	6	6	7	12	7	101
2004	1	7	7	19	6	17	9	10	10	1	13	14	5	118
2005	1	13	11	9	10	12	9	6	7	9	4	10	11	111
2006	1	8	6	14	11	16	12	11	9	13	11	5	8	124
2007	1	10	10	11	9	11	11	8	17	6	11	5	15	124
2008	1	13	15	10	11	10	15	11	6	8	8	8	16	131
2009	1	9	7	9	11	9	10	9	11	5	17	8	15	120
2010	1	5	9	9	11	11	16	13	9	10	5	2	14	114
2011	1	14	12	8	16	13	11	8	10	9	9	7	11	128
2012	1	9	8	12	10	11	4	12	8	7	10	3	12	106
2013	1	8	8	4	9	14	12	5	3	2	5	5	1	76
2014	1	13	8	12	13	12	16	8	10	8	9	8	6	123
MONTHLY PRECIPITATION (inches)														
	Yrs	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
1961-90	40	1.28	1.14	2.46	3.65	3.66	4.52	4.12	4.15	3.80	2.88	2.57	2.05	36.3
2003	1	0.34	0.16	1.45	2.33	4.20	1.98	3.71	0.48	1.89	1.30	3.70	3.20	24.7
2004	1	0.46	0.79	4.04	1.79	8.21	3.40	3.25	6.89	0.08	2.56	3.03	0.61	35.1
2005	1	3.29	1.51	0.43	1.71	1.78	2.45	1.45	5.10	1.86	0.24	2.81	0.98	23.6
2006	1	2.98	0.66	4.05	4.30	3.72	3.32	3.64	3.55	2.91	3.52	2.69	2.52	37.9
2007	1	0.79	1.43	3.25	2.73	1.25	4.1	2.4	14.0	2.04	1.44	0.4	3.27	37.1
2008	1	1.14	3.06	2.23	5.42	3.12	6.27	7.35	1.91	6.36	1.68	1.39	4.18	44.1
2009	1	0.81	2.22	5.8	4.6	3.35	7.4	2.6	7.19	1.69	5.94	1.44	3.55	46.6
2010	1	0.85	0.66	1.41	2.78	5.82	4.8	9.4	1.96	1.89	3.02	0.25	1.73	34.6
2011	1	0.88	1.90	3.41	3.40	3.18	3.39	8.0	4.47	5.33	1.58	4.1	2.06	41.7
2012	1	1.23	1.31	2.09	4.13	1.62	0.61	2.69	2.38	1.74	2.42	0.6	2.49	23.3
2013	1	2.99	1.96	1.97	7.82	2.91	7.33	1.83	2.61	1.28	3.02	1.95	0.21	35.9
2014	1	1.98	1.76	1.03	2.87	2.33	8.06	2.46	5.76	2.00	2.69	1.63	0.93	33.5

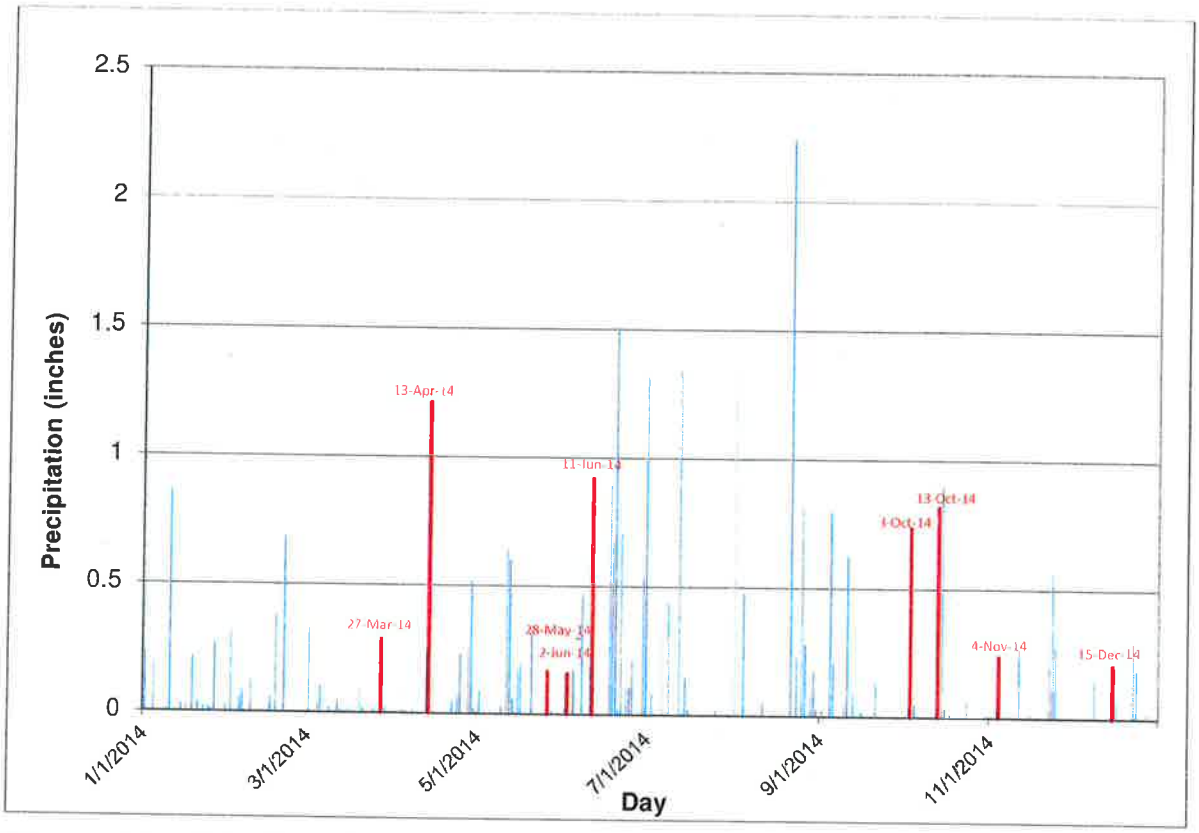

Figure B.14. Daily Precipitation and Sampling Events, 2014

Table B-6

STORM EVENTS AND ANTECEDENT CONDITIONS, 2014

Antecedent Day's Rain (in)	Date of Storm	Day of Sampling Rain (in)
0	March 27, 2014	0.29
0.25	April 13, 2014	1.21
0.17	May 28, 2014	0.1
0.03	June 2, 2014	0.16
0.19	June 11, 2014	0.92
0.04	October 3, 2014	0.74
0.01	October 13, 2014	0.82
0.03	November 4, 2014	0.24
0	December 15, 2014	0.21

B.3 Storm Water Pollutant Loads

The EPA Simple Method was used to develop storm runoff volumes and associated pollutant loads. The method is discussed in the EPA guidance manual[1]. In the Simple Method, annual pollutant loads are estimated as the product of storm runoff volume and event mean pollutant concentrations, summed over the course of one year. Annual runoff was estimated as the product of rainfall, a runoff coefficient, and the fraction of annual rainfall events that produce runoff (recommended by USEPA guidance as 0.9). The runoff coefficients account for imperviousness and were estimated from 30-m pixel satellite imagery from the Illinois GAP Project[2].

Table B-7 provides the updated event mean concentrations (EMC) and estimates for 2014 storm water pollutant loads. These loads do not include areas outside City limits or any baseflow (or natural background) pollutant loads. EMC values used in 2014 have been updated using data for the most recent 5-year period (Table B-1).

Figures B.15 through B.18 plot annual storm water pollutant loads from the MS4 for several key parameters. Trends in these plots are a function of not only changes in EMC but changes in annual runoff volumes.

Table B-7
STORM WATER POLLUTANT LOADS FOR 2014

Pollutant	Event Mean Concentration	Pollutant Load
Total Suspended Solids	96 mg/L	8,400,000 lbs/yr
Total Dissolved Solids	125 mg/L	11,000,000 lbs/yr
Biochemical Oxygen Demand	18.5 mg/L	1,600,000 lbs/yr
Chemical Oxygen Demand	88.7 mg/L	7,800,000 lbs/yr
Ammonia Nitrogen	0.32 mg/L	28,000 lbs/yr
Nitrate Nitrogen	0.46 mg/L	40,000 lbs/yr
Total Kjeldahl Nitrogen	1.2 mg/L	105,000 lbs/yr
Total Nitrogen	1.3 mg/L	114,000 lbs/yr
Total Phosphorus	0.64 mg/L	56,000 lbs/yr
Copper	146 µg/L	12,800 lbs/yr
Cadmium	2.5 µg/L	200 lbs/yr
Zinc	135 µg/L	11,800 lbs/yr
Lead	16 µg/L	1,400 lbs/yr
Fecal Coliform Bacteria	5,080 CFU/100mL	2,000,000 billion CFU/yr
FOG	9.05 mg/L	793,000 lbs/yr

[1] Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems. EPA-833-B-92-002. November, 1992.

[2] Illinois Natural History Survey's 1999-2000 1:100,000 Scale Illinois Gap Analysis Land Cover Classification, Version 2.0, September 2003.

Cyanide	1.4 µg/L	120 lbs/yr
Total Phenols	1.5 µg/L	130 lbs/yr

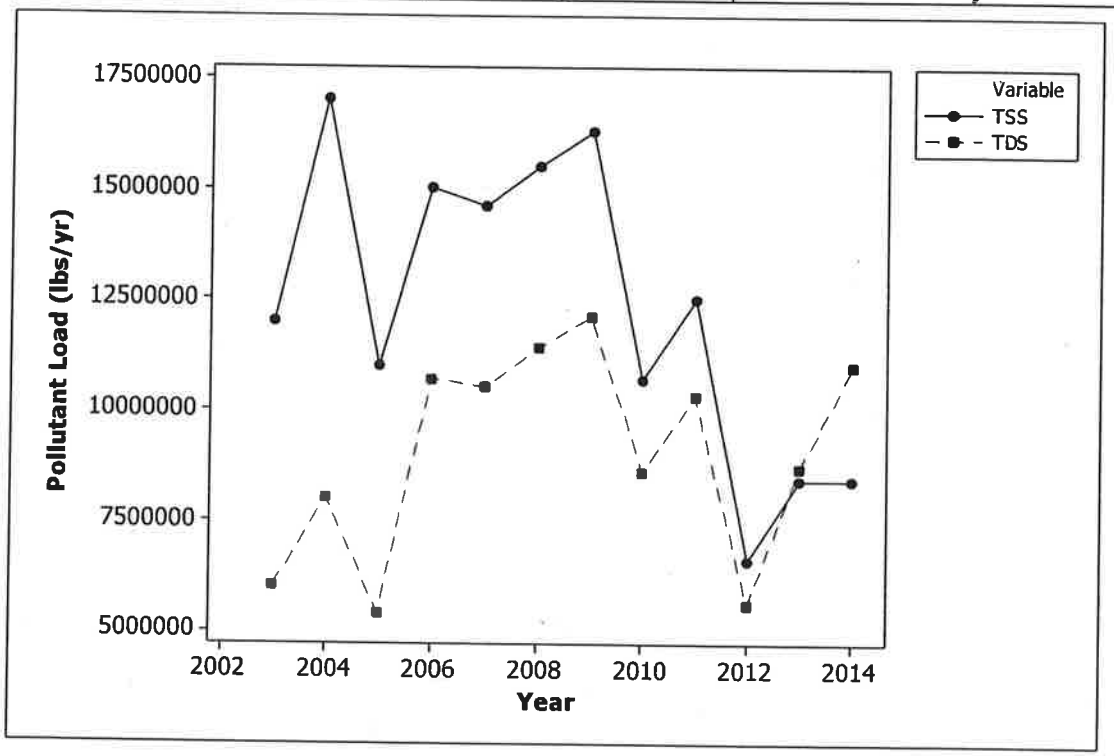

Figure B.15. Annual Solids Loads from Storm Water, 2003-2014

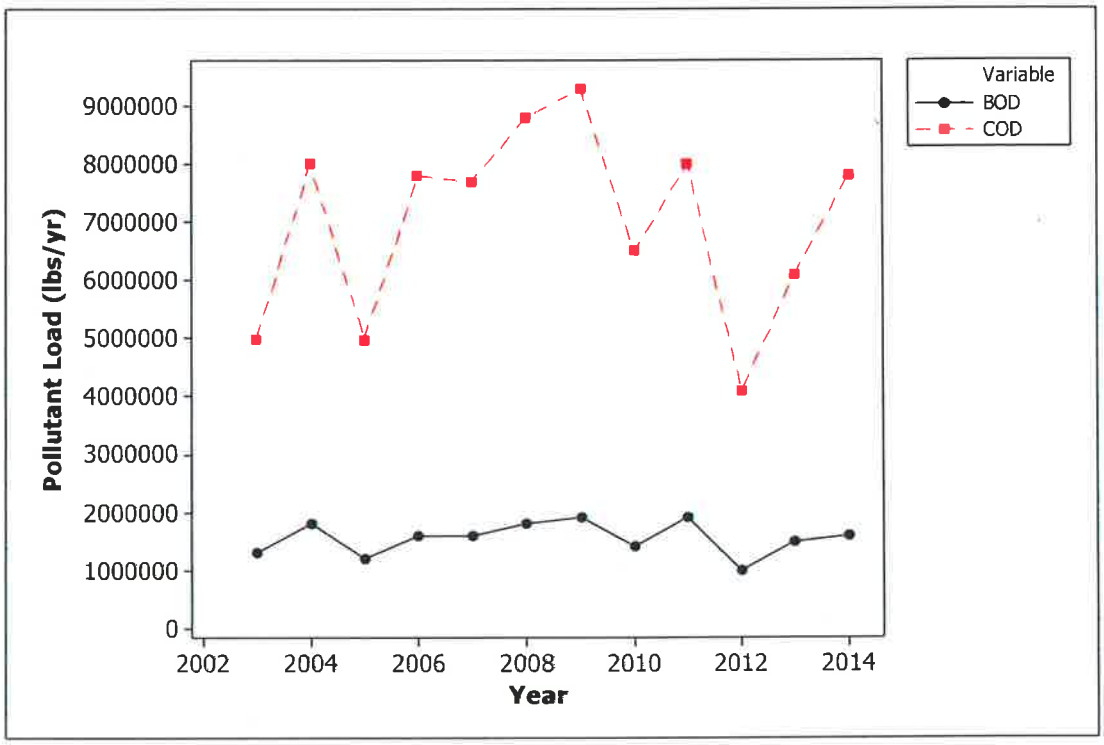

Figure B.16. Annual BOD and COD Loads from Storm Water, 2003-2014

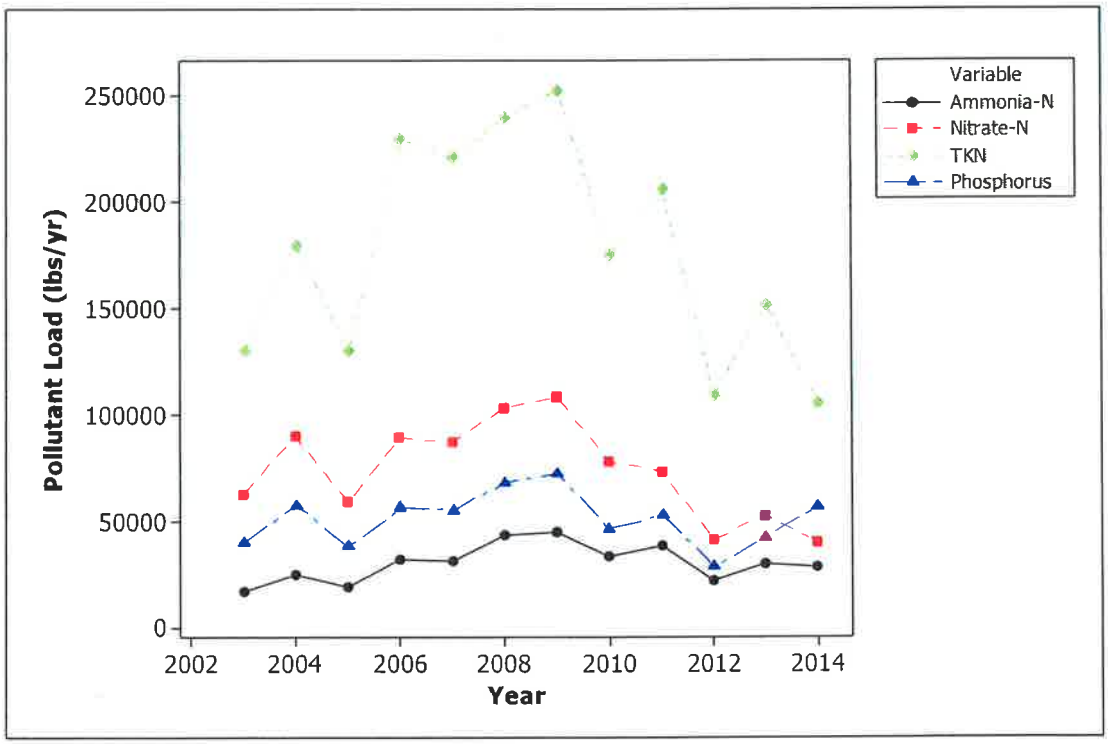

Figure B.17. Annual Nitrogen and Phosphorus Loads from Storm Water, 2003-2014

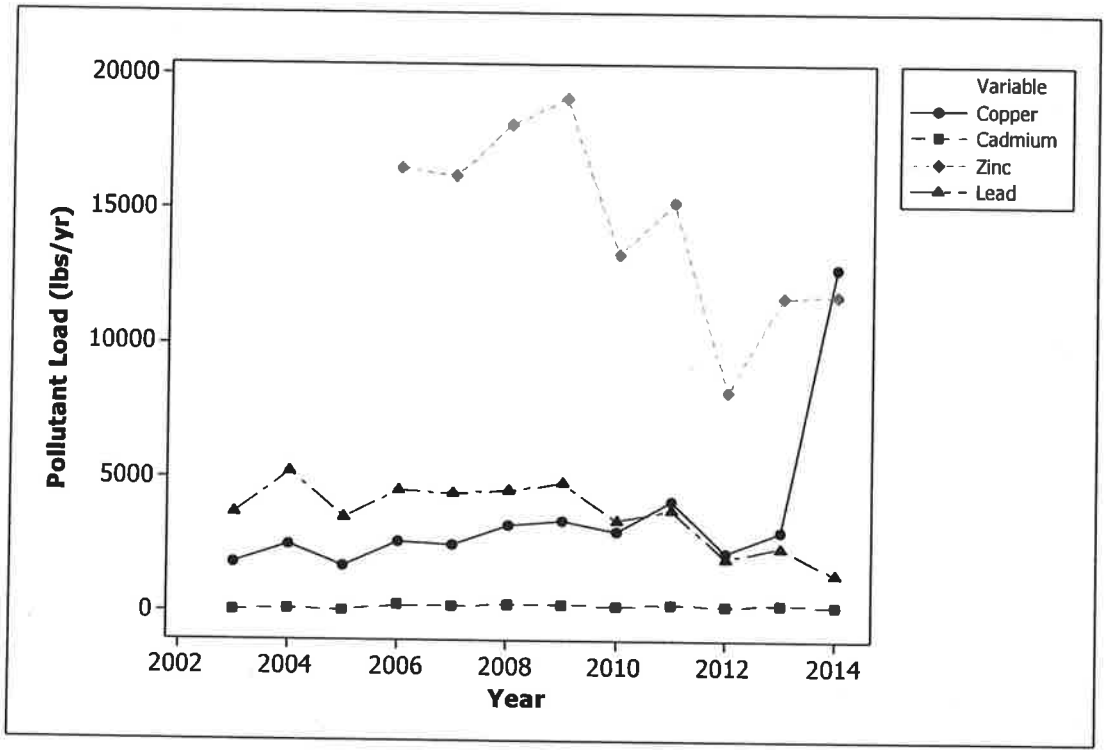

Figure B.18. Annual Loads of Metals from Storm Water, 2003-2014

APPENDIX C – MS4 STREAM ASSESSMENTS

This appendix presents the details of assessing the effects of storm water pollutant loads on water quality and aquatic health of streams in the City of Rockford. The stream bioassessment process is repeated biennially and was most recently performed in 2014. Water quality monitoring continues to be performed quarterly. This appendix addresses 2014 stream water quality monitoring that is part of the City's dry weather screening of the MS4.

Water quality, macroinvertebrates and physical habitat are routinely monitored at tributary monitoring stations T1 through T5 (Figure A.1 and Table C-1). These are the main receiving waters for the MS4.

Table C-1

STREAM MONITORING AND BIOASSESSMENT LOCATIONS

Station ID	Stream and Location
T1	North Kent Creek at Fairgrounds
T2	South Kent Creek near intersection of Tay and Corbin St
T3	Keith Creek at Tenth Avenue Park
T4	Keith Creek at Dahlquist Park
T5	Spring Creek at Starkweather Avenue

C.1 Stream Water Quality Assessment

Water quality at five stream stations in the MS4 service area are monitored quarterly by the City to assess potential dry weather water quality effects of the MS4. Since mid-2008, the stations have been monitored quarterly regardless of weather conditions, but the data since that time reflect ambient conditions, largely dry weather (base flows). Prior to 2008, stream monitoring was biased towards wet weather sampling, per the QAPP. Stream water quality data collected before 2008 have been excluded from the discussion and conclusions below.

We provide summary statistics for the tributary water quality data, compare the data to the applicable water quality standards given in 35 Ill. Admin. Code 302, and interpret the data as indicators of illicit connections in the MS4 per the dry weather screening program required in the permit (Part V.B). And as we did with the storm water quality data, analytical values less than detection limits have been transformed to 50% of the method detection limit for summarization.

C.1.1 Dissolved Oxygen and other Field Measurements

Dissolved oxygen (DO), pH, conductivity and temperature are measured on every occasion that samples are collected. DO summary statistics are given in Table C-2. There are no continuous DO measurement stations for evaluating use support in these streams. None of the tributaries in the City's MS4 service area (T1-T5) have had a grab DO measurement less than 5.9 mg/L during the 2008 – 2014 study period.

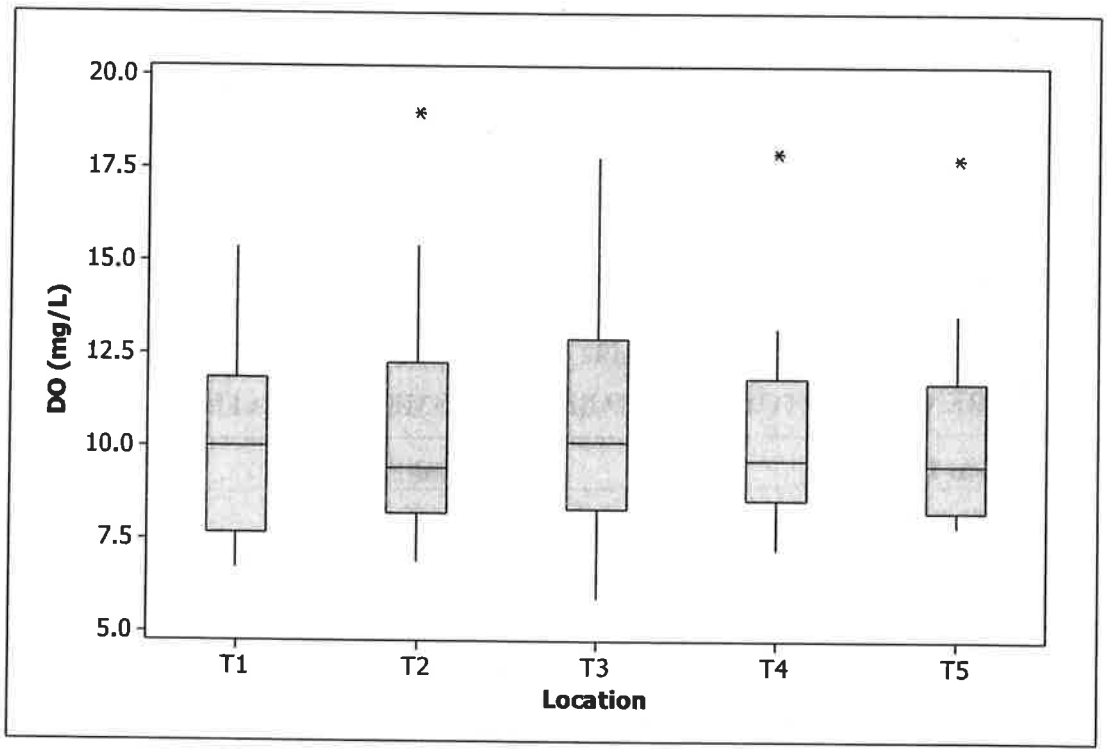

Figure C.1. Boxplot of Quarterly Dissolved Oxygen Concentrations, 2008-2014

Table C-2

DISSOLVED OXYGEN (mg/L) IN THE MS4 RECEIVING STREAMS

Location	N	Mean	Minimum	Median	Maximum
T1	23	10.15	6.72	10.0	15.37
T2	23	10.33	6.86	9.4	18.98
T3	23	10.58	5.88	10.1	17.81
T4	23	10.39	7.21	9.6	17.91
T5	23	10.12	7.8	9.5	17.76

The General Use Water Quality Standard applicable to all these streams is given in 35 Ill. Admin. Code 302.206:

1) During the period of March through July,
A) 5.0 mg/L at any time; and
B) 6.25 mg/L as a daily mean averaged over 7 days.
2) During the period of August through February,
A) 4.0 mg/L at any time;

B) 4.5 mg/L as a daily minimum averaged over 7 days; and
C) 6.0 mg/L as a daily mean averaged over 30 days.

While Illinois' water quality standards do not address high DO levels, we routinely observe these in the tributaries being monitored. High DO is the result of photosynthesis occurring in the streams. Like many streams in Illinois, this is the result of nutrient enrichment, and occurs in rural and urban streams throughout the Midwest.

The lack of any low DO measurements suggests that the MS4 does not likely contain significant illicit connections for sewage.

Summary statistics on pH values measured in the MS4 tributaries are given in Table C-3 and Figure C.2.

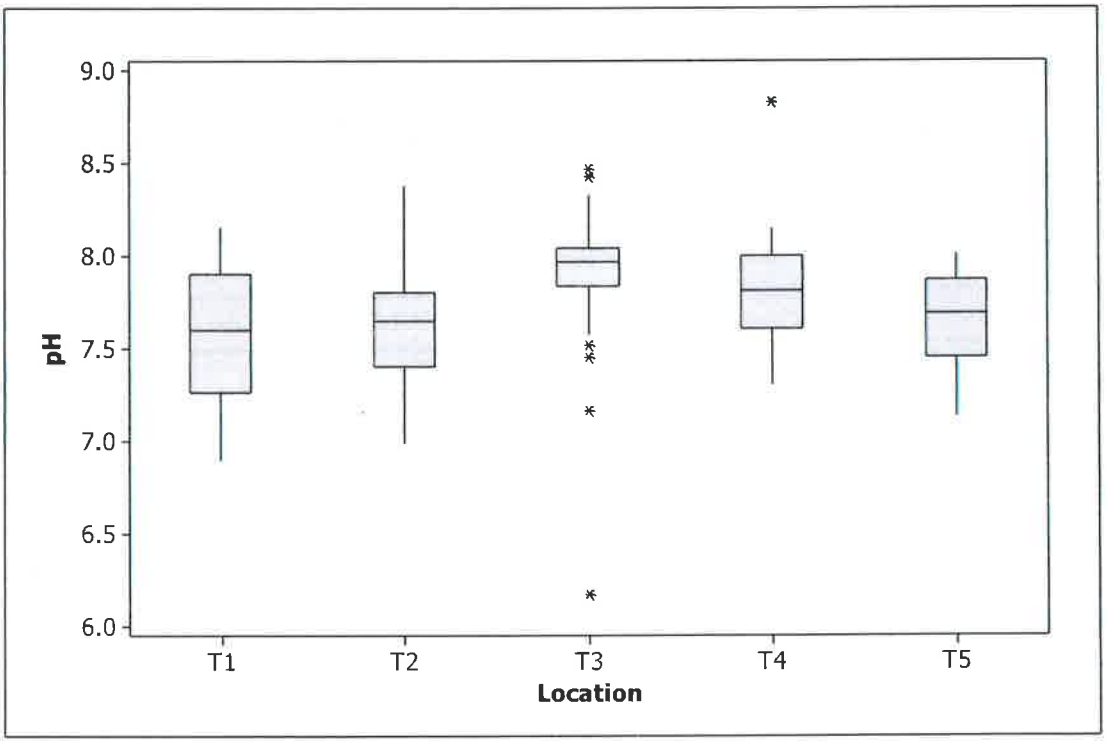

Figure C.2. Boxplot of Quarterly pH Measurements, 2008-2014

The General Use Water Quality Standard applicable to all these streams is given in 35 Ill. Admin. Code 302.204:

pH shall be within the range of 6.5 to 9.0 except for natural causes.

While none of the tributaries exceeded the upper pH standard, one measurement in Keith Creek (site T3) had a measurement less than the pH 6.5 lower limit in November 2010. This could be a natural phenomenon in the region or there may be anthropogenic causes.

Table C-3

pH IN THE MS4 RECEIVING STREAMS

Site	Name	N	Minimum	Median	Maximum
T1	North Kent Creek	23	6.89	7.6	8.16
T2	South Kent Creek	23	6.98	7.65	8.38
T3	Keith Creek at 10th Ave Pk	23	6.17	7.97	8.47
T4	Keith Cr at Dahlquist Pk	23	7.3	7.81	8.83
T5	Spring Creek	23	7.13	7.69	8.01

Summary statistics on stream conductivity measurements are given in Table C-4 and Figure C.3. Illinois does not have water quality standards for conductivity. There is a strong seasonal component to conductivity in these streams. The highest values almost invariably occur in winter and spring. This is common for urban tributaries in northern Illinois and across the nation, and reflects the effects of road deicing, i.e. salt.

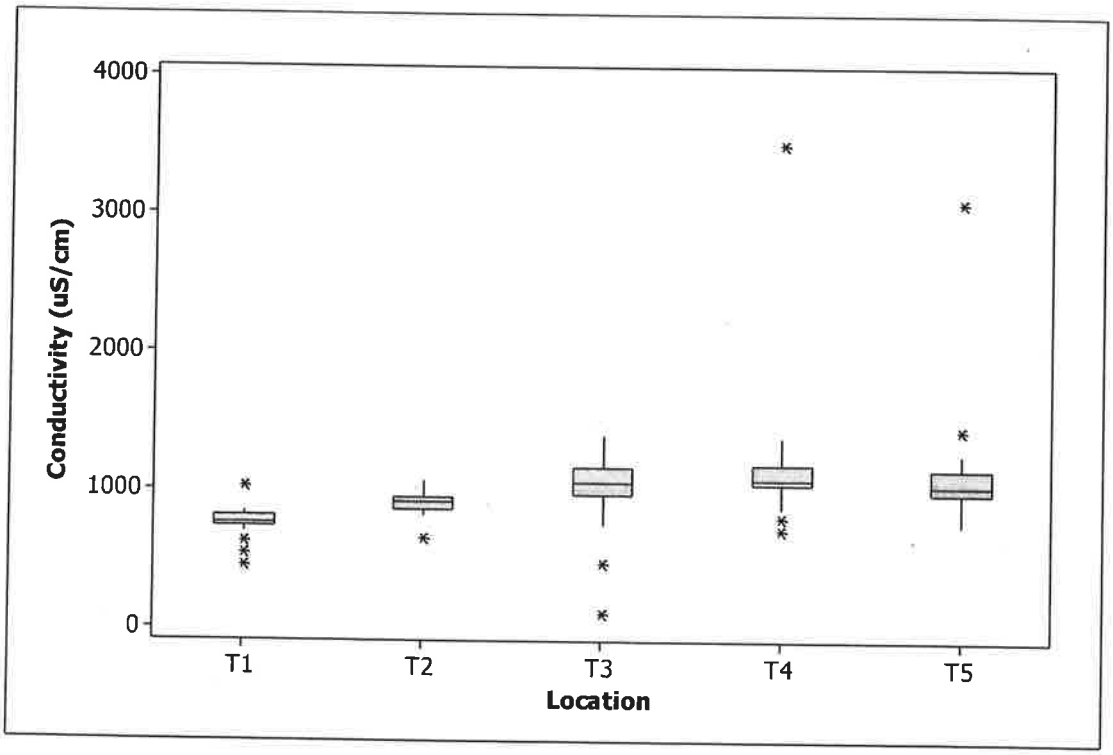

Figure 3.C. Boxplot of Quarterly Conductivity Measurements, 2008-2014

Table C-4

CONDUCTIVITY (µS/cm) IN MS4 RECEIVING STREAMS, 2008-2014

Location	N	Mean	Minimum	Median	Maximum
T1	22	751	452	762	1,017
T2	22	897	647	911	1,060
T3	22	1,005	113	1,057	1,393
T4	22	1,185	713	1,078	3,504
T5	22	1,138	750	1,034	3,094

C.1.2 Solids

Summary statistics for total suspended solids and total dissolved solids are tabulated below. Among the five streams in the Rockford MS4 service area, the TSS levels are generally lowest in Keith Creek, T3 and Spring Creek, T5, and are highest in South Kent Creek, T2. ANOVA testing indicates that there are no significant differences between TSS means (p-value = 0.069).

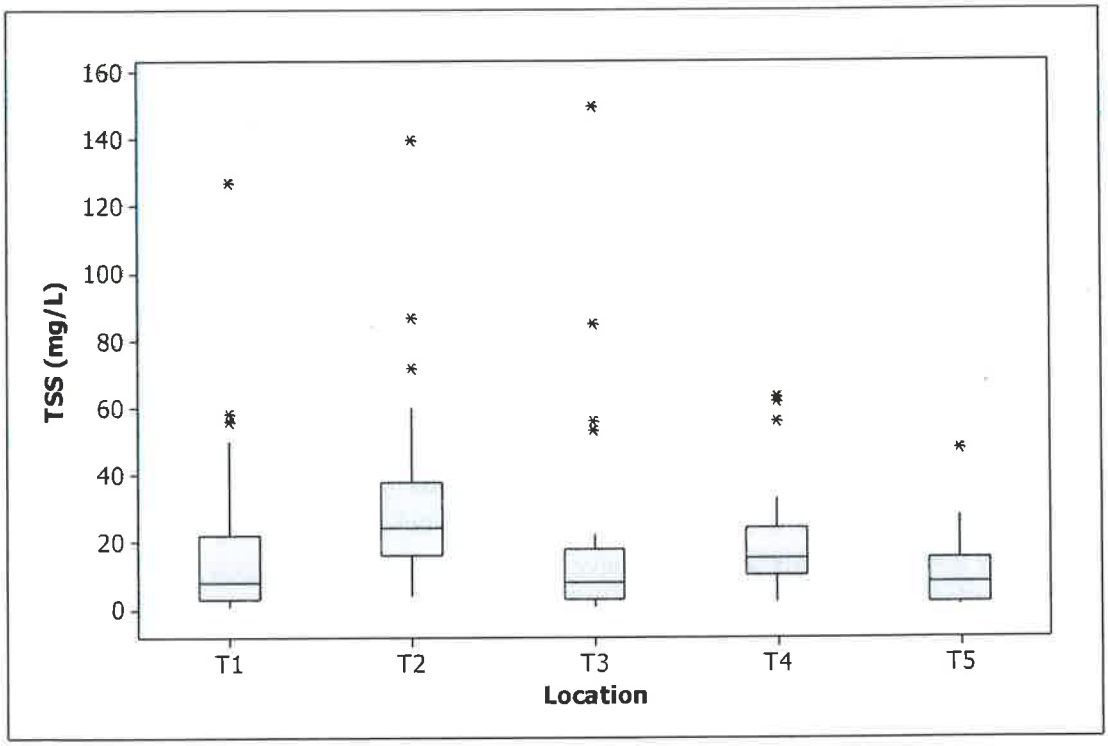

Figure C.4. Boxplot of Quarterly Measurements of Suspended Solids, 2008-2014

Table C-5

SUSPENDED SOLIDS (mg/L) IN THE MS4 RECEIVING STREAMS

Site	Name	N	Mean	Minimum	Median	Maximum
T1	North Kent Creek	23	19.7	0.5	8	127
T2	South Kent Creek	23	34.6	4	24	140
T3	Keith Creek at 10th Av Pk	23	21.7	0.5	8	150
T4	Keith Cr at Dahlquist Pk	23	20.5	2	15	63
T5	Spring Creek	23	11.7	1	8	48

Dissolved solids are highest in Keith Creek and lowest in North Kent Creek. Interesting in fact, ANOVA indicates that mean TDS in streams draining areas west of the Rock River (North Kent and South Kent Creeks) are less than the streams draining areas east of the Rock River (Keith and Spring Creeks), and that the differences are significant (p=0.000+).

Table C-6

DISSOLVED SOLIDS (mg/L) IN THE MS4 RECEIVING STREAMS

Site	Name	N	Mean	Minimum	Median	Maximum
T1	North Kent Creek	23	419	268	426	548
T2	South Kent Creek	23	487	378	486	560
T3	Keith Creek at 10th Av Pk	23	575	332	582	756
T4	Keith Cr at Dahlquist Pk	23	653	350	590	1,788
T5	Spring Creek	23	616	382	590	1,668

Illinois has no numerical standards for suspended solids or dissolved solids in general use waters for comparison to these data.

C.1.3 COD

Chemical oxygen demand (COD) was also measured in streams draining the MS4 service area. Summary statistics are given in Table C-7. There is no water quality standard for COD.

The streams have low COD levels and do not have depressed DO concentrations. This is evidence that there are likely no significant illicit discharges in the MS4 above the monitoring stations.

Table C-7

CHEMICAL OXYGEN DEMAND (mg/L) IN THE MS4 RECEIVING STREAMS

Location	N	Mean	Minimum*	Median	Maximum
T1	23	11.0	5	5	42
T2	23	12.4	5	12	27
T3	23	15.0	5	10	54
T4	23	14.7	5	10	43
T5	23	12.1	5	5	35

* The method detection limit for COD is 10 mg/L. Prior to statistical analyses, results that were less than the MDL were replaced by values equal to 50% of the MDL.

C.1.4 Nitrogen and Phosphorus

Nutrients analyzed as part of dry weather screening and tributary water quality assessment include ammonia, nitrate+nitrite, and total phosphorus. Table C.-8 summarizes total phosphorus concentrations measured in the streams. There are currently no total phosphorus water quality standards to compare these values with, but they are typical of streams in north central Illinois. A very high measurement of 5.0 mg/L total phosphorus occurred on March 10, 2014 at T2. This is an outlier and is not typical of any of these tributaries.

Table C-8

TOTAL PHOSPHORUS (mg/L) IN THE MS4 RECEIVING STREAMS

Site	Name	N	Mean	Minimum	Median	Maximum
T1	North Kent Creek	23	0.11	0.03	0.09	0.38
T2	South Kent Creek	23	0.11	0.03	0.10	0.30
T3	Keith Creek at 10th Av Pk	23	0.16	0.02	0.10	0.60
T4	Keith Cr at Dahlquist Pk	23	0.34	0.05	0.12	5.00
T5	Spring Creek	23	0.11	0.04	0.10	0.23

Table C-9 summarizes nitrate concentrations measured in the streams between 2008 and 2014. There are no water quality standards to compare these values with, but, again, they are typical of streams in north central Illinois. Mean nitrate levels in the two branches of Kent Creek are significantly higher than the other two streams in the monitoring program (p-value=0.000+) and can perhaps be attributed to higher proportions of agricultural land use in the Kent Creek watershed.

Table C-9

NITRATE_N (mg/L) IN THE MS4 RECEIVING STREAMS

Site	Name	N	Mean	Minimum	Median	Maximum
T1	North Kent Creek	23	6.73	2.16	7.12	9.40
T2	South Kent Creek	23	4.81	1.35	4.80	7.10
T3	Keith Creek at 10th Av Pk	23	1.24	0.44	1.20	2.50
T4	Keith Cr at Dahlquist Pk	23	1.44	0.49	1.44	2.80
T5	Spring Creek	23	1.58	0.50	1.50	3.50

High ammonia concentrations can indicate sewage contamination. Ammonia in the MS4 receiving streams is nearly always below the 0.1 mg/L detection level, but there are occasional measurements (Table C-10).

Table C-10

AMMONIA-N (mg/L) IN THE MS4 RECEIVING STREAMS

Site	Name	N	Mean	Minimum*	Median*	Maximum
T1	North Kent Creek	23	0.09	0.05	0.05	0.34
T2	South Kent Creek	23	0.08	0.05	0.05	0.44
T3	Keith Creek at 10th Av Pk	23	0.11	0.05	0.05	0.66
T4	Keith Cr at Dahlquist Pk	23	0.13	0.05	0.05	0.80
T5	Spring Creek	23	0.07	0.05	0.05	0.30

* The method detection limit for ammonia N is 0.1 mg/L. Prior to statistical analyses, results that were less than the MDL were replaced by values equal to 50% of the MDL.

C.1.5 Tributary Fecal Coliform Concentrations

Summary statistics on fecal coliform bacteria concentrations measured in tributaries are given in Table C.11. The General Use Water Quality Standard applicable to all these streams is given in 35 Ill. Admin. Code 302.209:

> *During the months May through October, based on a minimum of five samples taken over not more than a 30 day period, fecal coliform shall not exceed a geometric mean of 200 per 100 ml, nor shall more than 10% of the samples during any 30 day period exceed 400 per 100 ml in protected waters.*

Summary data for concentrations of fecal coliform bacteria at the MS4 tributary stations sampled between 2008 and 2014 are tabulated below. Direct comparison with the water quality standard is not possible due to the quarterly basis of the sampling program.

High coliform bacteria can indicate illicit sewer connections, but there are other sources, such as wildlife, failing septic systems, and pet wastes. Earlier load duration analyses strongly suggested that the coliform are primarily wet weather sources such as land runoff (e.g. pet wastes, Canada goose wastes) and not dry weather sources (such as an illicit connection).

Table C-11

FECAL COLIFORM BACTERIA (/100mL) IN THE MS4 RECEIVING STREAMS

Site	Name	N	Mean	Minimum	Median	Maximum
T1	North Kent Creek	23	1,392	10	240	15,800
T2	South Kent Creek	23	585	10	190	3,320
T3	Keith Creek at 10th Av Pk	23	2,290	5	480	25,500
T4	Keith Cr at Dahlquist Pk	23	2,343	50	830	11,200
T5	Spring Creek	23	1,268	20	240	9,000

C.1 Stream Macroinvertebrates

Macroinvertebrates were collected twice in 2003, once in 2006 and succeeding biennial periods. Stream macroinvertebrates were collected using the Illinois EPA Bureau of Water procedure, which closely mimics the USEPA's Rapid Bioassessment Protocols[3]. The multi-habitat sampling approach was followed.

Table C-12 lists several of the metrics investigated during this study and the expected response of the macroinvertebrate community to increasing pollution or physical disturbance. Table C-13 summarizes the findings of the benthic surveys, including the MBI, macroinvertebrate biotic index. The MBI ranges from 0 to 11 with lower scores indicating better quality communities. Computation of the MBI includes a pollutant tolerance value for each taxon, and in this manner, the lower MBI scores indicate that the community is generally less tolerant of water pollution.

Keith Creek at 10th Ave Park, T3, tends to dry up in late summer and had no flow in September 2003. Further, the stream channel at this site was relocated by the US Army Corps of Engineers as part of a flood management effort in 2010. Therefore, any changes in the macroinvertebrate community at T3 are likely due to recovery from this project rather than trends in nonpoint source pollutant loads.

[3] Barbour, M.T., J. Gerritsen, B. D. Snyder, and J. B. Stribling. 1999. Rapid Bioassessment Protocols For Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates, and Fish 2nd Edition. U.S. Environmental Protection Agency. EPA 841-B-99-002. Washington, DC. Available online at http://www.epa.gov/OWOW/monitoring/techmon.html

Table C-12

MACROINVERTEBRATE METRICS AND EXPECTED RESPONSE TO PERTURBATION

Metric	Definition	Expected Response to Perturbation
Richness *	Number of distinct taxa	Decrease
MBI *	Macroinvertebrate biotic index, based on Hilsenhoff (1987), modified for Illinois, reflects tolerance to pollution	Increase
EPT	Number of distinct taxa in the orders Ephemeroptera, Plecoptera, and Tricoptera	Decrease
% EPT *	Relative abundance Ephemeroptera, Plecoptera, and Tricoptera	Decrease
% Diptera	Relative abundance of the 'true' fly larvae	Increase
% Omnivores and Scavengers	Relative abundance of the omnivores and scavengers	Increase
% Predators	Relative abundance of the functional group predators	Variable
% Shredders	Relative abundance of the functional group shredders	Decrease
% Scrapers *	Relative abundance of the functional group scrapers	Decrease
Coleoptera Taxa *	Number of taxa in the order Coleoptera	Decrease
Ephemeroptera Taxa *	Number of taxa in the order Ephemeroptera	Decrease
Intolerant Taxa *	Number of taxa with pollution tolerance values ≤ 3	Decrease

Notes: * Indicates this metric is used in computing SCI, Stream Condition Index (Tetra Tech 2004)

A boxplot of MBI is shown in Figure C.5. Higher MBI scores suggest increased environmental stress. If all MBI measurements taken over the past 11 years are taken together, T2 (South Kent Creek) has the poorest MBI and T1 and T4 have the best MBI scores, although there are very small overall differences. Figure C-6 plots MBI scores over time at all five tributary sites and suggests improving MBI at all sites. Regression analyses indicate negative slopes for the sampling date at all tributary sites, but the slopes are not significantly different from zero (no change in MBI) except at T4, Keith Creek at Dahlquist Park, where improvements in MBI are small but statistically significant (P-value = 0.006).

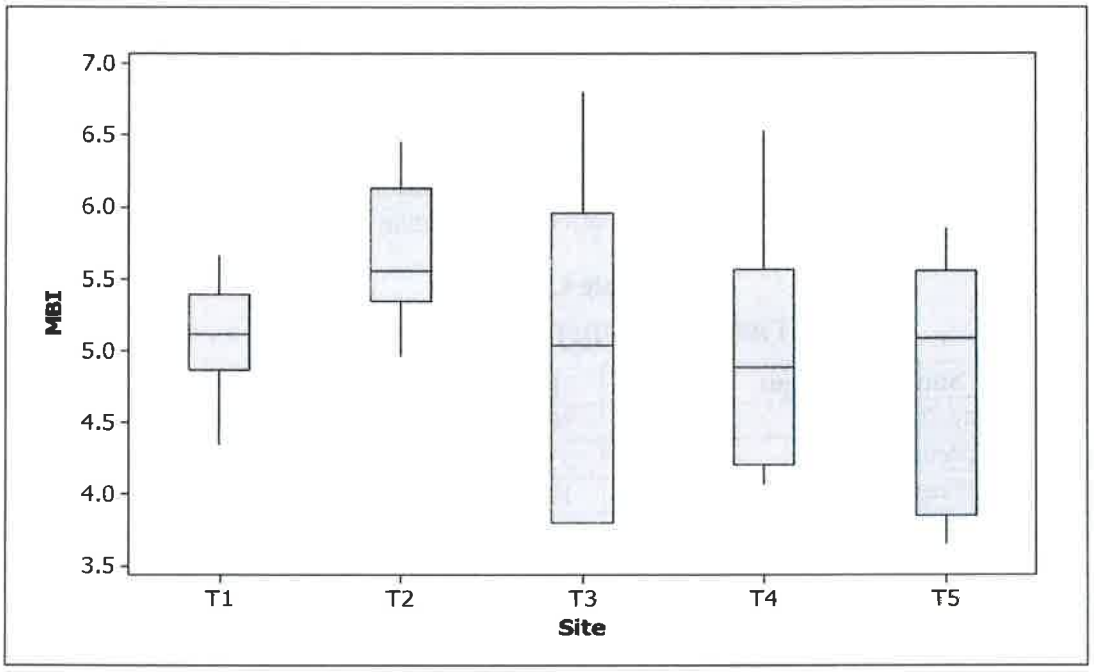

Figure C.5. Boxplot of MBI, 2003-2014

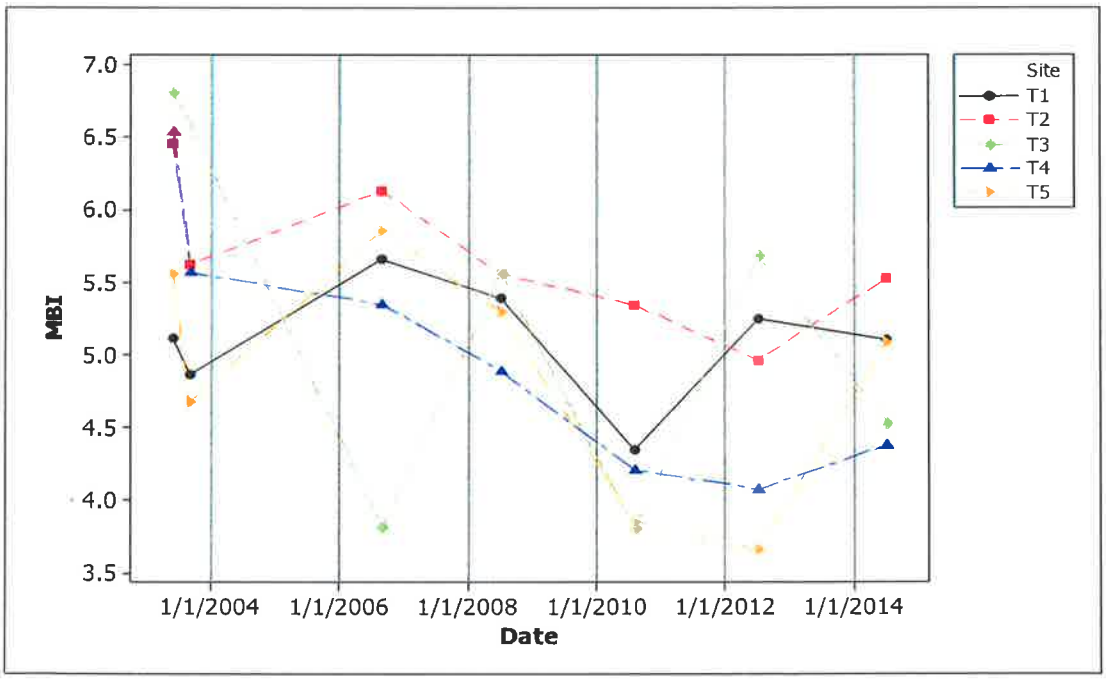

Figure C-6. MBI Timeseries Plot

Seven of the metrics in Table C-12 are averaged to estimate a Stream Condition Index, SCI [4]. Table C-13 reprints the SCI. Streams with SCI scores between 26.4 and 52.6 are rated as fair, while streams with scores between 52.6 and 72.9 are rated as good. The Illinois EPA considers streams with a SCI less than 41.8 to be impaired, and not supportive of aquatic life uses.

ANOVA was performed on the data in Table C-13 to assess differences between bioassessment sites. There are no significant differences between the five stream SCI scores (p-value = 0.084).

Table C-13

STREAM CONDITION INDICES

Sampling Event	T1	T2	T3	T4	T5
June 2003	34.7	50.1	50.8	44.3	47.0
September 2003	50.1	53.1	-	43.2	40.4
September 2006	44.9	39.2	47.2	50.6	35.9
July 2008	77.8	55.7	49.0	64.9	39.5
August 2010	56.9	56.3	41.2	43.0	41.6
July 2012	73.3	51.0	52.0	45.6	37.9
July 2014	42.9	38.3	33.3	35.4	30.2

[4] Tetra Tech. 2004. Illinois Benthic Macroinvertebrate Collection Method Comparison and Stream Condition Index Revision. Prepared for Illinois EPA by Tetra Tech, Inc. Owings Mills, MD. Revised March 2007.

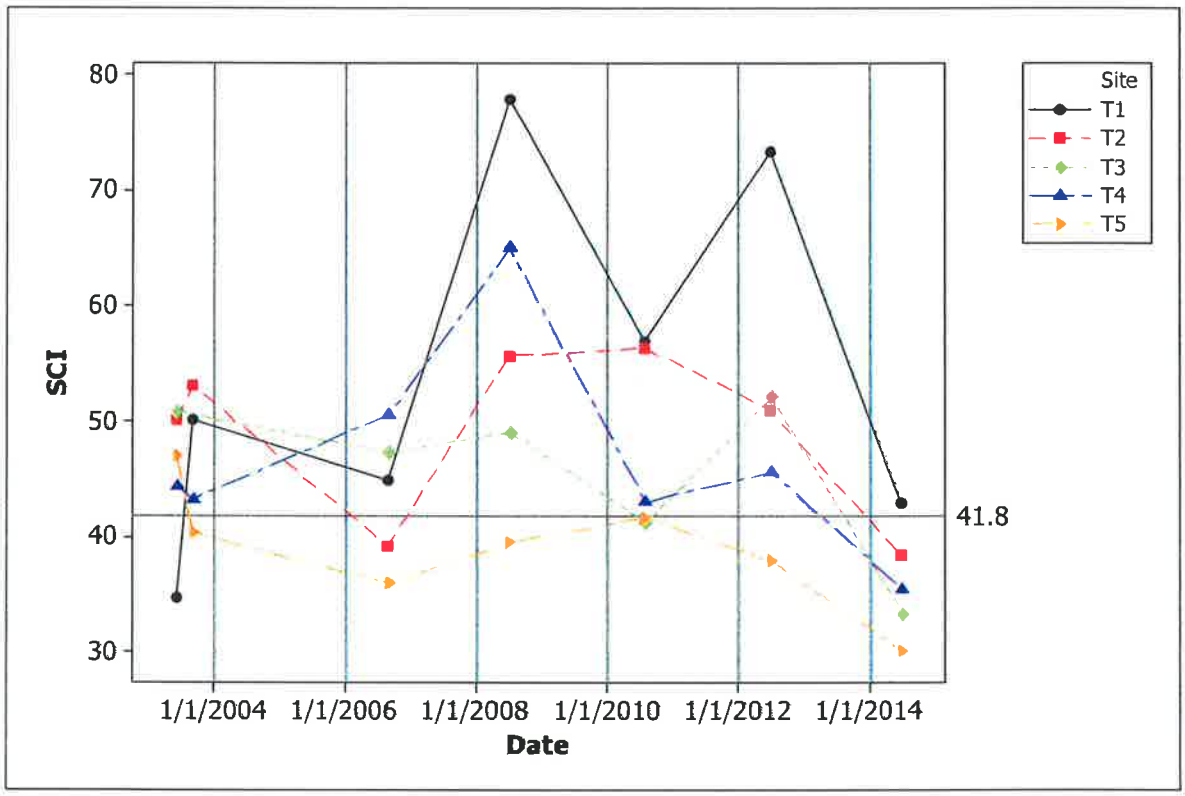

Figure C-7. Timeseries Plot of Stream Condition Index, 2003-2014

Appendix D

City of Rockford Detention Basins and Flood Control Structures

Detention Basins

1. Arden Court

Year Built: 1990 Watershed: Keith Creek

Owners: City of Rockford Maintenance Responsibility: City of Rockford

Location: SE Corner of Chelsea Avenue & Arden Court

Maintenance Activities by Year:

Year	Maintenance
2012	Removed .75 ton of sediment, routine mowing
2013	Removed 3 tons of sediment, routine mowing
2014	Removed 3 tons of sediment, routine mowing

Notes: A study was completed to retrofit this basin but the City's stormwater consultant recommended against it in 2010.

2. Lowes Distribution Center

Year Built: 2005

Watershed: Fuller Creek

Owners: City of Rockford

Maintenance Responsibility: City of Rockford (structural), Lowes (mowing)

Location: SE Springfield Ave & Montague Rd.

Maintenance Activities by Year:

Year	Maintenance
2012	Routine Mowing
2013	Routine Mowing
2014	Routine Mowing

Notes: This detention basin was built in 2006 with a multi-stage outlet structure. Since the basin was recently built and mowing has been performed regularly maintenance on the basin itself has been minimal.

3. Greater Rockford Industrial Park

Year Built: 1984 Watershed: Southeast

Owners: City of Rockford Maintenance Responsibility: City of Rockford

Location: 1052 Research Parkway

Maintenance Activities by Year:

Year	Maintenance
2012	Routine Mowing
2013	Routine Mowing
2014	Routine Mowing

Notes: This is a wet detention basin. The City is looking into possibly expanding this basin and clearing trees and brush that has overtaken its perimeter.

4. Elliot Golf Course Regional Detention Facility

Year Built: 1968

Watershed: Manning Creek

Owners: Rockford Park District

Maintenance Responsibility: City of Rockford (structural), Rockford Park District (weekly)

Location: 888 South Lyford Road

Maintenance Activities by Year:

Year	Maintenance
2008	Routine Mowing, Basin dredged, reshaped, sediment basin constructed
2009	Routine Mowing
2010	Routine Mowing
2011	Routine Mowing
2012	Routine Mowing, minor erosion repaired and reseeded
2013	Routine Mowing
2014	Routine Mowing

Notes: This is a wet detention basin. In 2009, the basin was dredged, re-graded and a sediment basin was constructed to make it a regional facility. In 2012, minor erosion was repaired and the basin was again reseeded.

5. Logistics Park Detention Basin

Year Built: 2005

Watershed: Airport East

Owners: City of Rockford

Maintenance Responsibility: City of Rockford

Location: 1650 Blackhawk Road

Maintenance Activities by Year:

Year	Maintenance
2009	Detention Basin Constructed
2010	None
2011	None
2012	None
2013	Construction began to complete basin design with local contractor
2014	Basin construction completed. Additional designs underway for retrofit

Notes: The City became aware this basin was not completed properly in 2012. An agreement was entered with a local contractor to complete the project which was done in 2014.

6. New Towne and Javelin Drive Detention Basin

Year Built: 1997

Watershed: Keith Creek

Owners: City of Rockford

Maintenance Responsibility: City of Rockford

Location: NW New Towne and Javelin Drives

Maintenance Activities by Year:

Year	Maintenance items
2014	Removed 37.66 tons of sediment from concrete channel and reseeded and routine mowing

Notes: The City became aware this basin was their maintenance responsibility in 2014. After inspecting the basin, the City removed sediment accumulated in the concrete channel and reseeded the disturbed areas.

North Towne and Javelin detention basin before and during maintenance. Disturbed areas were seeded and protected with erosion control blanket.

7. Linden Pointe Detention Basin

Year Built: 2007

Watershed: Airport East

Owners: Rockford Park District

Maintenance Responsibility: City of Rockford (structural)
Rockford Park District (routine maintenance)

Location: Scarlet Oak Drive and Bypass 20

Maintenance Activities by Year:

Year	Maintenance items
2012	Mowing
2013	Mowing & Tree removal
2014	Mowing

Notes: This detention basin is under design for repairs and retrofit.

8. Executive Parkway Detention Basin

Year Built: 1980

Watershed: Keith Creek

Owners: City of Rockford

Maintenance Responsibility: City of Rockford

Location: Executive Parkway east of Mulford Road

Maintenance Activities by Year:

Year	Maintenance items
2014	Property Purchased

Notes: In 2014 the City purchased ½ of a wet detention pond along Executive Parkway. This was done through a Winnebago County tax sale. The City intends to use its enforcement procedures to ensure the HMA completes maintenance on the pond per the subdivision plat.

Dams, Levees & Drainageways

1. **Alpine Dam** (Per the City of Rockford's MS4 permit this a one of the City's floatable locations)

Year Built: 1942 Watershed: Keith Creek

Owners: City of Rockford Maintenance Responsibility: City of Rockford & Rockford Park District

Location: 623 N. Alpine Road (Aldeen Park)

Maintenance Activities by Year:

Year	Maintenance items
2012	Mowing of the embankments and removal of 70 tons of accumulated silt, debris, and floatables.
2013	Mowing of the embankments and removal of approximately 15 tons of accumulated silt, debris, and floatables from the trash rack. Erosion control work was also completed on the embankments where citizens walk up and down the slope.
2014	Replacement of handrails, mowing of the embankments and removal of approximately 38 tons of accumulated silt, debris, and floatables from the trash rack and spillway.

Notes: Plans and specifications for dam repairs were prepared several years ago. The plans included modernizing the trash rack to facilitate future cleaning operations. The City is currently waiting on funding and construction permits for the improvements. The City of Rockford performs annual inspections on the dam per IDNR requirements.

Alpine Dam trash rack before and after cleanout.

2. Page Park Dam

Year Built: 1980

Watershed: North Kent Creek

Owners: City of Rockford

Maintenance Responsibility: City of Rockford & Rockford Park District

Location: Porter Road (Page Park)

Maintenance Activities by Year:

Year	Maintenance items
2012	Beaver dam removal. Minimal mowing took place due to wet conditions.
2013	Mowing, replacement of marker posts, brush cutting and spraying, removal of debris from trash rack and removal of several beaver dams.
2014	Mowing, brush cutting and spraying, removal of debris from trash rack and removal of several beaver dams. The City installed a depth gauge at this dam.

Notes: This dam is inspected annually by the US Army Corps of Engineers performs inspections as well as the City of Rockford per IDNR requirements.

Member of the Stormwater Environmental Team removing a beaver dam at Page Park Dam

3. Levings Lake Dam

Year Built: 1935

Watershed: South Kent Creek

Owners: City of Rockford

Maintenance Responsibility: City of Rockford & Rockford Park District

Location: South Pierpont Avenue (Levings Lake Park)

Maintenance Activities by Year:

Year	Maintenance items
2012	Mowing of the embankments.
2013	Mowing of the embankments, repairing the cable buoys and filling and reseeding washouts along the dam structure.
2014	Mowing of the embankments. The City installed a depth gauge.

Notes: This dam is inspected annually by the US Army Corps of Engineers performs inspections as well as the City of Rockford per IDNR requirements.

4. South Diversion Channel & Levee

Year Built: 1981

Watershed: North Kent Creek

Owners: City of Rockford

Maintenance Responsibility: City of Rockford

Location: West or Meridian Road along West State Street proceeding north to quarry north of Auburn Street.

Maintenance Activities by Year:

Year	Maintenance items
2013	Repaired the end section of a structure and utilized inmates from the Winnebago County jail for tree and brush removal and filling of animal burrows. .
2014	Mowing & repair of erosion. Continued tree and brush clearing of the thalweg.

Notes: This structure is inspected annually by the US Army Corps of Engineers

5. Logistics Park Drainageway

Year Built: Watershed: Airport East

Owners: City of Rockford Maintenance Responsibility: City of Rockford

Location: Blackhawk Road proceeding North on Logistics Parkway

Maintenance Activities by Year:

Year	Maintenance items
2013	Mowing
2014	Removal of trees and brush in the drainage way and mowing.

Notes:

Appendix E

STORMWATER POLLUTION PREVENTION PLAN REVIEWS IN 2014

Date	NPDES Permit	Facility Name	Facility Owner	Facility Location	SWPPP available for review	Notes
2/21/2014	S937	Meijer Store	Meijer Stores	Perryville & Rote Rds.	Yes	Lat. /long to be included on NOI, endangered species & hist. pres. have been applied for. Minor plan revisions have been addressed.
3/12/2014	R601	Eisenhower Middle School	Rockford Public Schools	3525 Spring Creek Road	Yes	
3/20/2014	T205	Detention Pond Construction, Plat #6, Spring Creek Crossing	First Perryville Development Corp.	6885 Vista Green Way	Yes	SWPPP available, no erosion control plan included or BMP specs. Permit has not been applied for approved 6/4/14
4/1/2014	T048	Auburn H.S. Paving Improvements	Rockford School District	5110 Auburn St.	Yes	SWPPP & ESC plans approved
4/1/2014	T049	Jefferson H.S. Paving Improvements.	Rockford School District	4145 Samuelson Rd.	Yes	SWPPP & ESC plans approved
4/1/2014	R602	Guilford H.S. Paving Improvements	Rockford School District	5620 Spring Creek Road	Yes	SWPPP & ESC plans approved, permit has not been applied for
4/1/2014	S990	Sinnissippi Park Improvements	Rockford Park District	1401 N. Second St.	Yes	
4/3/2014	T110 or T114	Mechanical Inc. Improvements	Mechanical Inc.	5660- Falcon Rd.	Yes	SWPPP & ESC Plans approved. Same site has 2 IEPA construction permits.
4/11/2014	S952	Hayes Beer Addition	Hayes Beer	1819 Elmwood Road	Yes	Needs specs for stabilized entrance and washout.
4/15/2014	S568	Lot 8 Perryville Center	First Rockford Group	6801 Mill Road	Yes	

STORMWATER POLLUTION PREVENTION PLAN REVIEWS IN 2014

Date	NPDES Permit	Facility Name	Facility Owner	Facility Location	SWPPP available for review	Notes
4/30/2014	T188	Fire Station #3	City of Rockford, Fire Dept.	802 Marchaesano Dr.	Yes	
5/7/2014	R782	Wesley Willows, Phase 3	Wesley Willows	Rockton Rd.	Yes	Only minor corrections
5/21/2014	T343	Conklin Elementary	Rockford School District	3003 Halsted	Yes	
5/21/2014	T344	Roosevelt Center	Rockford School District	978 Haskell	Yes	
5/21/2014	NA	3301 American Rd.	Scott's RV	3301 American Road	No	Site less than 1 acre. No SWPPP require
5/21/2014	NA	Johnson School Paving Imp.	Rockford School District	3805 Rural St.	Yes	Site less than 1 acre. No SWPPP required.
6/9/2014	T457	Rockford Heat Treaters	Rockford Heat Treaters	American Road	Yes	
7/3/2014	T205	Perryville Promenade II	First Rockford	2013 McFarland	Yes	Site included in permit # T205 approved on 6/4/2014, reviewed & approved revised ESC plan for sediment trap - 08/15/2014
7/8/2014	T283	Red Dot Storage	Red Dot Storage	3410 Publishers	Yes	
7/16/2014	S600	Alpine Hills Plan revision	Rockford Park District	4401 Larson	Yes	Plan phasing revision, Previous SWPPP still applies.

STORMWATER POLLUTION PREVENTION PLAN REVIEWS IN 2014

Date	NPDES Permit	Facility Name	Facility Owner	Facility Location	SWPPP available for review	Notes
7/17/2014	NA	Patio Improvements	Brendan Blackler	1021 E. State St.	NA	Less than 1 acre, No SWPPP needed. ESC plan good.
7/17/2014	T794	Multi Use Path	City of Rockford		Yes	
7/24/2014	T871	Reconstruction Airport Dr. & Falcon Rd.	City of Rockford	Airport Dr. & Falcon Rd.	Yes	
8/5/2014	T778	MKD Car Wash	MKD Enterprises	5051 E. State St.	Yes	
8/5/2014	T794	Ring Can Container Addition	Ring Container Technologies	4689 Assembly Dr.	Yes	
9/5/2014	T506	OSF Cancer Center Addition	OSF Healthcare System	5666 E. State St.	Yes	
9/22/2014	T986	RVC Leased Building	Greater Rockford Airport	6039 Cessna Dr.	Yes	SWPPP was not for correct area. Awaiting correct SWPPP. 10/08/2014 - all items corrected
10/23/2014	NA	Spring Creek Elementary Drainage Improvements	Rockford Public Schools	Spring Creek Road	NA	Site less than 1 acre. No SWPPP required. ESC measures are included in plan.
10/17/2014	U251	Boylan H.S. Expansion	Boylan High School	4000 St. Francis Dr.	Yes	Non-stormwater discharges not addressed & plans had 2 sets of stabilized entrance requirements. Approved 10/23/2014
10/31/2014	U264	Bello Reserve Lot 115 improvements	Terra Creek Townhomes	626 Shiloh	Yes	SWPPP & ESC Plans approved. NOI has not been approved by IEPA yet.

STORMWATER POLLUTION PREVENTION PLAN REVIEWS IN 2014

Date	NPDES Permit	Facility Name	Facility Owner	Facility Location	SWPPP available for review	Notes
10/28/2014	U269	Save A Lot	IFF	1701 W. State St.	Yes	11/19./2014 - All items addressed
11//20/2014	U340	Portillos	Portillos Hot Dogs	6122 Mulford Village Dr.	Yes	Need BMP installation Specifications. Approved 11/21/2014
11/24/2014	U356	Rockford Indoor Sports Complex	City of Rockford	305 S. Madison St.	Yes	Permit applied for. SWPPP & ESC Plan approved.
11/20/2014	U333	6122 Mulford Village Dr.	Dyn Capron Holdings	6122 Mulford Village Dr.	Yes	Add stabilized construction entrance & additional silt fence
11/24/2014	U356	Rockford Indoor Sports Complex	City of Rockford	305 S. Madison St.	Yes	Permit applied for. SWPPP & ESC Plan approved.

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
2/7/2014	Com Ed, Avon St. Site remediation	X		Q651	No	NA	NA	NA	Site is in winter shutdown. Discharging is completed.
2/7/2014	West State St. (IDOT)	X		R426	No	NA	NA	NA	Site has been shut down for the winter. Construction to begin again in the spring.
2/7/2014	Main & Auburn St. Round-A-Bout	X		R148	No	NA	NA	NA	Construction is completed and entire site is blanketed. Awaiting 70 vegetative cover.
2/11/2013	Logistics Park Lot 7	X		S409	No	NA	NA	NA	No construction activity. Site is in winter shutdown.
2/11/2013	Perryville Center, Lot 8	X		S221	No	NA	NA	NA	No construction activity. Site is in winter shutdown.
4/9/2014	Wesley Willows		X	D336	Yes	4/22/2014	Yes	No	Silt fence, inlet protection, construction exit needed
4/10/2014	Hampton Crossing (Boulder Creek)	X		5804	No	NA	NA	NA	No construction activity.
4/10/2014	Van Matre		X	S434	No	NA	NA	NA	BMP's are in good condition and SWPPP and inspection reports are current.

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
4/10/2014	1476 Castle Hill Drive		X	NA	Yes	4/25/2014	Yes	No	BMP's along street needed, inlet protection & back of curb protection. No ILR10 permit is required. 04/24/2014 - items addressed though additional maintenance needed. See 04/25/14 report
4/10/2011	Alpine Hills Adventure Park	X		S600	No	NA	NA	NA	This project has not started.
4/11/2014	Freeway of Rockford	X		S234	Yes	4/22/2014	NA	NA	Final grade taking place, inlet protection + silt fence good
4/11/2014	Project Empire Logistics Park Plat 3 Lot 7		X	S409	Yes	4/22/2014	NA	NA	Silt fence maintenance needed, ready for final grade
4/15/2014	Landstrom Rd Recon 2013	X		R961	Yes	5/2/2014	Yes	No	Soil erosion around inlets, needs stabilization - 6/19/2014 - site stabilized & terminated
4/15/114	Guilford HS Fieldhouse Addition		X	S096	Yes	5/2/2014	Yes	NA	Silt fence, washout exit good - sweeping needed on Shaw Woods Dr.

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
4/15/2014	804/806 Arnold Ave Habitat for Humanity	X		NA	Yes	5/6/2014	No	NA	Silt fence needed, construction exit needed
4/22/2014	Wesley Willows	X		D336	No	NA	No	NA	Silt fence, construction exit, and inlet protection installed
4/22/2014	Project Empire Logistics Park Plat 3 Lot 7	X		S409	No	NA	Yes	Na	Silt fence maintained, inlet protection good, final grading taking place
4/22/2014	Auburn High School Fieldhouse Addition		X	R864	Yes	5/2/2014	No	No	Silt fence, construction exit needed on east side of site
4/22/2014	Freeway of Rockford		X	S234	Yes	5/2/2014	No	No	Final grade - site needs stabilization
4/23/2014	Blackhawk Park Ave & Seminary St		X	S195	Yes	4/29/2014	Yes	No	Inlet protection needed
4/25/2014	1476 Castle Hill Drive		X	NA	Yes	5/8/2014	Yes	No	Letter sent 4/30/14, Received written response 05/08/2014, all corrective actions addressed.

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
4/28/2014	Froberg Elementary		X	R676	Yes	5/8/2014	Yes	No	Need to increase mulch application rate
4/29/2014	Rockford College Parking Lot	X		Q864	No	NA	NA	NA	Site is stabilized - NOT recommended
4/29/2014	Spring Creek Elementary School		X	R677	Yes	5/8/2014	NA	NA	Increase hydromulch application rate, install ECB on slopes
4/29/2014	Blackhawk Park Ave & Seminary St	X		S195	No	NA	NA	NA	Inlet protection installed, sump condition, concrete removal taking place
4/30/2014	Van Matre		X	S434	Yes	5/13/2014	Yes	NA	Newly graded detention basin needs stabilization
5/2/2014	Freeway of Rockford	X		S234	Yes	5/13/2014	No	No	Disturbed areas need to be stabilized
5/2/2014	Guilford HS Fieldhouse Addition	X		S234	Yes	5/13/2014	Yes	No	Section of silt fence needs maintenance, 06/19/2014 - site stabilized
5/2/2014	Landstrom Rd Recon 2013	X		R961	Yes	5/12/2014	Yes	No	Soil erosion around inlets, needs stabilization

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
5/2/2014	Auburn High School Fieldhouse Addition	X		R864	Yes	5/15/2014	Yes	No	Silt fence, inlet protection good, need construction exit on east side
5/5/2014	Lyford Crossing	X		I983	No	NA	NA	NA	Project has been terminated. Long term stabilization is in place.
5/5/2014	Hayes Beer Addition	X		S942	Yes	5/15/2014	NA	NA	Met contractor, grading has begun, silt fence up, inspections started
5/6/2014	Huffman Property		X	Q339	Yes	5/22/2014	Yes	No	No SWPPP, Minor S.F. maintenance. Grading and filling operations are taking place
5/6/2014	804/806 Arnold Ave Habitat for Humanity	X		NA	Yes	5/19/2014	Yes, not correctly	No	Silt fence needed, inlet protection needed
5/7/2014	RMTD Transfer Station	X		M035	No	NA	NA	NA	No Activity. Site is final stabilized.
5/7/2014	OSF Drainage Improvements		X	R071	No	NA	NA	NA	Site has erosion control blanket in place for final stabilization. Vegetative cover is not adequate.

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
5/7/2014	Mechanical Improvements		X	T114	Yes	5/16/2014	Yes	No	Silt fence splice needs fixed, new inlet protection needed
5/7/2014	Blackhawk Park Ave & Seminary St	X		S195	No	NA	NA	NA	Road removal taking place, inlet protection in - inlets are raised
5/8/2014	Froberg Elementary	X		R676	No	NA	NA	NA	Hydro seed has been reapplied
5/8/2014	Spring Creek Elementary School	X		R677	No	NA	NA	NA	Hydro seed has been reapplied
5/8/2014	Wesley Willows	X		D336	Yes	5/23/2014	Yes	No	BMPs look good
5/9/2014	N Main St & Auburn St Roundabout		X	R148	No	NA	NA	NA	Final Restoration, waiting for 70% coverage
5/9/2014	Morgan St & College Ave Road & Bridge		X	O898	No	NA	NA	NA	Final Restoration, waiting for 70% coverage
5/12/2014	Landstrom Rd Recon 2013	X		R961	Yes	6/19/2014	Yes	No	Emailed Steve about BMP maintenance, 07/02/2014 - permit terminated

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
5/13/2014	Freeway of Rockford		X	S234	Yes	6/9/2014	Yes	No	Final restoration, no BMP maintenance performed, final notice
5/13/2014	Van Matre		X	S434	Yes	5/30/2014	Yes	No	One inlet protection needs maintenance, all others good, See 05/30/2014 report
5/13/2014	Guilford HS Fieldhouse Addition		X	S234	Yes	5/29/2014	NA	NA	All bmp's are good, monitor track out at construction entrances
5/14/2014	6801 Mill Road		X	S221	Yes	5/22/2014	Yes	No	No SWPPP onsite, minor silt fence maintenance, stockpile needs stabilization, stockpile to be moved to another location.
5/15/2014	Ditch Relocation		X	S505	Yes	6/19/2014	Not all	No - resend letter	No SWPPP on site, silt fence needs maintenance, slope has failed near ditch check - needs replacement, 8/13/2014 – items addressed and confirmed
5/15/2014	Fordam Dam Remediation	X		R989	Yes	6/10/2014	NA	NA	Signs posted for construction, no work taking place

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
5/15/2014	Auburn High School Fieldhouse Addition		X	R864	Yes	6/10/2014	Yes	No	BMP's good, minimal tracking, monitor open top inlets
5/15/2014	Hayes Beer Addition		X	S942	Yes	6/11/2014	Yes	No	BMP's in place and working
5/16/2014	Mechanical Improvements	X		T114	No	6/19/2014	Yes	No	Silt fence splice replaced, outlet protecting installed, inspections kept with foreman from CIVIL
5/19/2014	804/806 Arnold Ave Habitat for Humanity	X		NA	Yes	6/10/2014	Yes	No	silt fence installed incorrectly, needs inlet protection
5/19/2014	Project Empire Logistics Park Plat 3 Lot 7		X	S409	Yes	7/17/2014	Yes	No	Basin needs stabilization, inlet protection and concrete washout replaced, silt fence maintained
5/21/2014	Meijer # 192		X	S937	Yes	6/9/2014	Yes	No	Mass grading has begun, additional silt fence required, spliced in silt fence need fix
5/22/2014	Perryville Path SE Connection		X	S138	Yes	7/8/2014	Yes	No	Inlet protection needs maintenance, ditch should be stabilized, could not locate SWPPP or inspections

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
5/22/2014	I90 at Bus 20 Ramp Recon.		X	S104	Yes	7/8/2014	Yes	No	All bmp's need maintenance or replacement, could not locate SWPPP or inspections
5/23/2014	Wesley Willows	X		D336	No	NA	NA	NA	Final grade, need stabilization, BMPS are good
5/27/2014	Wesley Willows		X	D336	Yes	6/11/2014	Yes	No	Minor maintenance needs
5/29/2014	Spring Creek Elementary School	X		R677	No	NA	NA	NA	Waiting on uniform growing grass in detention basin
5/29/2014	Guilford HS Fieldhouse Addition	X		S234	Yes	7/3/2014	Yes	No	Inlet protection in parking lot needs maintenance, all others good
5/30/2014	Van Matre	X		S434	No	NA	NA	NA	Outlet protection needs replacement, all other BMPS are good, site needs to be stabilized
6/9/2014	Freeway of Rockford	X		S234	No	NA	NA	NA	Final stabilization, erosion control blanket installed, grass growing

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
6/9/2014	Meijer # 192	X		S937	Yes	6/17/2014	Yes	No	Water main, storm sewer installed, new basin is being excavated
6/10/2014	Fordam Dam Remediation	X		R989	Yes	6/23/2014	Yes	No	Construction entrance installed, some silt fence up
6/10/2014	804/806 Arnold Ave Habitat for Humanity	X		none	Yes	7/8/2014	Yes	No	Silt fence re-installed, inlet protection in
6/10/2014	OSF Drainage Improvements	X		R071	No	NA	NA	NA	Grass is growing, basin is wet, inlet protection could be pulled out
6/10/2014	Auburn High School Fieldhouse Addition		X	R864	Yes	7/22/2014	Yes	No	Needs sweeping, silt fence maintenance needed
6/11/2014	Hayes Beer Addition	X		S942	Yes	6/17/2014	Yes	No	BMP's seem to be holding up, monitor outlet protection
6/17/2014	East High School Field House Add / Paving		X	T014	Yes	7/3/2014	Yes	No	Inlet protection not approved, needs replacement after milling

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
6/17/2014	Jefferson High School Paving		X	T049	Yes	7/3/2014	Yes	No	No SWPPP or inspections, additional inlet protection required
6/17/2014	Meijer # 192		X	S937	Yes	7/3/2014	Yes	No	Sediment leaving site, replacement BMP's required
6/17/2014	Eisenhower Middle School		X	R601	Yes	7/3/2014	Yes	No	Inlet protection needed, additional silt fence required
6/17/2014	Conklin Elementary		X	T343	No	NA	NA	NA	Site just started, All BMP's in place
6/17/2014	Hayes Beer Addition		X	S942	Yes	7/9/2014	Yes	No	Inlet protection reinforced, sweep
6/17/2014	Wesley Willows Phase 3		X	R782	Yes	6/24/2014	Yes	No	Minor maintenance needs
6/19/2014	Mechanical Improvements		X	T114	Yes	7/3/2014	Yes	No	Final graded, needs to be stabilized
6/19/2014	Ditch Relocation		X	S505	Yes	8/13/2014	Yes	No	Silt fence needs maintenance, stabilize deep rill

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
6/23/2014	Fordam Dam Remediation		X	R989	Yes	7/23/2014	Yes	No	Section of silt fence needs to be keyed in
7/2/2014	Wesley Willows Phase 3	X		R782	Yes	7/21/2014	Yes	No	Silt fence needs re-installation, additional fence needed
7/3/2014	West State St. (IDOT)	X		R426	No	NA	NA	NA	Some areas have been final or temporarily stabilized. Construction of walking path continues.
7/3/2014	Renaissance Corners, Campus of Care	X		N278	No	NA	NA	NA	Site has new management. Topsoil being respread and bare spots are being stabilized. Minor maintenance needed since heavy rains. Continue to monitor.
7/3/2014	Mechanical Improvements	X		T114	No	NA	NA	NA	Basin has been blanketed. Site appears to be final stabilized.
7/3/2014	Jefferson High School Paving	X		T049	Yes	7/23/2014	Yes	No	Street Sweeping needed

EROSION CONTROL INSPECTIONS AND CORRECTIVE ACTIONS PERFORMED IN 2014

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
7/3/2014	East High School Field House Add / Paving	X		T014	Yes	7/23/2014	Yes	No	Street Sweeping needed
7/3/2014	Meijer # 192	X		S937	Yes	7/22/2014	Yes	No	Turbidity at 84.8, silt fence NWX needs reinstallation
7/3/2014	Guilford HS Fieldhouse Addition	X		R602	Yes	7/29/2014	Yes	No	Some MH structures need reconstruction
7/3/2014	Eisenhower Middle School	X		R601	Yes	7/25/2014	Yes	No	Silt fence needs maintenance
7/3/2014	Spring Creek Elementary School	X		R677	No	NA	NA	NA	Seed has failed in detention basin
7/8/2014	804 806 Arnold Ave - Habitat house	X		NA	Yes	7/25/2014	Yes	No	Silt fence needs maintenance
7/8/2014	OSF Drainage Improvements	X		R071	No	NA	NA	NA	Detention basin has water in it, grass cannot grow.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
7/8/2014	I90 at Bus 20 Ramp Recon.	X		S104	Yes	7/25/2014	Yes	No	Ditch checks needed, final stabilization needed, 07/25/2014 - site has been seed and blanketed for final stabilization.
7/8/2014	Perryville Path SE Connection	X		S138	No	NA	NA	NA	Final stabilization
7/9/2014	Hayes Beer Addition	X		T343	Yes	7/21/2014	Yes	No	Inlet has rock protection, site in sump condition, waiting to be stabilized
7/10/2014	Blackhawk Park Ave & Seminary St		X	S195	Yes	7/24/2014	Yes	No	BMPs look good, sweeping needed
7/10/2014	Fire Station #3		X	T188	Yes	7/29/2014	Yes	No	Additional silt fence & inlet protection needed
7/17/2014	Project Empire Logistics Park Plat 3 Lot 7	X		S409	Yes	7/25/2014	Yes	No	Final grade needs to be stabilized, outlet rip rap installed
7/17/2014	Freeway of Rockford	X		S234	No	NA	NA	NA	Final stabilized, inlet protection can be removed

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
7/18/2014	1476 Castle Hill Drive	X		NA	Yes	7/31/2014	Yes	No	Inlet protection needs maintenance, road swept, 07/31/2014 - Site has been landscaped and hydro-seeded for final stabilization.
7/21/2014	Wesley Willows Phase 3	X		R782	Yes	8/25/2014	Yes	No	All BMP's and inspections are good and up to date
7/21/2014	Hayes Beer Addition	X		T343	Yes	8/25/2014	Yes	No	All BMP's and inspections are good and up to date
7/22/2014	Auburn High School Fieldhouse Addition	X		R864	Yes	8/27/2014	Yes	No	Inlet protection needs maintenance, concrete washout leaking
7/22/2014	Auburn High School Paving Improvements		X	T048	Yes	8/27/2014	Yes	No	BMP's installed and inspections are up to date
7/22/2014	Meijer # 192		X	S937	Yes	8/28/2014	Yes	No	Re-establish silt fence, new lined apron outlet protection needed, sweep
7/22/2014	COR City Wide Street Repairs #1 2014	X		NA	No	NA	NA	NA	Minor restoration around curb and inlets, inlet protection can be picked up
7/22/2014	COR City Wide Street Repairs #2 2014	X		NA	No	NA	NA	NA	Minor restoration around curb and inlets, inlet protection can be picked up

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
7/22/2014	COR City Wide Commercial Street Repairs #1	X		NA	NA	NA	NA	NA	Minor restoration needed, temp BMP's can be removed
7/23/2014	Jefferson High School Paving	X		T049	Yes	8/27/2014	Yes	No	Sloped drainage ditch wall needs stabilization, ditch checks
7/23/2014	East High School Field House Add / Paving	X		T014	Yes	8/28/2014	Yes	No	Dust control and sweeping needed, monitor inlet protection
7/23/2014	Fordam Dam Remediation	X		R989	Yes	9/15/2014	Yes	No	Slope stabilization needed, animals digging under silt fence
7/24/2014	Johnson School Paving Improvements		X	T342	Yes	8/28/2014	Yes	No	New inlet protection, concrete washout needed
7/24/2014	Roosevelt School Paving Improvements		X	T344	Yes	8/29/2014	Yes	No	Inlet protection needed, sediment control needed on North side
7/24/2014	Harrison Avenue Bridge Reconstruction		X	NA	No	NA	NA	NA	No disturbed areas other than bridge work. Sidewalk was being hydro-jetted. BMP's were in place to capture and filter fines.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
7/24/2014	Blackhawk Park Ave & Seminary St	X		S195	No	NA	NA	NA	Site is final stabilized with ECB blanket. Awaiting 70% vegetative cover.
7/24/2014	Huffman Property		X	Q339	Yes	7/30/2014	Yes	No	Perimeter silt fence needed, idle areas need temporary stabilization. 07/30/2014 - perimeter S.F. installed & additional stone to stabilized entrance.
7/25/2014	Conklin Elementary		X	T343	Yes	8/27/2014	Yes	No	BMP's are in good condition and SWPPP and inspection reports are current.
7/25/2014	Eisenhower Middle School	X		R601	Yes	9/3/2014	No	No	Silt fence maintenance needed, stabilization needed/ 09/03/2014 - perform full inspection
7/25/2014	804 806 Arnold Ave - Habitat house	X		NA	Yes	9/3/2014	Yes	No	Needs stabilization
7/25/2014	Project Empire Logistics Park Plat 3 Lot 7	X		S409	Yes	8/27/2014	Yes	No	Waiting on uniform growing grass in detention basin, throughout site

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
7/29/2014	Fire Station #3		X	T188	Yes	8/28/2014	Yes	No	Outlet needs sediment control, proper inlet protection needed, no inspections
7/29/2014	Guilford HS Fieldhouse Addition	X		R602	Yes	9/3/2014	Yes	No	All BMP's look good, Stenstrom taking over BMP's soon
8/13/2014	Rockford Heat Treaters		X	T457	Yes	9/2/2014	Yes	No	Minor silt fence maintenance otherwise site is in good condition.
8/13/2014	Ring Containment	X		T794	No	9/2/2014	NA	NA	Project has not started
8/13/2014	Red Dot Storage	X		T283	No	NA	NA	NA	Project has not started
8/13/2014	Ditch Relocation		X	S505	Yes	8/26/2014	Yes	No	Small gully forming in drainageway. 08/26/2014 - received confirmation for maintenance and timelines for completing work.
8/13/2014	1476 Castle Hill Drive	X		NA	Yes	9/2/2014	Yes	No	Site stabilized. Remove inlet protection, 09/02/2014 - Inlet protection removed, site is stabilized.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
8/13/2014	5452 11th Street		X	E608	Yes	9/24/2014	Yes	No	No BMP's onsite. Site is not presently active. COR has other ordinance violations with this site. 10/25/2014 - Site has been stabilized and new silt fence has been added.
8/25/2014	Wesley Willows Phase 3	X		R782	Yes	9/16/2014	Yes	No	North section of silt fence needs re-installation, inlet protection is good. Site looks to be temp seeded, waiting for vegetation growth.
8/25/2014	Hayes Beer Addition	X		T343	Yes	9/15/2014	Yes	No	Outlet protection is good, dry wells are draining the basin.
8/27/2014	Auburn High School Fieldhouse Addition	X		R864	No	NA	NA	NA	Fieldhouse exterior completed, grass is growing
8/27/2014	Auburn High School Paving Improvements	X		T048	Yes	9/16/2014	No	No	New ditch along Pierpont has been partially washed out, paving is completed, and grass is growing.
8/27/2014	Jefferson High School Paving	X		T049	No	NA	NA	NA	Paving completed, final restoration - grass is growing.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
8/27/2014	Conklin Elementary	X		T343	No	NA	NA	NA	Paving completed, final restoration - grass is growing.
8/27/2014	Project Empire Logistics Park Plat 3 Lot 7	X		S409	No	NA	NA	NA	Final restoration, grass is growing, basin holding water as it should
8/27/2014	Mechanical Improvements	X		T114	No	NA	NA	NA	Inlet protection can be removed, basin needs stabilization maintenance. Emailed Bill Hoffman.
8/28/2014	Meijer # 192		X	S937	Yes	9/19/2014	Yes	No	Ditch checks needed, basin needs to be stabilized, outlet protection maintenance required.
8/28/2014	Johnson School Paving Improvements	X		T342	Yes	9/25/2014	Yes	No	Site needs to be stabilized, silt fence maintained, inlet protection maintenance needed. Last inspection on 08/08/14
8/28/2014	East High School Field House Add / Paving	X		T014	Yes	10/16/2014	Yes	No	Slopes need stabilized, basin needs inlet riser with fabric.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
8/28/2014	Fire Station #3		X	T188	Yes	9/30/2014	Yes	No	Silt fence and inlet protection maintenance needed, disturbed areas not being worked on need to be temp seeded.
8/29/2014	Roosevelt School Paving Improvements		X	T344	Yes	10/15/2014	Yes	No	Parking lot has been paved. Needs to be stabilized.
9/2/2014	Ring Containment		X	T794	Yes	10/9/2014	Yes	No	Inlet Protection is good, silt fence needed.
9/2/2014	Slidematic Building Addition	X		T941	Yes	10/7/2014	NA	NA	Project has not started.
9/2/2014	Rockford Heat Treaters	X		T457	Yes	10/7/2014	Yes	No	Needs stabilization, could not locate SWPPP
9/3/2014	Eisenhower Middle School		X	R601	Yes	9/12/2014	Yes	No	Stabilization in progress, some silt fence maintenance needed. 09/12/2014 - Site has been final stabilized.
9/3/2014	804 806 Arnold Ave - Habitat house		X	NA	Yes	9/15/2014	Yes	No	Site has been final stabilized.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
9/3/2014	Guilford HS Fieldhouse Addition		X	R602	No	NA	NA	NA	Parking lot paved, sidewalks being poured. Much of the perimeter has been stabilized. Site is in very good condition.
9/3/2014	Jefferson High School Paving		X	T049	No	NA	NA	NA	Drainage channel cleared of trees is performing well. Most of work is on the interior of the site where offsite discharges will not occur.
9/5/2014	RVC Lease Area Site Work		X	T986	Yes	10/7/2014	NA	NA	Silt fence installed incorrectly, needs ditch checks.
9/8/2014	OSF Cancer Center Add.	X		T506	Yes	10/8/2014	NA	NA	No work has begun, site is JULIE' d
9/8/2014	2 Residential Dev. @ Bello Reserve	X		T953	Yes	10/9/2014	NA	NA	No work has begun, site has lath placed throughout
9/8/2014	MKD Express Car Wash	X		T778	Yes	10/9/2014	NA	NA	No work has begun

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
9/9/2014	South Park Multi-Use Connection		X	T777	Yes	9/22/2014	Yes	No	Silt fence required along river
9/15/2014	Hayes Beer Addition		X	T343	Yes	10/6/2014	Yes	No	Stabilization needed, final graded.
9/15/2014	Fordam Dam Remediation		X	R989	Yes	10/28/2014	Yes	No	Sweeping needed, final grade and stabilize.
9/16/2014	Wesley Willows Phase 3		X	R782	Yes	10/7/2014	Yes	No	Stabilization (temp seed) needed on disturbed areas.
9/16/2014	Auburn High School Paving Improvements		X	T048	Yes	10/24/2014	Yes	No	New concrete channel slope walls need stabilization.
9/19/2014	Meijer # 192	X		S937	Yes	Yes	Yes	No	Disturbed areas have blanket, silt fence to be reinstalled on north side.
9/22/2014	South Park Multi-Use Connection	X		T777	Yes	10/15/2014	Yes	No	Silt fence installed, construction exit needed
9/22/2014	Perryville Promenade Phase II		X	T205	Yes	10/7/2014	NA	No	Silt fence splices are incorrect, some section of silt fence are in backwards.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
9/24/2014	Spring Creek Crossing Detention Pond		X	T205	Yes	11/7/2014	Yes	No	No SWPPP Onsite., 11/7/2014 - SWPPP is in mailbox on north side.
9/24/2014	Red Dot Storage		X	T283	Yes	11/6/2014	No	No	Site does not have City of Rockford permits. A stop work order has been issued. Site also needs inlet protection and a stabilized construction entrance.
9/25/2014	Johnson School Paving Improvements		X	T342	No	NA	NA	NA	Final restoration - grass is growing.
9/30/2014	Fire Station #3		X	T188	Yes	10/15/2014	Yes	No	Met with Chief & Contractor to discuss concerns. Site needs stabilization and BMP maintenance.
10/6/2014	Hayes Beer Addition		X	T343	Yes	10/14/2014	Yes	No	Idle areas need stabilization. No exterior work appears to be taking place. 10/14/2014 - site stabilized
10/7/2014	Van Matre	X		S434	No	NA	NA	NA	Site has been final stabilized with erosion control blanket cover. Monitor for 70% vegetative cover.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
10/7/2014	Rockford Heat Treaters		X	T457	Yes	11/6/2014	Yes	No	Site final stabilized but there is minimal mulch cover.
10/7/2014	Perryville Promenade Phase 2		X	T205	Yes	10/7/2014	Yes	No	Sweeping needed at the entrance. Contractor was going to do on same day.
10/7/2014	Slidematic Building Addition		X	T941	Yes	10/14/2014	Yes	No	Appears grading has just started. No BMP's installed or SWPPP onsite. 10/14/2014 - all items addressed.
10/7/2014	Wesley Willows Phase 10		X	D336	Yes	10/14/2014	Yes	No	Stabilized needed on finished lots some silt fence maintenance needed. Inspections are not being done per permit and SWPPP is not current. Spoke to contractor. 10/14/2014 - all items addressed
10/7/2014	Wesley Willows Phase 3		X	R782	Yes	10/14/2014	Yes	No	Inlet protection maintenance needed and stabilization of idle areas. 10/14/2014 - all items addressed.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
10/7/2014	RVC Lease Area Site Work	X		T986	Yes	12/2/2014	Yes	No	Silt fence improved, ditch checks installed. Stabilization needed.
10/8/2014	OSF Cancer Center Add.		X	T506	Yes	12/10/2014	Yes	No	Earthwork started, inlet protection needed, silt fence not needed.
10/9/2014	2 Residential Dev. @ Bello Reserve		X	T953	Yes	12/2/2014	Yes	No	Sections of silt fence need attention, concrete washout required. Site in sump condition.
10/9/2014	MKD Express Car Wash		X	T778	Yes	11/5/2014	Yes	No	Pavement removed, no SWPPP, inspections nor BMP's found onsite.
10/9/2014	Ring Containment		X	T794	Yes	10/10/2014	Yes	No	Disturbed areas need to be stabilized, ditch checks needed near RR tracks. 10/10/2014 – Contractor emailed and was addressing items. Confirmed through visual.
10/15/2014	Guilford HS Paving Imp.		X	R602	Yes	12/10/2014	Yes	No	Final restoration, remove inlet protection, stabilized near job trailer. 12/10/2014 – site Stabilized.
10/15/2014	Roosevelt School Paving Improvements	X		T344	No	NA	NA	NA	Final restoration - grass is growing. BMP's have been removed.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
10/15/2014	South Park Multi-Use Connection	X		T777	Yes	10/28/2014	Yes	No	Silt fence needs to be reinstalled, new BMP needed for steep slopes.
10/16/2014	East High School Field House Add / Paving		X	T014	Yes	12/01/2014	Yes	No	Detention basin needs riser and slopes stabilized, 9th Ave needs sweeping. 12/01/2014 – items addressed.
10/24/2014	Auburn High School Paving Improvements	X		T048	No	NA	NA	NA	Slope walls stabilized, rip rap installed along low flow channel.
10/28/2014	Fordam Dam Remediation	X		R989	Yes	In Spring	Yes	No	Winter shutdown, all disturbed areas are stabilized.
10/28/2014	South Park Multi-Use Connection	X		T777	Yes	12/10/2014	Yes	No	Slopes are being stabilized with geo-web topsoil and TRM.
11/5/2014	MKD Express Car Wash		X	T778	Yes	12/29/2014	Yes	No	Could not locate SWPPP or inspections, concrete washout full. Construction exit should be improved.
11/6/2014	Red Dot Storage	X		T283	Yes	12/24/2014	Yes	No	Perimeter silt fence installed, disturbed areas and stock pile should be stabilized. 12/24/2014 - polymer protection has been applied.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
11/6/2014	Rockford Heat Treaters	X		T457	Yes	12/29/2014	Yes	No	Grass is growing, rills in basin have developed. Outlet protection needs maintenance. 12/29/2014 - site has poor vegetation and minor erosion in basin. Check in spring to check for maintenance.
11/7/2014	Perryville Promenade Phase 2	X		T205	Yes	12/29/2014	Yes	No	Basins should be stabilized, west basin culvert outlet protection needed. 12/29/2014 - work on basins continue and conditions do not allow for stabilization. Good protection at the outlet of the site.
11/7/2014	Spring Creek Crossing Detention Pond	X		T205	Yes	12/29/2014	Yes	No	Basin is being installed. Existing basin outlets need outlet protection. 12/29/2014 - outlet of the basin is protected. Current conditions do not allow for stabilization. BOC protection is in place.
11/25/2014	Save a Lot		X	U269	Yes	12/5/2014	Yes	No	Complaint from citizen. All corrective actions addressed.
12/1/2014	East High Parking / Demos		X	U057	Yes	12/29/2014	Yes	No	Site in sump condition, vegetative buffer is present. Sweeping should be done.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
12/2/2014	RVC Lease Area Site Work		X	T986	Yes	12/22/2014	Yes	No	Concrete washout needs replaced, construction exits needed. 12/22/2014 - Site in good condition
12/2/2014	Falcon Rd Airport Rd		X	T871	Yes	12/29/2014	Yes	No	Inlet protection required, some silt fence sections need maintenance. 12/23/2014 - PM instructed trades to repair silt fence and to add inlet protection.
12/2/2014	2 Residential Dev. @ Bello Reserve		X	T953	Yes	12/23/2014	Yes	No	Track out needs swept up, concrete washout needs to be replaced. Additional construction exit required.
12/10/2014	OSF Cancer Center Add.	X		T506	Yes	12/29/2014	Yes	No	Maintain inlet protection, clean road. 12/29/2014 - Street swept, Inlet protection has been cleaned.
12/10/2014	Guilford HS Paving Imp.	X		R602	No	NA	NA	NA	Grass is growing, all BMP's removed. Some TRM still on site for stabilization.
12/10/2014	South Park Multi-Use Connection	X		T777	Yes	Spring 2015	Yes	No	Work is complete until spring when grass can grow.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
12/11/2014	Greater Rockford Auto Auction	X		NA	Yes	12/12/2014	Yes	No	Complaint from IEPA. Ditch work completed with no BMP's. Stockpile next o ditch. Contractor emailed and called to take action immediately, no letter sent. 12/12/2014 - Stockpile removed and ditch has been temporarily stabilized.
12/12/2014	6801 Mill Road	X		S221	Yes	12/29/2014	Yes	No	No Activity, Silt fence needs maintenance. No SWPPP onsite. Site is vegetated 12/29/2014 - Silt fence repaired.
12/12/2014	Huffman Property	X		Q339	Yes	12/24/2014	Yes	No	Fill material continues to be hauled onsite. SWPPP & Inspections not onsite but inspections are sent to the City weekly.
12/12/2014	6122 Mulford Rd.		X	U333	Yes	12/24/2014	Yes	No	Building demo' d, IEPA said NPDES permit was not needed during demo as it was less than 1 acre. No BMP's in place. 12/24/2014 - silt fence added, construction to start upon RRWRD approvals
12/12/2014	Portillos		X	U340	Yes	12/24/2014	Yes	No	No SWPPP onsite, stockpile needs to be contained. Wrong type of inlet protection. Stockpile removed. Approved I.P since it's not a standard size.

Date	Construction Site	Drive thru Inspection	ESC Inspection	Permit # ILR10	Follow-Up Needed	Date of Follow-up	Corrective Actions Addressed	Submit To Code Enforcement	Notes
12/22/2014	Ring Containment		X	T974	Yes	12/29/2015	Yes	No	Disturbed areas needs stabilizing, sweeping needed for track out.
12/22/2014	East High School Field House Add / Paving	X		T014	Yes	12/29/2014	Yes	No	Some disturbed slopes need to be stabilized. Sweeping needed on 9th Ave.
12/23/2014	2 Residential Dev. @ Bello Reserve		X	T953	Yes	12/29/2014	Yes	No	Silt fence repaired, additional stone added to entrance. Com Ed working along the curb
12/23/2014	Bello Reserve Lot 115 Improvements		X	U264	Yes	12/23/2014	Stop work order issued by building dept.		Grading has started, silt fence needs to be reinstalled. Construction exit required along with SWPPP and inspections. 12/23/14 Stop work order issued for improper permits. Erosion control improvements put on hold until proper permits are acquired. Sediment is not leaving the site.

Appendix F

ILLICIT DISCHARGE AND IMPROPER DISPOSAL INSPECTIONS DURING 2014

Date	Location	Type of Discharge	Source Determined?	Nature of Follow-up	Submit to Code Enforcement	Notes
12/30/2013	Basin @ Springfield & School St.	Fuel smell in basin inlet	Suspected source is Rockford Township Yards	Township office (Brad Trent) has been contacted to perform an investigation. Due to the weather conditions corrective actions may not be possible at this time. Follow up will need to be completed.	No	Source appears to be truck washing facility at township yards. The township and the County are installing a filtering system in 2014 to address this. Continue to monitor until installed. The filtering system was installed in 2014.
1/31/2014	2642 Charles St.	Snow plowed into creek	Yes	Letter sent to remove snow	No	02/12/2014 - snow was removed from the creek
2/12/2014	2520 Kilburn Ave.	Snow plowed into creek	Yes	Letter sent to remove snow	No	02/26/2014 - Snow removed
2/20/2014	4109 11th St.	Oil going across pavement at IDOT facility.	Yes, Oil storage container overfilled at IDOT facility	Ryan L. visited site on 2/20 and was unable to access site. He went again on 2/21 and was unable to locate discharge. Additional information was sent on 2/21 and a follow up reviews was completed on 2/24.	No	This was observed by a local IEPA employee (Land Division) who submitted it to the water division of the IEPA local office who forwarded it to the City for investigation. New oil/water separator to be installed this summer to handle hazardous waste. City to initiate an industrial inspection.
3/10/2014	Kent Creek @ Fairgrounds Park	Oily sheen in creek	Yes, Urban Runoff	No follow-up - Source was urban runoff from first major snowmelt of the season	No	Observed by a member of SWET during tributary sampling
3/14/2014	Unknown Location in Rockford	Wastewater from cleaning service	Yes, Complete Care Cleaners	Warning letter sent to Cleaning Company	No	Warning letter was sent to Complete Care Cleaners. Person filing complaint did not give location or respond to additional inquiries.

Date	Location	Type of Discharge	Source Determined?	Nature of Follow-up	Submit to Code Enforcement	Notes
3/21/2014	99 E State St.	Concrete Washout (3/21)	Yes, Roscoe Ready-Mix & Rockford Register Star	Notice of Ordinance Violation Letter sent (3/24) to both parties. Made follow up inspection 3/27 found concrete debris still there. Contacted RRStar by email.	No	3/27 RRStar (Jeff Tilly) said they cleaned up snow & material on 3/21 but continued snow melt revealed more material and will have it clean by end of tomorrow.
	99 E State St.	Concrete Washout (3/21)	Yes, Roscoe Ready-Mix & Rockford Register Star	3/27 Marge from Roscoe Ready-Mix (815-389-0888) left voice mail for me. Said it will get cleaned up.	No	4/3 Confirmed material has been cleaned up. - dk
4/2/2014	1500 Preston	oil dumped	No	City removed dumped oil	No	Property owner adjacent to alley reports oil dumped in alley. Source was unknown and it was City property. City removed oil
4/4/2014	Junction Road	milky water in drainage way / creek	Yes, Landfill Pond Discharge outlet	Not in City of Rockford City Limits - discharge does run though for 8500 ft - Referred to IEPA by email.	No	
4/11/2014	Guard St.	Contractor dewatering sediment laden water into storm sewer	Yes, Go Excavating	Contractor was instructed to install dewatering devices to filter water and told to remove sediment rom storm sewer	No	04/14/2014 - Sediment was removed from storm sewer as instructed.

Date	Location	Type of Discharge	Source Determined?	Nature of Follow-up	Submit to Code Enforcement	Notes
4/23/2014	408 Fairview Blvd	Flow in storm pipe dry conditions	Yes, water service leak @ 3900 Blk of Barrington Rd	need to video	No	4/24/14 - traced flow to storm pipe leak in 3900 Blk of Barrington Rd, need to follow up with video, 4/25/14 - followed up with free chlorine test = .8 mg/L - most likely potable water. Going to forward new info to Greg Cassaro, Water Distribution, 5/27/14 Greg C found service leak at 3908 Barrington Rd. Will repair
6/13/2014	515-519 Pearl	paint poured in storm sewer	Yes, property owner	material was cleaned up from curb line	No	Spoke to property owner. Material was salt and thermoplastic reflective balls. Curb line was cleaned.
7/22/2014	1306 Lindsay Way	Sediment collecting on driveway from agricultural field.	Yes, field owner	Meet with field owner	No	Field owner cleaned up sediment and completed a vegetated filter strip to prevent future issues.
7/23/2014	4405 Alpine Oaks Drive	Unknown flow in back yard of property	Yes, property has a lawn sprinkler which appears to be leaking	None, property owner to make repairs	No	Property owner complained about flowing water in his back yard. Source was a broken lawn sprinkler line.
7/31/2014	667 Chisolm	Water bubbling to surface	Yes / Leaking cut off box on vacant lot	Water Division has been contacted to make necessary repairs.	No	Charlie Shaefer in Code Enforcement reported that mowing contractor observed water bubbling onto the surface of the ground. Investigation indicated broken cut off box for water service. Water division to make the necessary repairs.
8/5/2014	4423 Manchester Road	Leaking transformer from auto accident	Yes	COR Fire Dept. Haz Mat was onsite & ComEd dispatched an environmental cleanup crew.	No	Follow up visit the next morning showed all material was cleaned up from the site. No indications oil entered the storm system.

Date	Location	Type of Discharge	Source Determined?	Nature of Follow-up	Submit to Code Enforcement	Notes
8/9/2014	2007 Kishwaukee St.	Acid Leak from structure fire	Yes	COR fire Dept. Haz Mat team was onsite and all materials were contained. Environmental Clean-up crew was dispatched to the site.	No	Perform an industrial inspection on the remainder of the site and verify site clean-up. 08/12/2014 - clean up at site continues, test being done to determine where inlet drains.
8/11/2014	NW State & 1st Street	Paint dumped in inlet	No, Continue to monitor	Continue to monitor inlet to determine responsible party	No	COR public works employee observed person dumping paint in inlet. Investigation could not determine responsible party and we will continue to monitor. Have not observed a repeat offense in subsequent drive bys.
8/11/2014	126 Mill St. (Outfall #99)	Water discharging from pipe.	Yes, permitted industrial facility	None	No	Discharge observed coming from industrial facility. Facility has an IEPA discharge permit (IL0061891) and is discharging non-contact cooling water. Testing was being completed as required by facility.
8/11/2014	650 Race St., (Outfall # 92)	Clear discharge from outfall	Yes, Air conditioner condensate going down roof drains	None needed	No	Air conditioners are located on structure roof and condensate is flowing down roof drains. This is an allowable non-stormwater discharge.
8/14/2014	Belmont Blvd & Ridge Ave	discharge through concrete channel	Yes, stormwater in concrete channel. (see notes)	Continue to monitor - source found.	No	During outfall inspections, noticed water seeping through bottom of concrete channel. Tested for chlorine which came back negative. Stormwater in concrete channel was found to be flowing under concrete and daylighted above concrete, giving the illusion of an illicit discharge.

Date	Location	Type of Discharge	Source Determined?	Nature of Follow-up	Submit to Code Enforcement	Notes
8/19/2014	Tay St & Corbin St Outfall 64	clear discharge from outfall 64	leak in water service	Followed up to a storm sewer manhole at the south west corner of Kent St & Sanford St	No	Referred to water distribution - service leak at 1003 Sanford St
8/19/2014	Independence & Kent Creek	clear discharge from outfall 72	Yes, Old water main leaking and getting to storm system on city owned property.	Industrial Inspection for Liebovich Steel	No	Looks to be coming from Liebovich Steel / industrial inspection to follow. 08/26/2014 Liebovich Bros is not discharging into the storm sewer system, I was not able to locate discharge point. 9/3/14 Dean and Ryan tracked the discharge to COR property west of traffic signal shop near crushed concrete pile. Leaking water main or service is the source. Mark K was notified. Water leak was fixed.
8/20/2014	Fairview Ave & Lee St Outfall 143	clear discharge from outfall 143	Yes, Deans Foods	Deans Foods has a discharge permit	No	Followed the storm sewer, which led to deans foods.
8/26/2014	8xx Trainer Road	Gravel washed out into street from run-off	Gravel area from Northern Illinois Service Company property.	Street Cleaned up. Asked that they come up with a fix so it doesn't happen again.	No	Talked to resident, they were in process of fixing leak.
8/27/2014	2218 Grant Avenue	Clear discharge in grass & curb line	Found water service leaking on private property	None needed	No	Private water service leak.

Date	Location	Type of Discharge	Source Determined?	Nature of Follow-up	Submit to Code Enforcement	Notes
9/3/2014	515 S. Alpine (Alpine Hills Park)	Intermittent flow - clear	No.	This was found during outfall/creek walk inspections. So far follow up investigations found no active flows.	No	Continue to check for flows.
9/17/2014	4900 Javelin Dr.	clear trickle from outfall 482	No, possibly ground water	Source not found yet - following up		Will look to collect samples after winter thaw. Previous attempts could not be completed because flows were minimal to trickle (not enough).
9/24/2014	1204 Revell Ave.	Possible Oil Dumped in Manhole	Yes Back yard auto mechanic	Criminal investigation continues. Will revisit after spring thaw.		9/24/14 -B.Holcomb & D.Kurth went out to inspect the stormwater structures to see if anything illicit could be seen. Upon arrival there were police officers there because the person was agitated. For safety reasons the inspection was ended. 10/6/14 - D.Kurth & M.Leach drove thru alley and found residents were not around. It was observed that water in the bottom of the MH looked to have a sheen & leaves on the surface. Sample needs to be collected. (previous to this date, D.Kurth has been driving past the address and did not continue the investigation based on activity at the property for safety concerns). 10/8/14 - sample collected. 10/19/14 - Lab results FOG 20 mg/L

Date	Location	Type of Discharge	Source Determined?	Nature of Follow-up	Submit to Code Enforcement	Notes
9/29/2014	3909 11th St.	Paint Chips all over parking lot of Howard Johnsons Hotel.	Yes, owner had crew scraping and painting	Check if paint chips were cleaned up.	No	Talked to the manager and asked that the paint chips get cleaned up. Later talked to painting crew (and the guys cleaning it up) and explained what needed to happen. Chips were cleaned up.
10/20/2014	1357 6th Ave (outfall 239)	clear no-odor discharge	Swedish American Hospital - possible groundwater discharge from under buildings.	Spoke with Brian Morelock maintenance supervisor for Swedish American (10/28/14) about finding the source of discharge. He told me he would look into it. 10/28/14 email from Brian - he found source. Will set meeting for next week.	No	Hansen service request #: 162077. 11/19/2014 Talked to Matt Vine on the phone. He says discharge seems to be from underground system put in during reconstruction/remodeling/addition work completed in years past. This system seems to be collecting ground water and discharging it out to City storm system. During construction, ground water was an issue so they put the system in. I asked that they get an environmental company (they use Fehr Graham) to come in and get a sample collected and tested to confirm the discharge is not polluted. He said their consultant was going to be there 12/2/2014 and he will ask them to complete collection then. I approved. Ryan previously completed a chlorine test that came up negative. -dkurth 1/12/2015 Email from Matt Vine said they have not completed sampling and are trying to figure out a way to get the sample and will also dye test when weather warms up. -dkurth

Date	Location	Type of Discharge	Source Determined?	Nature of Follow-up	Submit to Code Enforcement	Notes
10/22/2014	2642 Charles St.	foul odor dumpster leak	Yes, compaction dumpster leaking	Spoke to Kevin Mortensen (Assit. Manager of Schnucks) 10/22/14 about the illicit dicharge. He told me he would have it cleaned up and taken care of. Another follow up needed. Discharge has been cleaned up.	No	Hansen service request #: 161824.
10/27/2014	3534 E State St. (outfall 310)	clear, no odor.	Basement sump pump.	10/31/14 Followed storm sewer to riser room at 3534 E State St. Spoke to Thomas Bonavia (561 758 5978) Building Manager. He showed me the souce - a sump pump in the basement. Sump pump runs into private storm sewer which is then connected to Morsay Dr. street inlet. Ground water is the source.	No	

Appendix G

INDUSTRIAL INSPECTIONS PERFORMED DURING 2014

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
1/9/2014	BP Gas Station Circle K	Medium	1030 E State St	5541	fuel station	No	NA	NA	NA	
1/9/2014	BP Gas Station (Macs)	Medium	3420 E State St	5541	fuel station	No	NA	NA	NA	Next to Keith Creek
1/9/2014	CITGO Gas Station	Medium	2837 11th St	5541	fuel station	No	NA	NA	NA	Next to Buckbee Creek
1/13/2014	J & J Fish	Medium	217 7th St	2092	no permit	No	NA	NA	NA	Letter sent - SIC code is incorrect - this is fast food restaurant
1/14/2014	Red Mango	Medium	6876 Spring Creek Rd	2024/ 5451	no permit	No	NA	NA	NA	Sic code should only be 5451, no permit required
1/15/2014	Phelps Industries	Medium	5213 26th Ave	2047/ 3999	no permit	No	NA	NA	NA	Letter sent, should apply for no exposure
1/29/2014	MC Products Company	High	720 South St	2899	no permit	No	NA	NA	NA	Letter sent, SIC might be incorrect, could qualify for no exposure
2/11/2014	Mobil Gas Station	Medium	2622 Charles St	5541	fuel station	No	NA	NA	NA	Info letter sent
2/11/2014	Road Ranger Gas Station	Medium	4106 Harrison Ave	4451	fuel station	No	NA	NA	NA	Info letter sent, car wash, softener salt spill piles
2/11/2014	Ducky's Car Wash	Medium	4118 Harrison Ave	7542	car wash	No	NA	NA	NA	Bay floor drains to san. Sewer. On site storm drain for parking lot
2/24/2014	BP Gas Station + Mini Mart	Medium	320 N Mulford Rd	5541	fuel station	No	NA	NA	NA	Next to S Branch of Keith Creek - parking lot drains straight into creek
2/24/2014	Grease Monkey	Medium	302 N Mulford Rd	7549	oil change	No	NA	NA	NA	letter sent - close dumpsters, increase spill kit supplies

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2/24/2014	Magic Mist Car Wash	Medium	304 N Mulford Rd	7542	car wash	No	NA	NA	NA	clean site, parking lot drains to street, waste water stored and emptied
2/25/2014	Mobil Gas Station	Medium	2624 Stowmarket Ave.	5541	fuel station	Yes	3/25/2014	NA	NA	Soapy water leaving site from car wash/dumpster lids open
2/28/2014	CITGO Gas Station	Medium	3005 N Rockton Ave	5541	fuel station	no	NA	NA	NA	small site, run off to curb & gutter inlet, spoke to manager
2/28/2014	Marathon Gas Station	Medium	3121 N Rockton Ave	5541	fuel station	no	NA	NA	NA	this fuel station is closed, run off to curb and gutter inlets
2/28/2014	Phillips 66 (Rockton Gas Inc.)	Medium	3135 N Rockton Ave	5541	fuel station	No	NA	NA	NA	small site, employee is unaware of spill kits, dumpster is closed
2014	Shell Express	Medium	430 W Harrison Ave	5541	fuel station	No	NA	NA	NA	Runoff to onsite inlets to River, BBQ restaurant attached, 4 pumps
3/7/2014	Shell Airport	Medium	53 Airport Rd	5541	fuel station	No	NA	NA	NA	small site, runoff to ditches, just south of Rock River, 4 pumps
3/7/2014	Phillips 66	Medium	4545 Sandy Hollow Rd	5541	fuel station	No	NA	NA	NA	large site, car wash with separator to sanitary, diesel pumps not covered
3/7/2014	Sam's Club Gas	Medium	7241 Walton St	5541	fuel station	No	NA	NA	NA	small site, onsite inlet north side of paved area, small spill kit on site
3/18/2014	Phillips 66	Medium	4402 Linden Rd	5541	fuel station	No	NA	NA	NA	large site, car wash with separator to sanitary, inlets are holding water
3/18/2014	BP (Swastik LLC)	Medium	4477 S Alpine Rd	5541	fuel station	No	NA	NA	NA	small site, neighboring parking lot has open top inlets discharge to field

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3/21/2014	US Cleaners	Medium	1137 N Alpine Rd	7349	Dry Cleaner	No	NA	NA	NA	storefront for pickup and delivery of laundry, no pollutants
3/25/2014	Lee's One Hour Cleaners	Medium	947 School St	7216	Dry Cleaner	No	NA	NA	NA	small building with 2 wash machines, discharge to san sewer
3/25/2014	Grease Monkey	Medium	3131 Auburn St	7549	oil change	No	NA	NA	NA	3 bays, interior discharges to 3 part separator, next to Kent Creek
4/8/2014	All Paws Beauty Salon	Medium	130 N 1st St	0752	Dog Grooming	No	NA	NA	NA	small indoor dog grooming, one bath drains to san sewer
4/8/2014	Bennies Dry Cleaning	Medium	126 N 1st St	7216	Dry Cleaner	No	NA	NA	NA	Dry cleaners, 3rd party disposal, 2 wash machines drain to san sewer
4/23/2014	Mobil Gas Station	Medium	1320 N Main St	5541	fuel station	No	NA	NA	NA	4 pumps, no outside storage. 2 site open top inlets, detention basin
4/24/2014	Phillips 66	Medium	2975 Perryville Rd	5541	fuel station	No	NA	NA	NA	large site, curb inlets, outlet blocked by sediment, carwash to san. Sewer
4/24/2014	Mobil Gas Station	Medium	3251 Perryville Rd	5541	fuel station	No	NA	NA	NA	one curb inlet to Perryville rd. ditch, car wash, clean site
4/29/2014	Compak Inc.	Low	1139 Alton Ave	2653	no permit	No	NA	NA	NA	letter sent, might have wrong SIC, they pkg and ship and assemble
4/29/2014	Rockform	High	2974 Eastrock Dr	2819	no permit	No	Na	NA	NA	letter sent, might have wrong SIC, they machine tools
4/30/2014	Grafcor Packaging Inc.	Low	121 Loomis St	2631	no permit	No	NA	NA	NA	letter sent, might have wrong SIC, they bend cardboard boxes

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5/9/2014	Accurate Metals - Illinois	High	2524 Eleventh St.	3312	No permit	Yes	5/15/2014	Yes	No	No IEPA permitting. Site appears to qualify for a no exposure certification. 05/15/2014 - Receive no exposure application being sent to IEPA.
5/9/2014	Rockford Secondaries	High	2424 Laude St.	3316	No permit	Yes	5/15/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. 05/14/2014 - No Exposure Certification applied for.
5/12/2014	RJ Link International	High	3741 Publishers Dr.	3321	No Permit	Yes	5/21/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though one Behr dumpster is uncovered. 05/21/2014 - making arrangements to cover dumpster then applying for No Exposure. 6/6/2014 - No Exposure submitted to IEPA

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
5/14/2014	RW Acquisition LLC	High	2833 Huffman Blvd	3421	No Permit	Yes	9/26/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though four Behr dumpsters is uncovered. 06/11/2014 - Hired Transenvironmental for permitting process. 09/26/2014 - NOI submitted to IEPA
5/16/2014	Kennametal Inc.	High	21 Airport Dr.	3400	Permit # IL002959	No	NA	NA	NA	Has permit and spill plan. Dumpster under cover. Site is clean and dry.
5/28/2014	Neenah Foundry	High	5075 28th Ave	3325	No permit / wrong SIC	No	NA	NA	NA	wrong SIC, this facility only stores and distributes, no mfg.
5/29/2014	Imperial Punch & Mfg.	High	2016 23rd Ave	3366	No Permit	No	NA	NA	NA	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though one Behr dumpster is uncovered. Received No Exposure application 7/11/14
5/29/2014	Clinkenbeard	High	577 Grable St	3369	Po Permit	Yes	6/19/2014	No	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Received No Exposure application 6/19/14

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6/4/2014	Lucien Horton, home auto repair shop	Medium	403 Lexington	5531	Permit not required	Yes	NA	NA	Yes	Entire property has been condemned due to City of Rockford Code violations. Code enforcement division in Community development handled all correspondence.
6/11/2014	Dasco Pro	High	340 Blackhawk Park Ave	3423	No Permit	Yes	12/22/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though one Behr dumpster is uncovered. 12/22/14 emailed Brad for follow up, talked to him on phone also. He said he would have app to me by end of month. Environmental Consulting firm has been hired to cover dumpsters and write application
6/11/2014	Saws International	High	4931 26th Ave	3425	No Permit	Yes	9/25/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. 09/27/2014 - No exposure applied for.

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6/18/2014	Rockford Process Control	High	2020 7th St	3429	No Permit	Yes	7/14/2014	yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though one Behr dumpster is uncovered. 07/14/2014 - dumpster removed & no exposure being sent to IEPA
6/18/2014	Reliable Machine Company	High	1327 10th Ave	3429	No Permit	Yes	7/25/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though one Behr dumpster is uncovered. 07/25/2014 - No Exposure applied for
6/25/2014	Comet Fabricating & Welding	High	5620 Falcon Rd	3441	No permit	Yes	7/28/2014	Yes	No	Facility not permitted, discussed permit and to define their SIC code, apply for necessary permit. Liquid Nitrogen storage is outside. No Exposure application sent to EPA 7/28/14
6/25/2014	Ablaze Welding & Fabricating	High	2003 Kishwaukee St	3441	No Permit	Yes	12/22/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Received application

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6/26/2014	Ultra Stamping & Assembly	High	4590 Hydraulic Rd	3441	No Permit	Yes	7/14/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. 07/14/14 no exposure certification applied for.
6/27/2014	Ekstrom, Carlson Fabricating	High	1204 Milford Ave	3441	No Permit	Yes	10/21/2014	Yes	No	Facility not permitted, discussed permit and to define their SIC code, apply for necessary permit. Raw steel storage is outside. 10/01/2014 - Hired consultant to review permitting requirements and to apply for permit. 10/21/2014 - No Exposure applied for
7/2/2014	Greenfeather LLC, Home auto repair shop	Medium	201 Willard	7549	Permit not required	Yes	NA	NA	Yes	Facility is an in-home auto/small engine repair shop. Auto fluids are being dumped down curbline. Stormwater violations are being included with other ordinance violations being pursued by the City. 08/28/2014 - Laid over as property owner is evicting tenant.

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7/9/2014	Olson Pattern & Foundry	High	2135 15th St	3365	ILR000069	Yes	9/25/2014	Yes	No	Operations have permit, expire April 30, 2014. Needs renewal. The ILR00 permit expire on April 30, 2014. Their permit is current and no further action is needed.
7/16/2014	Nelson Manufacturing	High	2516 20th St	3444	No Permit	Yes	8/15/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though outside dumpsters without lids will need to be covered or moved indoors. 08/15/2014 - Received no exposure application
7/17/2014	LJ Fabricators	High	944 Research Pkwy	3444	No Permit	Yes	1/14/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though outside dumpsters without lids will need to be covered or moved indoors. 12/24/14 Emailed Greg Johnson. Called Greg 1/14/15 said he would have it completed by end of week.

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7/17/2014	Co-Lin Metals	High	5075 26th Ave	3444	No Permit	Yes	11/18/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though outside dumpsters without lids will need to be covered or moved indoors. 10/15/14 Larry is working with dumpster company to fabricate a cover. 11/18/14 received no exposure application
7/17/2014	BUWW Coverings Inc.	High	4462 Boeing Dr	3444	No Permit	Yes	7/17/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though outside dumpsters without lids will need to be covered or moved indoors. Received No Exposure application 7/17/14

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7/17/2014	Sheet Metal Connectors	High	5601 Sandy Hollow Rd	3444	No Permit	Yes	10/06/2014	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Though outside dumpsters without lids will need to be covered or moved indoors. 10/06/2014 - spoke to Marty who is submitting No Exposure.
7/18/2014	SPX	High	5885 11th St	3443	IL0078425	No	NA	NA	NA	This large facility operates under ILR000069
7/28/2014	Elite Tool & Wire	High	4701 Hydraulic Rd	3449	No Permit	Yes	12/24/2014	Yes	NA	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Emailed John Jeffers for update 12/24/14. Called John 1/14/15 and left a message. 3/13/2015 – received no exposure cert.

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7/29/2014	Steel Fabricating	High	2806 22nd St	2449	No Permit	Yes	8/26/2014	Yes	No	Facility not permitted, steel storage is outside with one recycle dumpster. Shared permit information with representative. 08/26/14 Hired consultant for compliance. Called Greg 1/14/15 - they are working with Neil Evans from Artisan (618 567 5170) on general permit.
ı/2014	Rockford Toolcraft	High	766 Research Pkwy	3450	No permit	Yes	8/26/2014	Yes	No	Facility not permitted, Metal recycle dumpsters located outside. Shared permit information with representative. 09/15/2014 - Met onsite with representative to discuss option for permit compliance. 12/23/14 Randy Harley is working with Fehr Graham on a covered project.
8/21/2014	Jim Sterner Machines	High	2500 N Main St Ste 25	3451	No permit	Yes	9/15/2014	Yes	No	Facility not permitted, Metal recycle dumpster located outside. Shared permit information with representative. 9/15/14 Laura applied for no exposure, received copy.
8/25/2014	Liebovich Bros	NA	2116 Preston St	5051	No Permit	No	NA	NA	NA	SIC Code should be 5051 - no permit required

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8/26/2014	Auto Clinic of Rockford	Medium	4109 E State St	7538	Auto Repair	No	NA	NA	NA	All operations indoors, floor drain to separator. 3rd party waste oil removal 100' from S Branch Keith Creek
8/26/2014	Octopus Car Wash	Medium	3708 E State St	7542	Car Wash	No	NA	NA	NA	Car wash with outdoor open top waste water tank
8/26/2014	TJ's Auto Center	Medium	3427 E State St	7538	Auto Repair	No	NA	Na	Na	All operations indoors, floor drain to separator. 3rd party waste oil removal 100' from S Branch Keith Creek
8/27/2014	Triangle Metals	High	2500 Harrison Ave	3444	No Permit	Yes	1/14/2015	Yes	No	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information. Sent Bob Dooley a follow up email 12/24/14. Called 1/14/15 spoke to Gino and emailed permit app - will finish as soon as possible.
9/5/2014	Midwest Screw Machine Products	High	2500 N Main St	3451	No permit	Yes	9/30/2014	Yes	No	Facility not permitted, Metal recycle dumpster located outside. Shared permit information with representative. 09/30/14 no exposure certification applied for.

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
9/9/2014	Nyclo Screw Machine Products	High	3610 Mansfield St	3451	No Permit	Yes	12/24/2014	Yes	No	Facility not permitted, Metal recycle dumpster located outside. Shared permit information with representative. 9/29/14 Received letter regarding working on no exposure certification. Will keep the COR updated. 10/28/14 Tim emailed me to say they will be fabricating a tarp form to be used on their dumpster. 11/26/14 update letter received, covered one dumpster waiting on the other order. 12/24/14 received update letter.
9/10/2014	Micro Screw Machine Co.	High	2115 15th St	3451	No Permit	Yes	9/29/2014	Yes	No	Facility not permitted, Metal recycle dumpster located outside. Shared permit information with representative. 9/29/14 no exposure certification applied for.
9/11/2014	Kadon Precision Machining	High	3744 Publishers Dr.	3451	No Permit	Yes	9/12/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/24/14 Emailed Justin Franklin for follow up status. Received no exposure application 9/12/14 - found copy.
9/12/2014	US Cleaners	Medium	2518 Charles St	7216	Dry Cleaner	No	NA	NA	NA	storefront for pickup and delivery of laundry, no pollutants

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
9/12/2014	Charles Street Laundry Mat	Medium	2125 Charles St	7215	Coin Laundry	No	NA	NA	NA	Coin operated laundry - no dry cleaning. Drain to sanitary sewer.
9/12/2014	GT Laundry	Medium	1115 Charles St	7211	Power Laundry	No	NA	NA	NA	Power laundry, washer and dryer. No dry Cleaning. Drain to sanitary sewer.
9/15/2014	Toledo Screw Machine Products	High	5257 Northrock	3451	No permit	No	No	NA	NA	Facility not permitted. It appears to qualify for "no exposure" certification, discussed with representative and provided information.9/15/14 Turned in no exposure app.
9/18/2014	TY Precision automatics Inc.	High	2606 Falund St.	3451	No permit	Yes	12/5/2014	Yes	No	Facility not permitted, Metal recycle dumpster located outside. Shared permit information with representative. 12/5/14 received no exposure app.
9/18/2014	Wilson Mfg. Screw Machine	High	2500 N Main St.	3451	No permit	Yes	10/9/2014	Yes	No	Facility not permitted, Metal recycle dumpster located outside. Shared permit information with representative. 10/9/14 No exposure cert. applied for.
9/24/2014	Diamond Heat Treat	High	3691 Publishers Dr.	3398	No Exposure	No	NA	NA	NA	Facility has a no exposure certification. All facility processes are under cover and not exposed to stormwater.

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
9/24/2014	Greenlee Textron	High	4455 Boeing Drive	3357	Offices	No	NA	NA	NA	SIC based on past activities which do not apply. No manufacturing taking place. Primarily offices. Facility to supply new SIC.
9/25/2014	GFI Heat Treating	High	1531 Preston St.	3398	No Permit	Yes	1/14/2015	Yes	No	Site needs and IEPA Stormwater industrial permit. Inspection indicates site would qualify for no exposure. No other site concerns. 12/30/2014 - Follow up request emailed to Jason Breuer (gfimetaltreating@sbcglobal.net) Called Jason 1/14/15 and spoke to him. Emailed no exposure application to complete and send back.
9/29/2014	Bluff City Materials (Northwind RAS Recycled Shingles	High	5728 9th Street		NPDES	No	NA	NA	NA	Site has necessary permitting. Magnets used to pick up nails along street and sweeping. Trash pickup taking place.

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
9/29/2014	Car Wash on Auburn	Medium	2521 Auburn St.	7542	No Permit required	Yes	12/02/2014	Yes	No	Complaint forwarded from IEPA. Sludge has been removed from bays and placed on tarp for drying and disposal. There were no indications material entered the inlet but a better containment system is needed. All other operations appear good. 12/02/2014 - Sludge storage removed. Continue to monitor
10/7/2014	Brynolf Mfg INC	High	412 18th Ave.	3452	No Permit	Yes	10/9/2014	Yes	No	Facility not permitted, Metal recycle dumpster located outside. Shared permit information with representative. 10/9/14 No exposure cert. applied for.
10/7/2014	Folkerts Mfg, INC	High	2229 23rd Ave.	3452	No Permit	Yes	1/14/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow up email sent to Ron Folkerts Called 1/14/15 spoke to Ron about needing the completed application and emailed him the application. Said he would work on a temp cover now and build something in the Spring. 1/26/15 work on new garage door for chip dumpster and have completed in March/April.

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
10/7/2014	Freeway Rockford INC	High	4701 Bocing Dr.	3452	No Permit	No	NA	NA	NA	No exposure applied for Oct. 2013.
10/16/2014	Custom Metal Products	High	1827 Broadway	3469	No Permit	Yes	10/20/2014	Yes	No	Facility not permitted, Metal recycle dumpster located outside. Shared permit information with representative. 10/20/14 received copy of no exposure application.
10/16/2014	JW Fasteners Inc.	High	1311 Preston St.	3452	No Permit	Yes	10/17/2014	Yes	No	Facility not permitted. Shared permit information with representative. 10/17/14 received copy of no exposure application
10/16/2014	Rockton Centre (Complaint)	Low	3150 Rockton Ave		No permit required	Yes	11/18/2014	In Progress	No	Inspection performed due to complaint submitted on 10/15/2014. Site is a shopping center. Only concern is severe erosion along drainageway being caused by downspouts. 11/18/2014 - Met with owners to discuss runoff concerns. Repairs will be made in spring since conditions do not allow for it now.
10/17/2014	Rodix Inc.	High	2316 23rd Ave	3625	No Permit	Yes	10/20/2014	Yes	No	Might have wrong SIC. Facility is not permitted. Shared permit information with representative. 10/20/14 received copy of no exposure application.

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
10/23/2014	Pearson Fasteners	High	1400 Samuelson	3452	No Permit	Yes	10/23/2014	Yes	No	Facility not permitted. Shared permit information with representative. 10/23/14 received no exposure app.
10/23/2014	Rockford Fastener	High	725 South St.	3452	No Permit	Yes	11/19/2014	Yes	No	Terminated Permit # ILR004001. Shared permit information with representative. 11/19/14 received EPA acknowledgment for no exposure.
10/23/2014	Rockford Ball Screw	High	940 Southrock Dr.	3452	No Permit	Yes	02/03/2015	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow-up email sent to Denis Bermingham 1/26/15 Left Denis a message on his voicemail. Left Denis another voicemail message 2/3/15 Left Denis another voicemail 2/4/15. Recieved no exposure app 02/13/15
10/30/2014	Rockford Products, LLC	High	707 Harrison Ave	3452	Individual permit	No	NA	NA	Na	They have an individual permit, Fehr Graham is monthly inspector.
10/31/2014	STAR Tire Recycling	High	217 Peoples	5531	No Permit required	Yes	12/2/2014	In Progress	No	Site has permit with IEPA Land Division, inspection scheduled due to concerns relayed by IEPA during their inspection. Tire storage was good, lots of dumped material at the back of the facility. Grading permit being applied for fill material being added.

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
11/4/2014	Specialty Screw Corp.	High	2801 Huffman Blvd.	3452	No Permit	Yes	10/4/2014	Yes	No	Facility not permitted. Shared permit information with representative. 10/4/14 Received no exposure certification app.
11/4/2014	Southern Imperial	High	1400 Eddy	3452	No Permit	Yes	12/30/2014	Yes	No	Site is operated very well. No concerns with environmental requirements. Site does need NPDES permitting though it would qualify for a no exposure if dumpsters were covered. 12/30/2014 - Sent Follow up email to Dave Cortex, quotes being obtained for covering dumpsters the applying for no exposure
11/13/2014	Letrika	High	4814 American Rd	3452	No Permit	No	NA	NA	NA	SIC based on past renter which does not apply. No manufacturing taking place. Only Distribution. Facility to supply new SIC (5063).
11/13/2014	Carmona Gear Cutting	High	2415 Kishwaukee St	3452	No Permit	No	11/17/2014	Yes	No	Facility not permitted. Shared permit information with representative. 11/17/14 received no exposure application.
11/13/2014	Raycar Gear & Machine	High	6125 11th St	3462	No Permit	Yes	12/30/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow up email sent to Daniel Schwartz, No Exposure received on December 13.

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
11/13/2014	General Forging & Die	High	4635 Hydraulic Rd.	3462	No Permit	Yes	01/05/2015	Yes	No	Facility not permitted. Shared permit information with representative. 11/18/14 Chip dumpster company is working on a lidded dumpster plan. 12/19/14 update, still working on a solution to cover chip dumpster. 01/05/15 Received no exposure app.
11/17/2014	Erickson Tool & Machine Co.	High	1903 20th Ave	3469	No Permit	Yes	12/30/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow up emailed to Chris Erickson, Fabricating cover for dumpsters then applying for no exposure. 1/29/15 received no exposure app.
11/18/14	Rockford Jobbing Service Inc.	High	4955 28th Ave	3462	No Permit	Yes	11/26/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow up emailed to Brian Hornbeck Received no exposure application 11/26/14

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
11/20/2014	Rockford Heat Treaters, Inc.	High	4704 American Road	3398	No permit	Yes	12/30/2014	Yes	No	Based on facility activities a NPDES industrial Stormwater permit is required. It appears to qualify for a no exposure. 12/30/2014 - Follow up emailed to Tom Deutsch, received no exposure from IEPA on December 10
11/20/2014	Action Tool & Mfg. Inc.	High	5573 Sandy Hollow Rd.	3469	No Permit	Yes	12/30/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow up email sent to Troy Gay, No exposure application has been sent and confirmation received.
11/20/2014	Carlson Capital Mfg. Inc.	High	2319 23rd Ave.	3469	No Permit	Yes	12/8/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/08/14 no exposure cert. applied for.
11/20/2014	Schafer Gear Works Rockford LLC	High	5876 Sandy Hollow Rd.	3462	No Permit	Yes	12/18/2014	Yes	No	Facility not permitted. Shared permit information with representative. Received no exposure app 12/18/14.
11/20/2014	Allied Production Drilling Inc.	High	4004 Auburn St.	3469	No Permit	Yes	11/24/2014	Yes	No	Facility not permitted. Shared permit information with representative. 11/24/14 received no exposure app.
11/24/2014	X-Tech Innovations	High	424 18th Ave.	3452	No Permit	Yes	12/30/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow-up Email sent to Jordan Kinsbury, No exposure applied for on December 18th

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
12/8/2014	Rockford Drop Forge	High	2011 10th St.	3462	No Permit	Yes	12/30/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow-up email sent to Al Meyer, Fehr Graham is developing SWPPP
12/9/2014	Wilson Tool Corp.	High	2401 20th St.	3469	No Permit	Yes	12/30/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow-up email sent to Frank Lasala, No exposure receive 12/12/2014
12/9/2014	A & L Drilling	High	4125 W State St.	3471	No Permit	Yes	12/15/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/15/14 received a copy of the no exposure application.
12/10/2014	Certified Technology	High	915 22nd St.	3471	No Permit	Yes	12/17/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/17/14 received no exposure application.
12/11/2014	Rockford Toolcraft	High	5455 11th St.	3469	No Permit	Yes	12/30/2014	Yes	No	Facility not permitted. Shared permit information with representative. 12/30/2014 - Follow-up email sent to Pete Mckee, dumpsters to be covered and no exposure to be applied for.
12/12/2014	Barron Metal Finishing	High	1350 Preston St.	3471	No Permit	YEs	1/9/2015	Yes	No	Facility not permitted. Shared permit information with representative. 01/09/15 received a copy of the no exposure application.

Date	Company/ Permit # ILR00	Priority Ranking	Address/Location	SIC	NPDES/High Risk/SIU	Follow-up needed (Yes/No)	Date of Follow-up (if needed)	Corrective Actions Addressed (Yes/No/NA)	Submit to Code Enforcement (Yes/No)	Notes
12/22/2014	Masters Plating	High	2228 20th Ave.	3471	No Permit	Yes	1/21/2015	Yes	No	Facility not permitted. Shared permit information with representative. Received No exposure App.
12/23/2014	J&M Plating, Inc	High	4500 Kishwaukee St.	3471	No Permit	Yes	3/30/2015	Yes	No	Facility not permitted. Shared permit information with representative. 3/30/15 – No Exposure application received
12/29/2014	Rocknel Fastners, Inc.	High	5309 11th St.	3471	No Permit	Yes	2/09/2015	Yes	No	Facility not permitted. Shared permit information with representative. Received No exposure App.
[illegible]0/2014	Chem Processing, Inc.	High	3910 Linden Oaks Dr.	3471	No Exposure Applied for	No	NA	NA	NA	Facility not permitted. Shared permit information with representative. No exposure applied for 05/29/13
12/30/2014	Chem Processing, Inc.	High	715 N Madison St.	3471	No Exposure Applied for	No	NA	NA	NA	Facility not permitted. Shared permit information with representative. No exposure applied for 05/29/13

Notes:

* SIC: Standard Industrial Code is a United States government system for classifying industries by a four-digit code

** SIC: Significant Industrial User, as defined by the Rock River Water Reclamation District

Appendix D. – Standard Operating Procedures (SOPs)

D-1

Detention Basins

DETENTION BASINS

STANDARD OPERATING PROCEDURE

June 2015

1.0 General

The purpose of this standard operating procedure for the detention basin monitoring program is to comply with Part II, A.2 of the City of Rockford's NPDES Storm Water Permit (ILS000001). This document addresses the process to perform detention basin inspections on public and privately owned detention basins.

2.0 Legal Authority

All properties with detention basins have drainage and detention easements on the recorded plats which allow the City to access the property to check the basins for maintenance needs.

If it is determined that a detention basin has maintenance issues the property owner will be notified to make the necessary repairs. Failure to properly maintain a detention basin can result in violations on municipal code Chapter 109, Article 6, as well as violations of the easement provisions.

3.0 Documentation and Record Management

All detention basin locations and ID numbers are mapped on the City of Rockford's GIS database and are hyperlinked to files with all data pertaining to that basin. A spreadsheet of basin inspections has been developed to indicate maintenance categorization following inspections and to track maintenance performed on the detention basins. The data shall be updated continuously as new information is gathered for the basins.

To access the detention basin database perform the following:

1) Open the Stormwater Drive (note: this drive has limited access for people who perform duties directly related to the City's stormwater program),
2) Open the Detention Basin folder,
3) All basins have number Id's which is how they are categorized in the folder.

Basin folders include the following data: past inspection reports & photos, recorded plat (indicating maintenance responsibility) property owner(s). Other data can be added to the files as it becomes available (i.e. correspondence, engineering plans, etc.)

4.0 Staffing and Equipment

Positions of the City of Rockford's Stormwater Environmental Team (SWET) include: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated project managers and engineering techs.

Inspections for the detention basins will be performed by the Public Works Engineering Division utilizing the following staff positions: Operations Manager(s), Program Manager(s), Project Manager(s), Coordinator(s), and Engineering Technicians. These positions shall be trained to perform these inspections according to the Standard Operating Procedures for Stormwater and Environmental Education and be familiar with this document.

Equipment to perform the inspection should include: the Detention Basin Inspection Form (Attachment B) or Field Observation Form (Attachment C), safety vest, work boots (possibly rubber boots or hip waders), camera, tape measure, and rain gear. It is also recommended the inspector review previous reports prior to completing the inspection.

5.0 Detention Basin Monitoring

The detention basins within the City of Rockford limits have been broken down into three (3) categories:

5.1 Public Detention Basins

These basins are owned, operated and maintained by the City of Rockford. These basins are listed as part of Attachment A.

5.2 Private Detention Basins

These are detention basins owned, operated and maintained by private citizens or homeowner associations that have not been designated as Private Priority Detention Basins. The majority of the detention basins within the City of Rockford limits fall under this category.

5.3 Private Priority Detention Basins

These are private basins that have been given a Private Priority Basin designation based on previous inspections & observations. These designated basins will be inspected or observed more frequently than other privately owned basins. These basins are listed as part of Attachment A.

The following criteria shall be considered to add or remove private basins from the Priority Basin List:

- History of overtopping
- Owner lack of maintenance
- Significant collection of debris or floatables
- Basin failure
- Downstream flooding
- Significant grading or maintenance work has been completed recently
- Redesign or retrofit has been completed
- Large regional basin
- Newly constructed basin

6.0 Detention Basin Inspection Frequency

All detention basins within the City of Rockford limits shall be inspected based on scheduled Dry Weather inspections and Storm Event inspections.

6.1 Dry Weather Basin Inspection Frequency

Public & Private Priority Basins

All public and private priority detention basins shall be inspected annually utilizing the Detention Basin Inspection Form (Attachment B). Maintenance of the detention basins and stormwater systems shall be in accordance with the post construction management plan for that property.

Private Basins

All private detention basins shall be inspected no less frequently than every two years and as needed in response to a public complaint or a concern identified by the City. Maintenance of the detention basins and stormwater systems shall be in accordance with the post construction management plan for that property.

Any detention basins that were not previously located shall be inspected in the year the City became aware of their presence.

6.2 Storm Event Basin Inspection Frequency

The source for weather observation data to be used by Staff is from the National Weather Service website (http://w1.weather.gov/data/obhistory/KRFD.html) which reports the past 72 hours of weather data (including hourly rainfall data) from the Chicago Rockford International Airport.

In addition, the following factors shall be utilized to determine inspection frequency:

- Intensity of rainfall
- Duration
- Previous weather conditions, (i.e. soil moisture content, frost depth, time since previous event)

Public and Private Priority Basins
All public and private priority detention basins will be inspected within 72 hours following a 4 inch or greater, 24 hour storm event.
Non-Priority Private Basins
All non-priority private detention basins will be inspected within two (2) weeks of a 6 inch or greater, 24 hour storm event.

7.0 Performing Basin Inspections

7.1 Dry Weather Basin Inspection

The attached detention basin inspection form (Attachment B) shall be used when performing inspections. Number, type and size of inlet and outlet structures will not need to be recorded unless there was a change in design or it wasn't previously recorded. Photos will be taken to show basin conditions and to indicate items of concern. It is recommended the inspector review previous reports prior to completing the inspection.

Reasons for follow-up can include but not be limited to:

- Structure failures (berms, pipes, etc.)
- Poor seeding establishment
- Blockages in or around the inlet and outlet structures
- Obstructions in the basins.
- No maintenance is being completed. (mowing, debris removal, etc.)

7.2 Storm Event Basin Inspection

During event inspections the Field Observation Form (Attachment C) shall be utilized and the basins will be visually inspected for:

- Structural integrity
- Debris and floatable build up at outflow or other locations
- Potential or active flooding concerns
- Potential or active property damage

Inspectors must be aware of their surroundings when performing inspections during and after storm events.

7.3 Concern for Public Safety during Basin Inspections

If during a basin inspection, there are found to be concerns about the integrity of the basin, the inspector shall immediately contact the City Engineer (See Attachment E for Emergency Contact Phone Numbers). The City Engineer, or his designee, will assess the basin for further action.

If the inspector determines there are urgent concerns for the health and safety of the public, the inspector shall call 911 to notify the Rockford Fire Department. The inspector shall then immediately inform the City Engineer of the current situation.

8.0 Basin Maintenance Notifications

8.1 Private and Private Priority Basins

1. Inspections shall be reviewed by the Public Works, Engineering Division to determine the type of maintenance needed. Basin maintenance will be categorized as:
    a. None – no additional maintenance required
    b. Minor – No immediate concerns. Minor maintenance (mowing, removal of debris) is needed. Flows are not compromised

c. Intermediate – No maintenance is being performed and flows are or will be compromised if maintenance doesn't commence.
d. Major – Basin needs significant maintenance and/or repairs.

2. For basins categorized as having Intermediate and Major maintenance needs:
   a. Owners shall be sent letters detailing needed repairs. This shall be completed within one (1) week for dry weather inspections and within two (2) weeks of storm event inspections.
   b. Owners shall be given 90 days to complete the maintenance or will be instructed to contact the City regarding a maintenance timetable. Depending on the extent of the repairs and the history of the property or owner the owner may be sent through the code enforcement hearing process.
   c. The city will request basin owners to send in the attached maintenance confirmation form (Attachment D) upon completion of maintenance items as directed in the letter. Staff will review the maintenance to confirm it has been completed.
   d. As maintenance is reported as completed on basins in the Intermediate and Major categories it will be indicated on the spreadsheet. Failure of an owner of such a basin to notify the City within the 90 day timeframe will result in an additional inspection to assess compliance.

3. All other basin owners will receive a form letter reminding them of their maintenance responsibilities.

4. All basin owners will receive the Detention Basin Maintenance Guide included as Attachment F.

5. All detention basins and their maintenance category will the tracked on an Excel spreadsheet.

8.2 Public Basins

The Public Works Street Division performs and tracks routine maintenance (mowing, sediment removal, etc.) on public basins according to the Right-of-Way and Drainageway Standard Operating Procedure document. The Stormwater Environmental Team shall notify the Street Division within 48 hours of the inspection of the maintenance issues on City owned basins.

9.0 Enforcement

All recorded plats indicate provisions of the drainage and detention easements and identifies the property owner's responsibilities. Violations of these requirements will make the responsible party subject to enforcement as outlined in Chapter 109, Article 13 of the City of Rockford Code of Ordinances and the Enforcement Response Plan.

Attachment A
Public Basin & Private Priority Basin List

The following are detention basins where the City of Rockford has maintenance responsibilities or are considered private priority basins.

Public Basins	**Private Priority Basins**
Lowes Distribution Center	Harrison Park
Elliot Golf Course	Turnberry Ridge
Arden Court	Linden Pointe
Greater Rockford Industrial Park	Colony Bay
Logistics Parkway	Leland Place (NE Rote & Divine)
Harmon Park Ponds/Swales	Mill & Highgrove
New Towne Dr. & Javelin Dr.	Red Oak Estates #8 (SE Rote & Eden)
Mulford Village Pond X (west)	
802 Marchesano Dr. (Fire Station #3)	

Attachment B

City of Rockford
Detention Basin Inspection Form
(If yes is checked take a picture and make comment)

Basin ID _____ Inspector(s) _____

Inspection Date: _____ Basin Type: _____Dry _____Wet

Was there rain in the last 24 hours? Yes___ No___ 10 yr. /24 hr. Event yes_____ No_____

Rainfall Amount _____

1. Does basin have sediment deposits? Yes_____ No_____ If Yes, estimated Quantity _____
2. Is there standing water in the basin? Yes___ No ___ If Yes, water depth at outlet structure _____

   Depth of Debris Line_____
3. Is there debris in the basin? Yes _____ No _____
4. Inlet/Outlet Conditions

   Is there erosion or undercutting at the inlets/outlets? Yes_____ No _____

   Has the rip rap or other material been displaced/moved from around the inlet/outlet?
   Yes_____ No _____ N/A _____

   Is there garbage or debris obstructing the structures? Yes_____ No_____
5. Embankment/Bottom Conditions

   Are there any indications of erosion or sloughing? Yes_____ No_____
6. Downstream conditions (100 ft. downstream of the outfall)

   Are there indications of excessive erosion downstream of the primary outlet structure?
   Yes_____ No _____ N/A _____

   Check if further follow-up is needed_____

Comments/Other Maintenance: _____

_____

_____

_____

_____

Note: If this is a new installation include the number, type and size of inlet and outlet structures.

Inspector Signature: _____ Date: _____

Attachment C

City of Rockford Field Observation

1. Person Making Observation: _____ Date: _____

2. Type of Observation (check all that apply):

_____ Drainageway	_____ Creek
_____ Citizen Complaint	_____ Industrial/Commercial Site
_____ Detention Basin	_____ Outfall Monitoring
_____ Construction Site	_____ Illicit Discharge (If the Illicit Discharge is active contact Brad Holcomb or Dean Kurth immediately)
_____ Inlet	_____ Other _____

3. Location/Project Name: _____

4. Is this a post rain event observation? _____ Yes _____No

5. If yes: Date of Rainfall _____ Rainfall amount (inches) _____

6. Is there standing water in the basin? Yes___ No ___ If Yes, water depth at outlet structure _____

7. Is a follow-up inspection required? _____ Yes _____ No

8. Is maintenance needed? _____ Yes _____ No

9. Comments (please be detailed and supply photos if necessary): _____

_____

_____

_____

_____

Inspector Signature: _____ Date: _____

Provide Copies to one of the following:

Brad Holcomb, Stormwater & Environmental Program Manager – Cell # 815-218-7343, brad.holcomb@ockfordil.gov,
Dean Kurth, Environmental & Stormwater Project Manager – Cell # 815-218-7353, dean.kurth@rockfordil.gov
Ryan Lundberg, Stormwater Coordinator - Cell # 815-985-0585, ryan.lundberg@rockfordil.gov
Marcy Leach, Operations Manager – Cell – 815-520-0658, marcy.leach@rockfordil.gov

Attachment D

DETENTION BASIN MAINTENANCE CONFIRMATION

Please fill out and return to the above address when all maintenance is completed

BASIN ID # _____

NAME: _____ PHONE: _____

ADDRESS: _____ EMAIL: _____

LOCATION OF DETENTION BASIN: _____

MAINTENANCE START DATE: _____ MAINTENANCE END DATE: _____

ARE YOU PERFORMING THE MAINTENANCE? YES: _____ NO: _____

TYPE OF MAINTENANCE PERFORMED: _____
_____

CONTRACTORS (IF APPLICABLE):_____
CONTACT: _____
ADDRESS:_____
PHONE/FAX: _____EMAIL:_____

ENGINEERING COMPANY (IF APPLICABLE):_____
CONTACT: _____
ADDRESS: _____
PHONE/FAX: _____EMAIL:_____

NOTE: Any grading or change in design may require additional City of Rockford permitting and approvals. Contact the City of Rockford Public Works Department (779-348-7300) to determine permitting requirements.

SIGNATURE: _____ DATE: _____

FOR OFFICE USE ONLY

DATE OF FOLLOW-UP INSPECTION: _____INSPECTOR:_____
MAINTENANCE APPROVED: YES: _____ NO: _____ IF NO, WHY? _____
_____
COMMENTS: _____
_____

Attachment E

Emergency Contact List

Emergency – 911

Position	Name	Cell Phone #	Email
Public Works Director	Tim Hanson	815-985-4635	Timothy.hanson@rockfordil.gov
City Engineer	Matt Vitner	815-222-4659	Matthew.Vitner@rockfordil.gov
Emergency Operations Division Fire Chief	Joe Corl	815-289-7282	Joe.Corl@rockfordil.gov
Engineering Operations Manager	Marcy Leach	815-520-0658	marcy.leach@rockfordil.gov
Street and Transportation Superintendent	Mark Stockman	815-262-6733	mark.stockman@rockfordil.gov
Stormwater Program Manager	Brad Holcomb	815-218-7343	brad.holcomb@rockfordil.gov
Stormwater Program Manager	Dean Kurth	815-218-7353	dean.kurth@rockfordil.gov
Stormwater Coordinator	Ryan Lundberg	815-985-0585	Ryan.lundberg@rockfordil.gov
Street Maintenance Supervisor	Harry Noble	815-218-0843	Harry.noble@rockfordil.gov
Forestry Supervisor	Mitch Leatherby	815-980-2062	mitchell.leatherby@rockfordil.gov
Project Manager	Jason Irvin	815-988-0069	Jason.irvin@rockfordil.gov
Hazardous Materials District Chief	Dan Zaccard	815-494-8659	dan.zaccard@rockfordil.gov

THE CITY OF ROCKFORD ILLINOIS, USA

Timothy Hanson
Director
Public Works Department

August 15, 2013

(Insert name & address of responsible party)

Re. **Detention Basin Maintenance at *(insert plat name)* (Basin ID #)**

Dear Mr./Ms. ;

Storm water detention basins are a best management practice designed to reduce the impacts of pollution and increased velocity of storm water runoff caused by developments. They are an essential part of the City of Rockford's efforts to improve the quality of our streams, rivers and ponds. Once a detention basin fails, or if it is not adequately maintained, it will no longer perform its intended function and is often very expensive to replace.

By performing routine maintenance on storm water detention basins those responsible for them can reduce potential costly repairs, not only to the basin themselves but downstream as well. On (insert date) the City of Rockford inspected the above referenced detention basin to determine if maintenance is needed to keep the basin functioning as originally designed.

An inspection on the above referenced detention basin was completed and the inspection identified the following item requiring maintenance:

1.
2.
3.

According to the recorded plat you are responsible for the maintenance of this basin. If you fail to maintain it as required and it results in a failure you could be found liable for all resulting damage. In addition, failure to properly maintain the basin will result in violations to Chapter 109, Article 6 of the City of Rockford's code of ordinances.

Please fill out the attached maintenance permit once all maintenance items are completed or contact the City of Rockford within 90 days to discuss a timetable to complete the required maintenance.

If you have any questions regarding this maintenance, please contact the Stormwater Program Manager, Brad Holcomb, at (815) 967-7061 or by email at Brad.Holcomb@rockfordil.gov.

Sincerely,

Matthew Vitner, P.E.
City Engineer

Enc. photo documentation, recorded plat, maintenance guide, maintenance confirmation

Timothy Hanson
Director
Public Works Department

Detention Basin Maintenance at *(Insert plat name)* (Basin ID #) **Page 2**

Photo #1

Picture description

Photo #2

Note: the attached photos indicate examples of corrective actions observed on this construction site. When performing maintenance as indicated in the photos, check the entire site for other areas with similar maintenance needs.

D-2

Erosion & Sediment Control Plan Review & Regulatory Inspections

THE CITY OF
ROCKFORD
ILLINOIS, USA

EROSION & SEDIMENT CONTROL PLAN REVIEW AND REGULATORY INSPECTIONS

STANDARD OPERATING PROCEDURES

June 2015

1.0 General

The purpose of this Standard Operating Procedure (SOP) for plan review and erosion and sediment control regulatory inspections is to comply with Part II, A.3 of the City of Rockford's NPDES Stormwater Permit (ILS000001). This document addresses the City's procedures for reviewing erosion and sediment control plans; Stormwater Pollution Prevention Plans (SWPPP) and performing regulatory site inspections.

2.0 Legal Authority

Legal authority for the City's Erosion and Sediment Control Program is found in the City's Code of Ordinances Chapter 109, Article 3. This City of Rockford Code provides City staff the authority to access properties for inspections. Chapter 109, Article 3, the Stormwater Technical Manual and the ILR10 Permit provides specific erosion and sediment control requirements.

3.0 Staffing

Staff from the Department of Public Works shall conduct the reviews of the erosion and sediment controls (ESC) plans and SWPPPs. The primary public works staff that will be trained in plan review include the following positions: Engineering Operations Manager and the Stormwater Program Managers. Training shall be from in-house and external training sources as approved by the Engineering Operations Manager and the Stormwater Program Manager(s).

Staff from the Department of Public Works, Engineering Division shall be responsible for performing permit compliance inspections. The primary public works staff that will be trained to perform full site inspections will be the following positions: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated Project Managers Engineering Techs. Each team member shall be trained to perform the inspections as referenced in the ILR10 construction permit and shall be familiar with this document. Training shall be from in-house and external training sources as approved by the Engineering Operations Manager and the Stormwater Program Manager(s). Project Managers and Engineering Technicians can perform inspections provided they have the above training and are approved to perform inspections by the Engineering Operations Manager and the Stormwater & Environmental Program Manager.

All training shall be in accordance with the Standard Operating Procedures for Stormwater and Environmental Education.

The following equipment shall be utilized when performing inspections: a copy of the SWPPP and erosion and sediment control plans, clipboard, inspection form, camera, personal protection equipment. Personal protection equipment shall include:

- Hard hats – required on all sites with equipment running overhead or as required by the contractor.
- Safety vests – required on all sites.
- Work boots, rubber boots or hip waders (depending on site conditions).

Safety while doing any inspection is a top priority. Staff should always be aware of their surroundings as well as the location of equipment operating in the area.

4.0 Review and Approval of Erosion and Sediment Control Plans and Stormwater Pollution Prevention Plans

Pursuant to Article 5 of the City's Stormwater Management Ordinance and the City's Subdivision and Site Plan Review Processes, the Stormwater Administrator, or their designee will review Stormwater Pollution Prevention Plans (SWPPPs) and erosion and sediment control (ESC) plans for compliance with Articles 3, 5 and 6 of the City's Code of Ordinances Chapter 109 and with the requirements of ILR10, the *IL Urban Manual* and the City's Stormwater Technical Manual. This review, which is one component of the overall plan review process conducted by the City, covers both construction and post-construction stormwater controls. Construction shall not commence on a project until the City has conducted this review and issued its approval of the SWPPP and ESC plan through issuance of a Grading and Stormwater Discharge Permit or through issuance of a Building Permit.

This SOP applies to all construction projects involving one acre or more of land disturbance or involving less than one acre of land disturbance but that are part of a larger common unit of development, including municipal projects. All such projects are required to obtain and comply with the IEPA Construction General Permit (ILR10) and have the SWPPP and ESC plan reviewed and approved by the City of Rockford Department of Public Works. As part of the review process, all project applicants must submit a Grading and Stormwater Discharge Application which identifies the parties responsible for both the temporary stormwater controls utilized during construction and the parties responsible for ongoing operation and maintenance of post-construction stormwater controls. The SWPPP and ESC plan review checklist (Attachment A) and the City's Stormwater Technical Manual will be used by the Department's Stormwater Program Manager and staff to review all projects requiring an IEPA construction general permit. The project owners or their consultants are required to submit ESC plans and SWPPPs to IEPA and to the City for review and approval as part of the City's process for issuing a Grading and Stormwater Discharge Permit. Work at the site is prohibited until it has obtained permit coverage and is authorized to discharge stormwater under ILR10 and until the City has provided its approval through issuance of a Grading and Stormwater Discharge Permit or the Building Permit. Submittals to IEPA will be verified on the website referenced in Section 5.0.

Subsequent revisions to construction plans after initial City approval must be reviewed and approved by the Stormwater Administrator or designee in accordance with the process described above. The Stormwater Administrator will conduct his/her review pursuant to the ordinance requirements in place at the time of the new review. If the Stormwater Administrator determines that the revised plans are in compliance, an amended Grading and Stormwater Discharge Permit may be issued.

Plan submittal, review and approval will be tracked by the Public Works Department – Engineering Division (PWE) and the Community & Economic Development Department – Construction & Development Services Division (CDS) using the Hansen tracking system. PWE and CDS manage this tracking system and will enter all new projects into the tracking system in accordance with the City's Plan Review Process. The project's status is updated in the system as each review is completed and approved. The Engineering Division, also, utilizes Excel to track plan submittals, reviews and approvals.

5.0 Inspections

The City's oversight inspection program consists of pre-construction inspections where applicable, field inspections and drive-thru inspections. Many active construction sites are viewed by staff while driving to other appointments. Any active construction site that is believed not to have the necessary IEPA or City of Rockford approvals will be inspected for compliance.

If a construction site is found not to have the necessary IEPA or City of Rockford permits a stop work order shall be issued until the proper documents are submitted and approved.

Any milling of parking lots or road projects that are larger than one acre shall be considered maintenance and no IEPA construction permit is required. Any parking lot or road projects larger than one acre that are having material removed down to the sub-base also do not require IEPA construction permitting provided there is less than one acre of disturbance to the subsoil and the adjacent area. (These requirements will be revised as necessary to be consistent with any revisions to the IEPA construction general permit.) These sites shall also have erosion and sediment control measures (BMP's) in place as needed to reduce and/or eliminate sediment runoff.

The Illinois Environmental Protection Agency (IEPA) issues NPDES permits to construction sites and maintains information on permitted sites on their website. The City will work with the local office of the Illinois Environmental Protection Agency to review its list of permitted sites. The City shall also utilize the website below to make sure all NPDES permitted sites have obtained the proper City of Rockford approvals.
(http://dataservices.epa.illinois.gov/NoticesofIntent/ConstructQuickSearch.aspx)

Sites with less than one acre of disturbance or do not require NPDES permitting shall have erosion and sediment control measures in place as needed to reduce and/or eliminate sediment runoff. These sites shall be inspected at the City's discretion based on the proximity of environmentally sensitive areas, citizen complaints and past contractor compliance issues.

5.1 NPDES Permitted Facilities

All Construction sites regulated under IEPA general construction permit (ILR10) shall be inspected by the City's Public Works – Engineering Division. Sites that have not begun construction activity or are inactive (no construction activity) and have been temporarily stabilized shall receive drive thru inspections only (Section 6.3) until such time as construction begins or re-commences. Sites that have been final stabilized as defined in the ILR10 permit are not required to be inspected and either the City's Hansen System or the Engineering Division's Excel tracking system will indicate that final stabilization has been achieved.

5.2 City of Rockford Projects

Any City of Rockford project of 1 acre or more in land disturbance or with less than one acre of land disturbance but that is part of a larger common unit of development shall comply with the requirements of the NPDES (ILR10) general construction permit. These projects are subject to the same inspection requirements as a private property project.

5.3 Citizenry Complaints and Past Known Noncompliance Record

The City has a citizen complaint program which includes a hotline (779-348-7300) for phone calls and the City's website (www.rockfordil.gov). Complaints from the public are recorded and investigated. Every citizenry complaint will be followed up with a field inspection by City staff within three business days.

Monthly inspections shall be completed for construction companies, property owners and/or developers that have had an administrative order issued within the past year. If an additional administrative order has not been issued within a year from the last administrative order issuance then the City will return to the normal inspection process. If non-compliance continues then additional enforcement procedures will take place (see Section 8.0).

6.0 Field Inspection Program

This section describes the procedures for performing field inspections of construction sites. These inspections are a critical component of this program.

6.1 Inspection Priority and Frequency

Field inspections may be scheduled in advance with the contractor though the preference is to perform inspections without prior notice. Field inspections will be prioritized at the City's discretion. Factors for prioritization will be based on: citizen complaints, proximity to environmentally sensitive areas, date construction commenced, previous noncompliance of the owner, contractor or consultant or random site visits.

All NPDES permitted construction sites on which construction has commenced shall have a full erosion and sediment control inspection completed a minimum of two (2) times during the construction season (May 1st – November 30); provided, however, that sites for which an alternate inspection frequency is specified by Section 5.1 or Section 5.3 of this SOP shall be inspected as stated in that Section. The first full erosion and sediment control inspection for each site will be conducted within the first two weeks of the construction start date as noted on the grading and stormwater discharge permit. In the situation where construction continues beyond the season additional inspections shall be completed a minimum of once every three months. Sites/contractors with past compliance issues will be inspected monthly in accordance with Section 5.3. In lieu of full inspections, drive thru inspections (Sec. 6.3) shall be completed on sites that are inactive (no construction activity) and have been temporarily stabilized. Sites that have been final stabilized as defined in the ILR10 general construction permit are not required to be inspected under this SOP.

6.2 Pre-Construction Inspections

When a project is adjacent to an environmentally sensitive area a pre-construction inspection shall be completed to confirm all necessary BMP's are in place prior to the commencement of any land disturbing activity other than those associated with BMP placement.

Environmentally sensitive areas are areas such as wetlands, creeks, rivers, drainageways, IEPA designated superfund sites, site with endangered species and areas with steep slopes (6% or greater).

Attachment B is a copy of the Pre-Construction Checklist.

6.3 Drive Thru Inspections

Drive thru inspections shall be utilized to document visits to sites that do not constitute a full erosion and sediment control site inspection. A drive thru inspection does not replace a full erosion and sediment control site inspection; it is an assessment of the site conditions to determine if a more detailed inspection is required. Drive thru inspections may be scheduled or may be conducted on an ad hoc basis as City inspectors drive by or through a site during the course of other routine business. Drive thru inspection reviews include: cleanliness of the site and the condition of in–place BMP's. A copy of the Drive Thru Inspection Checklist, which will be completed during the inspection, is included as Attachment C of this document. If ther are no deficiencies noted during the drive thru then no follow-up action is required. If there are minor deficiencies the site supervisor or owner shall be notified at the time of the inspection via an on-site meeting or a phone call to make the necessary corrective actions. If the deficiencies have not been addressed in a timely manner or the construction site has major deficiencies, a full erosion and sediment control site inspection shall be completed within 3 business days of the drive thru inspection. Major deficiencies include overall poor site conditions; poorly installed BMP's, failure of BMP's, evidence of sediment leaving the site or great potential that sediment can leave the site. Major deficiencies do not include routine maintenance of structural controls where the site is generally in good condition and there is no evidence that routine maintenance is not conducted in a timely manner. The drive thru inspections results shall be documented according to Section 9.0.

6.4 Full Erosion and Sediment Control Site Inspection

The full Erosion and Sediment Control Site Inspection Form (Attachment D) shall be completed during the inspection and any deficiencies will be reviewed with the site supervisor, if available. A letter (Attachment E) describing the inspection report results will be sent to all responsible parties as detailed on the ILR10 Notice of Intent, typically the owner and/or contractor. When deemed applicable, pictures shall be taken to document site conditions.

The inspection form primarily focuses on site conditions including but not limited to: discharge points, disturbed areas that have not been final stabilized, structural control measures, locations where vehicles enter and exit the site, evidence of discharges to Waters of the State and Best Management Practices (BMPs) effectiveness and condition. The SWPPP and inspection records will be reviewed if accessible. If the SWPPP is not accessible a follow up appointment will be scheduled to review the document.

The primary manuals the City will utilize for BMP installations and maintenance will be the Illinois Urban Manual and the IDOT Erosion and Sediment Control Field Guide for Construction Inspections. Other manuals may be utilized if approved by the City of Rockford.

The City shall confirm that corrective actions for major deficiencies identified during field inspections are completed in a timely manner either through certification provided by the site owner and/or operator or through follow-up inspections by the City. Major deficiencies include overall poor site conditions; ineffective or inappropriate BMPs; missing BMPs (i.e., BMPs required by the SWPPP but not installed or implemented); BMPs that were not installed or constructed correctly, and in accordance with good engineering practices and the Stormwater Technical Manual and the Illinois Urban Manual; and poorly maintained or implemented BMPs. Major deficiencies do not include routine maintenance of structural controls where the site is generally in good condition and there is no evidence that routine maintenance is not conducted in a timely manner. If the site owner/operator does not provide certification of all required corrective actions for major deficiencies within one week following the inspection, the City will issue a stop work order until such time as the deficiencies have been addressed and certified to the City. Deficiencies not addressed shall follow the enforcement procedures in Section 8.0. Status of corrective actions will be noted in the inspection and sampling log.

7.0 Termination of NPDES permits

Construction sites that meet the termination requirements in the ILR10 permit shall be listed as inactive and will no longer be inspected. Prior to termination, sites shall be reviewed to confirm final stabilization as detailed in the ILR10 General Construction Permit and construction best management practices have been removed. This review shall consist of a final inspection, which could be a field inspection or a drive thru inspection if appropriate, or certification by the construction site owner/operator.

8.0 Enforcement

Enforcement measures will be in accordance with Chapter 109, Article 13 and the City of Rockford Stormwater Division Enforcement Response Plan for corrective actions not remedied within the required timeframe.

9.0 Documentation and Record Management

Hard copies of site data (inspection reports and letters) will be filed by site name and/or address in file folders. In addition, digitized copies will also be saved in the Stormwater Drive on the City of Rockford computer system. Digitized information may include: SWPPP, inspection reports/checklists, letters, photos, correspondence, etc. These files will be saved as follows:

1) Open the Stormwater Drive (note: this drive has limited access for people who perform duties directly related to the City's stormwater program),
2) Open the Construction folder,
3) Open the COR Inspection folder,
4) Open the inspection folder for the current year,
5) If a folder for a site is already created open it and save the data. Inspection reports should be saved by date. If it is a new site create a new folder.

Any construction site where inspections carry over to the next year shall have the entire digitized inspection folder copied and pasted to the next year. All hard copy inspections shall be saved in the same file.

An excel spreadsheet for all inspections has also been created. This spreadsheet can be found in the Stormwater Drive in the folder entitled ***Inspection and Sampling Logs***. All spreadsheets are saved by year for easy tracking. Data includes: date, construction site name, type of inspection, NPDES permit # (if applicable), type of follow-up needed, date of follow-up and whether corrective actions have been addressed. Notes about the inspection can also be included.

SWPPP/ESC Plan review Checklist

Note: the SWPPP template IEPA references is the USEPA template. After reviewing the IEPA ILR10 permit and the USEPA SWPPP template the following items are required in all SWPPP

Site Name _____

To be used on construction sites that require an IEPA NPDES stormwater permit (ILR10)

SWPPP Content	Yes	NO	NA	Comments
Contact Information/Responsible parties				
Project Owner & contact information				
SWPPP Preparer Contact Information				
Site Information				
Project Name & Address				
Latitude & Longitude (NOI is acceptable)				
Discharge Information				
Is project discharging to the City of Rockford's MS4?				
Name of closest receiving waters				
Runoff Coefficients after construction				
Nature of Construction Activity				
Description of Project				
Size of project (total size & area to be disturbed)				
Sequence of Construction (major soil disturbing)				
Allowable Non-stormwater Discharges				
Site Maps				
Drainage patterns before and after major grading activities				
Vehicle entrance & exit locations plus controls to prevent offsite tracking				
Total site areas and areas of soil disturbance				
Location and types of all structural and non-structural controls				
Areas where stabilization practices are to occur				
Material and equipment storage areas				
Stockpile locations				
Locations of surface waters and wetlands				
Location(s) where storm water discharges from site				
Inspections & Maintenance				
Inspection Schedule & procedures				
Procedures for corrective actions				
Person(s) responsible for corrective actions				

SWPPP Content	Yes	No	Na	Comments
Documentation requirements				
Endangered species (NOI is acceptable)				
Historic Preservation (NOI is acceptable)				
Other required permitting (if applicable)				
Does the SWPPP address protection of endangered species or historic preservation? (if applicable)				
Erosion & Sediment Controls - Should include specifications and location on maps (Illinois Urban Manual to be used for guidance)				
Note: these are commons controls used onsite in the area. Other BMP's may be necessary or more effective				
Perimeter controls				
Sediment Trackout Controls				
Stockpile Contols				
Inlet Protection Controls				
Stabilization Practices				
Concrete washout				
Other Controls				
Post Construction Runoff				
Are post construction runoff measures included to minimize pollutants after construction is completed?				

SWPPP & ESC Plan Reviewer _____

Date of Plan Review _____

Attachment B

Pre-Construction Checklist

The pre-grading checklist shall be completed when a project is adjacent to an environmentally sensitive area.

Date: _____ Project Name: _____

Inspector: _____

1. Are all required certifications signed and included in the SWPPP? Yes_____ No _____
2. Is the SWPPP located onsite? Yes_____ No _____

   Location of the SWPPP_____
3. Has the SWPPP manager and Inspector been identified? Yes _____ No _____
4. Has the primary contractors been identified and the NOI updated (if necessary) Yes ____ No _____
5. Are all required BMP's (inlet protection, perimeter controls, stabilized construction entrance, etc.) installed? Yes_____ No _____

Any question answered "NO" must be corrected prior to the start of grading.

Comments: _____

_____

_____

_____

Inspector Signature: _____ Date: _____

Attachment C

Drive Thru Inspection Checklist

A Windshield inspection is a windshield survey of site conditions at a construction site. A windshield inspection will be acceptable for sites with no visible corrective actions or with minor maintenance issues provided the site supervisor is contacted and the maintenance items are addressed. A follow-up must be completed to confirm maintenance has been completed. Sites with significant maintenance needs will have a stormwater construction site inspection completed (see Standard operating Procedure for Regulatory Erosion and Sediment Control Inspections Section 5.3 & 5.4).

Construction Site Name: _____ Date: _____

Inspector: _____

Site Conditions:

1. Site is clean and well maintained (trash and debris picked up, streets clean, no spills, etc.)

   Yes _____ No _____

2. All visible BMP's are maintained and there are no corrective actions needed.

   Yes ___ No ___ NA _____

3. Minor BMP maintenance is needed and the Site Manager has been contacted.

   Yes ____ No ____ NA ____

4. Name of Site Contact: _____

5. Phone # _____

6. Date of Follow-up (if necessary): _____

7. All maintenance items addressed: Yes _____ No _____

8. If maintenance items were not addressed or additional maintenance is noted during the follow-up visit a stormwater construction site inspection will be done.

9. Is there evidence of sediment leaving the site? Yes _____ No _____

10. Is a Stormwater Construction Site Inspection Needed? Yes _____ No _____

Comments: _____

_____

_____

Inspector Signature: _____ Date: _____

Provide Copy to Stormwater & Environmental Team

Attachment D

City of Rockford
Erosion and Sediment Control Site Inspection Report

General Information			
Project Name			
NPDES Tracking No.		**Location**	
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Describe present phase of construction			

Inspection Type:

Random Site Visit ____ Citizen Complaint ____ Date Received _____ Time Received _____

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds ❑ Other:

Temperature: _____ Date of last Rain Event (> 0.5") _____

Have all discharge points been inspected? ❑Yes ❑No **Are there any discharges at the time of inspection?** ❑Yes ❑No
If yes, describe:

Was the SWPPP onsite and available for review? ❑Yes ❑No ❑Onsite but not Accessible/Reviewed

Site-specific BMPs

- *Utilize the SWPPP and the erosion and sediment control plans (if accessible) to determine types and locations of BMP's for the site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		❑Yes ❑No	❑Yes ❑No	
2		❑Yes ❑No	❑Yes ❑No	
3		❑Yes ❑No	❑Yes ❑No	
4		❑Yes ❑No	❑Yes ❑No	
5		❑Yes ❑No	❑Yes ❑No	
6		❑Yes ❑No	❑Yes ❑No	
7		❑Yes ❑No	❑Yes ❑No	
8		❑Yes ❑No	❑Yes ❑No	
9		❑Yes ❑No	❑Yes ❑No	
10		❑Yes ❑No	❑Yes ❑No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
4	Are discharge points and receiving waters free of any sediment deposits?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
5	Are storm drain inlets properly protected?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
6	Is the construction exit preventing sediment from being tracked into the street?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	
12	(Other)	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA	

General Comments

Inspector Signature: _____ Date: _____

Timothy Hanson
Director
Public Works Department

Attachment E

September 5, 2013

(Insert Name & Address of permit holder)

RE: Erosion Control Inspection at *(insert name of facility)* (ILR10 insert permit #)

Dear Mr. / Ms. ;

A soil erosion and sediment control inspection was conducted on September 4, 2013 by the City of Rockford. The purpose of the inspection was to determine the effectiveness of soil erosion and sediment control measures in preventing water pollution.

The site inspection identified the following items needing your attention to meet the requirements of your NPDES permit as well as the City of Rockford Code of Ordinances:

1.
2.
3.
4.
5.

Under the Illinois Construction General Permit (ILR10), all corrective actions must be completed in a timely manner. Please provide a response to this letter within 7 days certifying all corrective actions have been completed or provide an estimate for completion along with an explanation for the delay. Failure to do so will result in a Stop Work Order being posted until all corrective actions have been addressed. Please send the certification via email.

Please note, the ILR10 general construction permit was updated and new requirements became effective August 1st, 2013. Please review the revised permit and adjust the SWPPP accordingly.

If you have any questions regarding this inspection, please contact the Stormwater Program Manager, Brad Holcomb at (779) 348-7611, or by email at brad.holcomb@rockfordil.gov.

Sincerely,

Matthew Vitner, P.E.
City Engineer

Cc.

Timothy Hanson
Director
Public Works Department

Erosion Control Inspection at **(ILR10)**

Photo #1

Picture description

Photo #2

Picture description

Photo #3

Picture description

Note: the attached photos indicate examples of corrective actions observed on this construction site. When performing maintenance as indicated in the photos, check the entire site for other areas with similar maintenance needs.

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Erosion & Sediment Control Guidance Manual for City of Rockford Projects

THE CITY OF ROCKFORD ILLINOIS, USA

EROSION AND SEDIMENT CONTROL GUIDANCE MANUAL FOR CITY OF ROCKFORD PROJECTS

June 2015

1.0 GENERAL

An important component of any stormwater management program is the reduction of pollutants from construction sites that may discharge to the municipal separate storm sewer system or waters of the state. A proactive program to identify and inspect all permitted construction sites can significantly reduce pollutants entering the municipal storm drainage system.

The following program and procedures shall be followed by City of Rockford's Public Works, Engineering Division when managing municipal construction projects. This guidance applies to the Project Managers and stormwater compliance inspectors who oversee the City's construction projects. Project Managers are located in the City's Public Works, Engineering Division and their responsibilities include overseeing City construction projects. The stormwater compliance inspectors are generally the projects consultant or contractor and they conduct the stormwater compliance inspections required by the ILR10 or an individual NPDES permit, where appropriate. The inspectors are responsible for ensuring that the project is in compliance with the ILR10 and the SWPPP, that corrective actions are identified and corrected in a timely manner, and that all BMPs are being properly operated and maintained. In addition, a member of Stormwater & Environmental Team (SWET) from the Public Works, Engineering Division shall conduct compliance oversight inspections as addressed by the City's Standard Operating Procedures for Erosion and Sediment Control Plan Review and Regulatory Inspections. All Project Managers and stormwater compliance inspectors, as well as erosion and sediment control plan reviewers, must be knowledgeable in the principles and practices of erosion and sediment control measures, the requirements of the ILR10, the Illinois Urban Manual and the City's stormwater technical manual, and be trained annually pursuant to the City's Standard Operating Procedure for Stormwater and Environmental Education. Consultants and contractors c. supply documentation of training in lieu of participating in City sponsored training events.

Questions regarding this document or the IEPA General Construction permit should be directed to a member of the Stormwater & Environmental Team (SWET).

2.0 PLAN REVIEWS

Any construction project managed by the City of Rockford, regardless of size, will be required to have erosion and sediment control measures that meet the requirements of Articles 3, 5 and 6 of the City's Code of Ordinances Chapter 109, the standards in the Illinois Urban Manual and the City's stormwater technical manual. These erosion and sediment control plans must be approved by a member of SWET in the Public Works, Engineering Division, specifically by a person knowledgeable in the principles and practices of erosion and sediment control measures and trained annually pursuant to the City's Standard Operating Procedure for Stormwater and Environmental Education. In addition, any construction project managed by the City of Rockford that disturbs more than 1 acre or are part of a larger common unit of development shall comply with the IEPA General Construction Permit (ILR10) which includes developing a Stormwater Pollution Prevention Plan (SWPPP) and erosion and sediment control plans. These plans must also be approved as indicated above, and pursuant to the City's Standard Operating Procedures for Erosion and Sediment Control Plan Review and Regulatory Inspections as part of the plan review process.

3.0 PROJECT MANAGERS/INSPECTORS STORMWATER RESPONSIBILITIES

As the owners on an IEPA permitted construction project the City is responsible to assure the SWPPP and erosion and sediment control plans are implemented and being maintained. The ultimate goal of any SWPPP is to keep pollutants from leaving the site, including infiltration. As the project managers for the City of Rockford you are responsible to ensure the day–to-day activities are followed in a compliant manner and to assure the SWPPP is being implemented and maintained.

NOTE: Most regulatory inspections are initiated by a drive thru or citizen complaint. First impressions for a regulatory inspector are important. If a drive thru shows a site is clean, organized with all BMP's maintained that inspector may decide to drive to the next site. If a site is messy, unorganized with poorly maintained BMP's regulatory inspections will happen often.

4.0 PERMITTING REQUIREMENTS

4.1 CONSTRUCTION PROJECTS LESS THAN ONE ACRE, PARKING LOTS & ROAD PROJECTS

Though IEPA permitting is not required, unless items a & b apply in section 4.2, sites less than one acre shall have erosion and sediment control measures (BMP's) in place as required to reduce and/or eliminate sediment runoff.

Any milling of parking lots or road projects that are larger than one acre shall be considered maintenance and no IEPA construction permit is required. Any parking lot or road projects larger than one acre that are having material removed down to the sub-base material also do not require IEPA construction permitting provided there is less than one acre of disturbance to the subsoil and the adjacent area. These sites shall also have erosion and sediment control measures (BMP's) in place as required in order to reduce and/or eliminate sediment runoff.

The drive thru inspection form (attachment A) shall be used to by technicians, coordinators and managers in the Public Works Engineering Division to ensure BMP's are in place and functional. These positions shall be trained as indicated in the Stormwater & Environmental Education Standard Operating Procedures. This inspection shall be done throughout the project with copies provided to the Stormwater & Environmental team for review.

Contractors not addressing erosion and sediment control concerns shall be reported to the Stormwater and Environmental Team who shall perform a full erosion and sediment control inspection.

4.2 NPDES CONSTRUCTION PERMITS

An IEPA General Construction Permits Notice of Intent (NOI) must be submitted by the project manager or a member of SWET when:

a. There is more than 1 acre of land disturbance (clearing, grading, and excavation of land),
b. When a site less than 1 acre is part of a larger common plan of development,
c. When there is potential for contributing to a violation of water quality standards or significant contribution of pollutants to waters of the state.

ALL NOI's must be submitted on the City of Rockford's IEPA construction login page (http://dataservices.epa.illinois.gov/SWConstructionPermit/bowLogin.aspx). For logi information see a member of SWET. Coverage under the ILR10 requires submittal of t SWPPP in addition to the NOI. An electronic version of the SWPPP must be sent to IEPA by email at the following address: epa.constilr10@illinois.gov. Construction can start 30 days after NOI and SWPPP submittal and following the issuance of the City Grading and Stormwater Discharge Permit or the Building Permit. .

All SWPPP documents, including the inspections and erosion control plan should be kept onsite in one location, preferably a 3-ring binder. The permit and notice of intent should be posted.

The SWPPP is a living document and should be updated as the project progresses (see ` attachment D).

The following is a summary of the requirements of the ILR10 General Construction Permit. City of Rockford project managers, inspectors, technicians, consultants and contactors should be familiar with the contents of the permit as well as this document. Any questions should be directed to a member of the Stormwater and Environmental Team.

5.0 SWPPP CONTENT

The SWPPP is a site specific document and will vary for each project. The following are items that shall be included in the SWPPP, see Section 2.0 for SWPPP and erosion and sediment control plan review requirements which must take place prior to the start of construction. All SWPPP's must b kept current in accordance with ILR10 permit requirements.

5.1 Site Description– Every SWPPP will be site specific but information shall include

- Description of the nature of construction activity or demolition work;
- A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site storage of materials;
- An estimate of the total area of the site and the total area of the site that is expected to be disturbed by clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils and storage of materials, or other activities;
- An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;
- A site map indicating:
  - drainage patterns and approximate slopes anticipated before and after major grading activities,
  - locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking,
  - areas of soil disturbance,
  - the location of major structural and nonstructural controls identified in the plan,
  - the location of areas where stabilization practices are expected to occur,
  - locations of on-site or offsite soil stockpiling or material storage,
  - surface waters (including wetlands),
  - locations where stormwater is discharged from the site and discharged to surface waters.

5.2 **Controls** – A description and installation details of the BMP's being used on the site. The plan should clearly describe each major activity and the type and timing of controls that will be installed during each activity. The Illinois Urban Manual (www.aiswcd.org/IUM), the IDOT Erosion and Sediment Control Field Guide or other similar document shall be used. See common BMP's at the end of this document.

- ***Erosion and Sediment Controls*** – design, install & maintain erosion and sediment controls to minimize the discharge of pollutants. All controls must be maintained and kept in effective operating condition during the entire project. At a minimum controls must:
  - Control stormwater volume & velocity to minimize erosion.
  - Control stormwater discharges, including peak flow rates & total storm volume to minimize erosion at the outlets and to minimize downstream channel and streambank erosion,
  - Minimize the amount of soil exposed during construction activity,
  - Minimize disturbance of steep slopes,
  - Minimize sediment discharge from the site,
  - Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration.
  - Minimize soil compaction and preserve topsoil.

- ***Stabilization Practices*** – include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where practicable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporarily seeding, permanent seeding, mulching, chemicals, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, staged or staggered development, and other appropriate measures.

  - A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated, shall be included in the plan.
  - Stabilization of disturbed areas must be initiated within 1 day of permanent or temporary cessation of earth disturbing activities on all or a portion of a site and shall be completed as soon as possible but not later than 14 days from the initiation of stabilization work in an area. Exceptions to these time frames are specified as in paragraphs (i) and (ii):

    (i) Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

    (ii) On areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method can be used. Temporary stabilization techniques and materials shall be described in the SWPPP.

- ***Structural Controls*** – a description of structural practices used to divert flows from exposed soils, store flows or limit runoff and the discharge of pollutants. This may include:
  - Silt Fence,
  - earth dikes,
  - drainage swales,
  - sediment basins & traps,
  - check dams,
  - subsurface or slope drains,
  - level spreaders,
  - inlet protection & outlet protection

- ***Other Controls & Pollution Prevention***
  - Design, install, implement and maintain pollution prevention measures to minimize exposure such as wash waters, building materials, products, construction wastes, landscape material, pesticides, fertilizers , spills and other materials
  - Waste Disposal – no construction materials, including but not limited to concrete waste and paint, shall be dumped on the ground, discharged offsite or in any location that could lead to waters of the state.

- ***Post Construction Stormwater Management***
  - Describe measures that will be installed to control pollutants after construction operations have been completed.
  - Permittee must plan and put forth stormwater BMP's that will retain the greatest amount of stormwater runoff practicable given the site and project constraints by installing one or more BMP's as detailed in the Illinois Urban Manual.
  - Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall as necessary to provide non-erosive flows from the structure.
  - Unless otherwise specified in the Illinois Urban Manual the SWPPP shall be designed for a 25 year, 24 hour event.

5.3 Contractor Certifications

The stormwater pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in paragraph 2 below in accordance with Part VI.G {Signatory Requirements) of the ILR10 Permit All certifications must be included in the stormwater pollution prevention plan except for owners that are acting as contractors.

Certification Statement - All contractors and subcontractors identified in a stormwater pollution prevention plan in accordance with paragraph 1 above shall sign a copy of the following certification statement before conducting any professional service at the site identified in the stormwater pollution prevention plan:

> "I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR10) that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature in accordance with Part VI.G of the ILR10 Permit: the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

5.4 SWPPP Certification - All Notices of Intent, stormwater pollution prevention plans, reports, certifications or information either submitted to the Agency or the operator of a large or medium municipal separate storm sewer system shall be signed by a designated official or officer.

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

6.0 INSPECTIONS

6.1 Pre-Grading Inspections

All best management practices shall be installed prior to the initial disturbance of soils associated with clearing, grading, and excavation of land.

When a project is adjacent to an environmentally sensitive area a pre-construction review shall be completed by the project consultant, the project manager or a member of SWET to confirm all necessary BMP's are in place prior to the commencement of any land disturbing activity other than those associated with BMP placement. Environmentally sensitive areas are areas such as wetlands, creeks, rivers, drainageways, IEPA designated superfund sites, site with endangered species and areas with steep slopes (6% or greater). Attachment B is a copy of the Pre-Construction Checklist.

6.2 ILR10 Inspection Requirements

Generally, project consultants or contractors perform stormwater compliance inspections as required in the ILR10 permit. When conducting these inspections, it is preferable, though not required, that the same person performs weekly and rain event inspections. This is because of their familiarity with the project area. The inspector should also be knowledgeable in the principles and practices of erosion and sediment control measures as addressed in Section 1.0, and meet the criteria for "Qualified Personnel" as defined in ILR10.

When stormwater compliance inspections are to be conducted by City staff the project manag shall consult with a member of SWET to ensure the inspector meets the qualifications as defined in the ILR10 permit and has received the training as detailed in the Stormwater & Environmental Education Standard Operating Procedures.

Inspections must be done at least once every seven calendar days and within 24 hours of the end of a storm or by the end of the following business or work day that is 0.5 inches or greater. Every inspection report should indicate what type of inspection is being done. Weather data should be included. (Attachment C - sample inspection report)

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

Inspectors should verify previous weeks maintenance items have been addressed. The following items should be inspected:

- All disturbed areas,
- Equipment and material storage areas,
- Onsite BMP's, these should be checked for maintenance, proper installs and that they are functioning properly,
- Discharge locations,
- Locations where vehicles enter and exit.
- ***The entire site must be monitored to assure no potential pollutants enter the City of Rockford's storm system or leaves the site.***

Based on the results of the inspection, the description of potential pollutant sources identified in the SWPPP shall be revised as appropriate as soon as practicable after such inspection to minimize the potential for such discharges. Such modifications shall provide for timely implementation of any changes to the plan and pollution prevention control measures within 7 calendar days following the inspection. The inspection report shall either indicate when maintenance was completed or a maintenance log shall be included.

6.3 Regulatory Inspections

City projects can be inspected anytime by authorized representatives of the Illinois or U.S. EPA. In addition, all City projects requiring an ILR10 permit shall be inspected by SWET in the Public Works Engineering Division at least twice during the construction season (May 1st – November 30) pursuant to the City's Standard Operating Procedures for Erosion and Sediment Control Plan Review and Regulatory Inspections. The inspector shall review the inspection result with the project manager to initiate corrective actions.

7.0 NON-STORMWATER DISCHARGES

Non-Stormwater is discharges not composed entirely of rain. The following non-stormwater discharges are authorized under the ILR10 permit providing they do not contain pollutants:

- Firefighting activities
- Fire hydrant flushing's
- Waters used for dust control
- Water used to wash vehicles where detergents are not used
- Potable water sources including uncontaminated waterline flushing
- Landscape irrigation drainages
- Routine external building wash down which does not use detergents
- Pavement wash waters which does not use detergents and where spills or leaks of toxic or hazardous materials have **not** occurred,
- Uncontaminated air conditioning condensate
- Uncontaminated springs or groundwater
- Foundation footing drains where flows are not contaminated.

All other discharges (i.e. concrete or paint waste) must be managed as part of the SWPPP.

8.0 INCIDENCE OF NON-COMPLIANCE (ION)

Permit Language:

> *The permittee shall notify the appropriate Agency Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of any incidence of noncompliance for any violation of the stormwater pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the stormwater pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the Agency and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. Corrective actions must be undertaken immediately to address the identified noncompliance issue(s).*

If you or your contractor believes there is cause for an incidence of non-compliance submittal contact the Stormwater & Environmental Team (SWET) immediately for guidance. A member of SWET shall notify the local IEPA office within 24 hours after an incident and submit a report within 5 days.

Corrective actions must be initiated immediately.

9.0 PERMIT TERMINATION

- Where a site has completed final stabilization and all stormwater discharges from constructi activities that are authorized by this permit are eliminated, the permittee must submit a completed Notice of Termination.
    - Talk to a member of the Stormwater & Environmental Team regarding terminating a permit.
- All SWPPP records and inspections must continue to be current until permit is terminated.
- Records must be kept for three years after termination.

Attachment A

Drive Thru Inspection Checklist

A Drive Thru inspection is a windshield survey of site conditions at a construction site. A drive thru inspection will be acceptable for sites with no visible corrective actions or with minor maintenance issues provided the site supervisor is contacted and the maintenance items are addressed. A follow-up must be completed to confirm maintenance has been completed. Sites with significant maintenance needs will have a stormwater construction site inspection completed (see Erosion and Sediment Control, Plan Review and Regulatory Inspections Section 6.3 & 6.4).

Construction Site Name: _____ Date: _____

Inspector: _____

Site Conditions:

1. Site is clean and well maintained (trash and debris picked up, streets clean, no spills, etc.)

   Yes _____ No _____

2. All visible BMP's are maintained and there are no corrective actions needed.

   Yes ___ No ___ NA _____

3. Minor BMP maintenance is needed and the Site Manager has been contacted.

   Yes ____ No ____ NA ____

4. Name of Site Contact: _____

5. Phone # _____

6. Date of Follow-up (if necessary): _____

7. All maintenance items addressed: Yes _____ No _____

8. If maintenance items were not addressed or additional maintenance is noted during the follow-up visit a stormwater construction site inspection will be done.

9. Is there evidence of sediment leaving the site? Yes _____ No _____

10. Is a Stormwater Construction Site Inspection Needed? Yes _____ No _____

Comments: _____

_____

_____

Inspector Signature: _____ Date: _____

Provide Copy to Stormwater & Environmental Team

Attachment B

Pre-Grading Checklist

Date: _____

Inspector: _____

1. Are all required certifications signed and included in the SWPPP? Yes_____ No _____
2. Is the SWPPP located onsite? Yes_____ No _____

   Location of the SWPPP _____
3. Has the SWPPP manager and Inspector been identified? Yes _____ No _____
4. Has the primary contractors been identified and the NOI updated (if necessary) Yes ____ No _____
5. Are all required BMP's (inlet protection, perimeter controls, stabilized construction entrance, etc.) installed? Yes_____ No _____

Any question answered "NO" must be corrected prior to the start of grading.

Comments: _____

_____

_____

_____

Inspector Signature: _____ Date: _____

Attachment C

Erosion and Sediment Control Site Inspection Report

General Information			
Project Name			
NPDES Tracking No.		**Location**	
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Describe present phase of construction			

Weather Information
Weather at time of this inspection? ☐Clear ☐Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds ❑ Other: Temperature: _____ Date of last Rain Event (> 0.5")_____
Are there any discharges at the time of inspection? ❑Yes ☐No **If yes, describe:**
Inspection Type: ☐ Weekly ☐Rain Event Amount of Rain_____

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes	Corrective Action Completed (7 day follow-up)
1		☐Yes ☐No	☐Yes ☐No		❑Yes ❑No
2		☑Yes ❑No	☐Yes ☐No		❑Yes ❑No
3		☐Yes ❑No	☐Yes ☐No		❑Yes ❑No
4		☐Yes ❑No	☐Yes ☐No		❑Yes ❑No
5		☐Yes ❑No	☐Yes ❑No		❑Yes ❑No
6		❑Yes ☐No	☐Yes ❑No		❑Yes ❑No
7		❑Yes ☐No	☐Yes ❑No		❑Yes ❑No
8		❑Yes ☐No	☐Yes ❑No		❑Yes ❑No
9		❑Yes ☐No	☐Yes ❑No		❑Yes ❑No
		❑Yes ☐No	☐Yes ❑No		❑Yes ❑No

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes	Corrective Action Completed (7 day follow-up)
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
4	Are discharge points and receiving waters free of any sediment deposits?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
5	Are storm drain inlets properly protected?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
6	Is the construction exit preventing sediment from being tracked into the street?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
7	Is trash/litter from work areas collected and placed in covered dumpsters?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
10	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No
12	(Other)	❑Yes ❑No ❑NA	❑Yes ❑No ❑NA		❑Yes ❑No

General Comments/Follow-Up Observations

Inspector Signature:_____ **Date:**_____

Attachment D

D-4

Right-of-Way & Drainageway Inspection & Maintenance

THE CITY OF
ROCKFORD
ILLINOIS, USA

RIGHT-OF-WAY & DRAINAGEWAY INSPECTION & MAINTENANCE

STANDARD OPERATING PROCEDURES

June 2015

1.0 General

It is the responsibility of the City of Rockford Public Works Department to ensure the proper operation and maintenance of the MS4, including city-owned and timely enforcement of privately-owned stormwater structures. The City shall inspect, maintain, clean, and repair all city owned components of the MS4 including storm inlets, pipes, culverts, manholes, detention ponds, drainageways and all other stormwater structures to the maximum extent practicable. The City shall inspect, track and take necessary action to require that privately-owned stormwater structures are adequately maintained.

2.0 Personnel

2.1 Inspections

1. Storm Inlets/Manholes/Pipes – Street Maintenance Workers, Stormwater Staff, Engineering Project Managers, Engineering Technicians
2. Creek/Drainageway inspections – The Stormwater Staff of the Engineering Division and the Street Supervisors

2.2 Maintenance

Street Supervisors, Equipment Operators, Maintenance Workers, External Contractors

3.0 Equipment

3.1 Inspection

1. Clip Board with pen or pencil
2. Work boots or appropriate foot wear
3. Tape measure
4. Camera
5. Safety vest
6. Hard hats when around heavy equipment

3.2 Maintenance

1. Jet/Vac sewer cleaning vehicles (i.e. Vactor)
2. Light duty pickup trucks equipped with traffic control "arrow-board"
3. Backhoe
4. Heavy duty pickup with utility box
5. Skid-steer loader with bucket and breaker attachment
6. Heavy duty flatbed truck with cement mixer
7. Lawn mower(s)
8. Dump trucks

4.0 Material Disposal

All waste material generated by the inlet cleaning operation shall be emptied from the jet/vac vehicles at an approved dumping station and immediately loaded onto dump trucks and deposited in a licensed landfill facility. All sediment and debris removed from all cleaning operations shall be deposited in a licensed landfill facility.

5.0 Storm Inlets/Manholes/Pipes

5.1 Inspection

The City has over 29,000 known storm structures within its right-of-way and easements. Inspections are completed under two different processes.

1. Reactive:
   As citizens or city staff notify the Street Division of blocked inlets or pipes, sunken/broken structures or broken pipes. These inspections are completed by the Street Supervisors or the Stormwater Staff and tracked through the Infor (Hansen) Service Request System. Notification can be in the form of phone calls, emails, website requests or Hansen requests. A work order is generated by the Street Division and scheduled for inspection based on severity. Clogged inlets causing flooding are inspected and cleaned same day or within 24 hrs. Sunken structures are inspected immediately and barricade placed same day or within 24 hrs. Repairs are completed as part of the Yearly Inlet Package. All other requests are inspected within 1 week.

2. Proactive:
   As the Engineering Division performs street inspections for the Annual Capital Improvement Program projects or when the State performs resurfacing or reconstruction on State Highways within the City's jurisdiction. These inspections are completed by Engineering Project Managers or Engineering Technicians.

5.2 Maintenance

1. Inlet & Pipe Cleaning – Storm structure cleaning shall begin following the winter season with the initial focus on known problem areas that are susceptible to sediment and debris accumulation or flooding. List of known problem areas are kept at the Street Division and reviewed annually to determine if areas should be added or deleted from the list. Changes to the list will be summarized each year in the annual report. Subsequent inlet cleaning shall be based on the citizen requests/complaints and as needed based on the reactive and proactive inspections of the Street Supervisors, Stormwater Staff and Engineering Division. Frequency associated with known problem areas is dependent on weather conditions (i.e. A heavy winter as in the 2013/2014 winter season causes more debris to accumulate in the gutters and inlets requiring more frequent inlet cleaning and street sweeping.). Inlet cleaning shall also be completed as part of City road construction projects, as needed.

2. Inlet & Pipe Repairs – Storm structures, mains & laterals found to be substandard or failing shall be rebuilt or repaired in a timely manner dependent on weather conditions, with the largest percentage of the repairs being performed by an external contractor. Internal staffing will address moderate repairs as scheduling will allow. Inlets found to be in disrepair during the inspections as part of the Capital Improvement Program shall be repaired as part of the roadway project.

5.3 Documentation

Record of all storm structures / storm pipes inspected to include date, type of structure, size of each pipe, exact location (intersection, address, etc.), physical condition at time of inspection, sand/silt or debris present and recommended resolution to any of the above listed defects. If location, type and size of inlet vary from the GIS map system then the inlet data shall be given to the Facilities Management Section so the GIS maps can be updated.

Record of all structures/pipes cleaned to include date, type of structure, location (address or intersection), type and approximate amount of debris deducted, and number of feet of laterals or mains cleaned. Documentation shall be kept by the Street Division for the entire year and a summary of structures cleaned and the amount of material deducted shall be given to the Stormwater Section by the end of February of each for inclusion in the Annual Report.

Record of all structures repaired/replaced to include date, type of structure, address or intersection, nature of repair and cost of repair. For structures repaired by the Street Division the documentation shall be kept by the Street Division for the entire year and a summary of the number of inlets repaired shall be given to the Stormwater Section by end of February each year to include in the Annual Report. For inlets repaired as part of the Capital Improvement Program the documentation shall be kept by the project managers for the entire year and provide a summary of the number of structures repaired/replaced to the Stormwater Section by the end of February each year for inclusion in the Annual Report.

6.0 Drainageways

The City does not own or maintain all of these drainageways and creeks. Maintenance of private drainage systems shall be the responsibility of the property owner(s). The following is a list of drainageways within the City:

- Southeast Drainage Ditch/Buckbee Creek (Paved)
- Northwest Drainage Ditch (Paved)
- Airport East Watershed Creek
- Kent Creek
- Keith Creek
- Madigan Creek
- Manning Creek
- Fuller Creek
- Spring Creek
- Forest Hills Watershed Creek

6.1 Inspection

The City inspects all publicly and privately maintained drainageways and creeks. The City continues to assess the number of miles of paved and unpaved drainageways and creeks within its jurisdiction. As this is evaluated revisions to the total mileage to be inspected will be included in the annual report. If during an off inspection year the City determines there are additional drainageways to be inspected then it shall be documented in the annual report and included in the required inspections for following year.

These inspections are completed by the Stormwater Staff during the even years. This may be completed while performing the outfall inspections for illicit discharge. Inspections are to be performed during low flow conditions. Inspections of non-paved ditches/creeks shall be in accordance with Appendix A, Chapter 4 of Center for Watershed Protection Manual 10 "Unified Stream Assessment - A User's Manual." Inspections for paved ditches shall be in accordance with Appendix A, Chapter 4 and Appendix B, Chapter 9 of Center for Watershed Protection Manual 10 "Unified Stream Assessment - A User's Manual."

Results of the inspections shall be reviewed by the Stormwater Staff and Street Superintendent to determine appropriate maintenance measures.

1. Maintenance will be categorized as:
    i. None – no additional maintenance required
    ii. Minor – No immediate concerns. Minor maintenance (mowing, removal of debris) is needed. Flows are not compromised
    iii. Intermediate – No maintenance is being performed and flows will be compromised if maintenance doesn't commence. Minor erosion noted.
    iv. Major – Flows are compromised. Severe erosion noted. Needs significant maintenance and/or repairs.
    v. Life Safety

6.2 Maintenance

Privately Maintained Ditches/Creeks

Maintenance Notifications

1. For Life Safety concerns
   The property owner shall be immediately notified by phone, if possible. Otherwise the notification shall be provided through an in-person visit to the property-owner's residence. In all cases, the property owner shall also receive written notification. The written notification shall specify the required corrective actions, require the property-owner to commence corrective actions within 7 days, provide instructions and a deadline for certifying the completion of those corrective actions, provide a contact for the property-owner to obtain additional information, and identify consequences for noncompliance including follow-up action by the City. If a property-owner fails to certify

completion of the required corrective actions, the City will enter the property 10 days from the date of the notification to make the necessary improvements and the property owner will be responsible for all improvement costs and any associated fees, including attorney fees. Notification shall, also, include contacting the Stormwater Staff prior to commencing work in ensure proper remediation.

2. For Intermediate and Major maintenance needs:
    a. Owners shall be sent letters detailing needed repairs. This shall be completed within one (1) week of the inspection. Notification shall include the property owner scheduling a meeting with the Stormwater Staff to review remediation measures and to determine if work would require permitting through the IDNR or ACOE.
    b. If no permit is required property owners shall be given 90 days to complete the maintenance. If additional time is needed the property owner shall request an extension which will be reviewed by the Stormwater Staff. Depending on the extent of the repairs and the history of the property or owner the owner, may be sent through the code enforcement hearing process.
    c. The city will request property owners to send in the attached maintenance confirmation form upon completion of maintenance items as directed in the letter. Staff will review the maintenance to confirm it has been completed.
    d. As maintenance is reported as completed on the ditches/creeks in the Intermediate and Major categories it will be indicated on the spreadsheet. Failure of an owner of such a ditch/creek to notify the City within the 90 day timeframe will result in an additional inspection to assess compliance.

3. All other ditch/creek property owners will receive a form letter reminding them of their maintenance responsibilities.

4. All ditch/creek property owners will receive the Ditch/Creek Maintenance Guide included as Appendix C.

5. All ditches/creeks and their maintenance category will the tracked on an Excel spreadsheet.

Publicly Maintained Ditches/Creeks

Life Safety repairs shall be completed as soon as possible, with the understanding that temporary measures shall occur immediately to allow time for the Engineering Division, Street Superintendent and contractor to determine the best course of action for the remediation.

Major repairs to the City-owned paved and un-paved drainage systems/channels will be initiated by the Public Works Engineering Division and shall be prioritized based on the extent of the flow obstruction and erosion concerns. Analysis will begin within 30 days of the inspection and design solutions will begin. Construction timeframes vary due to weather, contractor availability and funding source determination. Temporary stabilization may be required to prevent additional erosion while the project is under design. This work may be completed by the Street Division or by a contractor.

Intermediate and Minor repairs shall be completed either internally by the Street Division or externally by contractors as required. In some cases the Engineering Division may complete the repairs as part of the Capital Improvement Program and shall be consistent with the Stormwater Management Plan.

Maintenance activities occasionally require equipment or personnel to enter a stream, river, channel, wetland or other water body. Cleanup/Repair, Drainage Ditch and Channel Maintenance and Bridge Repairs are among that maintenance work items that can require work in or near a water body. Maintenance equipment should not enter a water body without the required regulatory permits (e.g., Army Corps of Engineers Clean Water Act Section 404 permit, State Illinois Department of Natural Resources). The Floodplain Manager should be contacted to identify the appropriate permits.

In maintenance work near waterbodies, the following environmental stewardship practices should be followed.

- Evaluate alternatives to performing work in the water body.
- Tires should be cleaned before entering a water body.
- Heavy equipment driven into a water body to accomplish work should be clean of petroleum residue.
- Water levels should be below the gearboxes of the equipment in use, or equipment lubricants and fuels should be sealed such that inundation by water would not result in leaks.

Stream channelization or channel deepening as part of cleanup operations is prohibited and avoid placing equipment in-stream, whenever possible. Work is to be performed during low-flow conditions whenever possible and disturbance to existing stream bank vegetation is not to occur "unless absolutely necessary." Removed material must not be placed on the streambanks or in the floodway, and disturbed areas must be seeded and mulched.

6.3 Documentation

Inspection documents completed by consultants (IDNR), ACOE and the Stormwater staff shall be maintained in the Stormwater Share drive and paper reports completed by the ACOE shall be maintained in the appropriate file folders in the file cabinets.

Maintenance work performed or managed by the Engineering Division the Engineering Project Managers shall document all maintenance work performed by its contractors, including date, type of activity, nature of debris removal or bank stabilization performed and the approximate amount of debris removed (tons or cubic yards). Maintenance work completed on privately owned systems will be documented as noted above and shall be tracked on a Time and Materials basis in accordance with the latest edition of the Illinois Department of Transportation Specifications for city staff. Contractor costs shall be tracked based on contract agreement. The Engineering Division shall maintain this documentation for the entire year and provide the data to the Stormwater Section by the end of February each year for inclusion in the Annual Report.

The Street Division shall document all maintenance work performed by the Street Division and its contractors, including date, type of activity, nature of debris removal or bank stabilization performed and the approximate amount of debris removed (tons or cubic yards). The Street Division shall maintain this documentation for the entire year and provide the data to the Stormwater Section by the end of February each year for inclusion in the Annual Report.

The Stormwater Section shall maintain the maintenance documentation in the Stormwater Share Drive.

7.0 Dams & Levees

The City operates and maintains 3 dams (Alpine Dam, Page Park Dam, and Levings Lake Dam) and 1 levee (Kent Creek South Diversion Channel Levee) within its jurisdiction.

7.1 Inspections

Page Park Dam, Alpine Dam and Levings Lake Dam are required to be inspected annually by the City to meet the Illinois Department of Natural Resources (IDNR) compliance. The City retains a consultant to complete the annual inspections along with City staff. A report is completed by the consultant and submitted to the IDNR and the City. Traditionally, the Army Corp of Engineers completes an annual inspection of these dams and supplies a report to the City. For Kent Creek South Diversion Channel the Army Corp of Engineers completes an inspection of the diversion channel and levee and supplies the City with a report. When informed the City staff shall accompany the ACOE staff during the inspections.

7.2 Maintenance

Alpine Dam shall be operated and maintained in accordance with the Alpine Dam Operations and Maintenance Manual kept on file with the Engineering Division. Page Park Dam, Levings Lake Dam and Kent Creek South Diversion Channel shall be operated and maintained in accordance with the its Operation and Maintenance Manual kept on file in the Street Division and the Engineering Division. The City has agreements with the Rockford Park District for various maintenance tasks at Alpine Dam, Page Park Dam and Levings Lake but, ultimately, it's the City's responsibility to ensure the maintenance tasks are completed.

Publicly – Owned Detention Ponds

The City owns several detention ponds within its jurisdiction. The City owned ponds are listed below.

- Lowes Distribution Center
- Elliot Golf Course
- Arden Ct.
- Greater Rockford Industrial Park
- Logistics Parkway
- Harmon Park Ponds/Swales
- New Towne Dr. and Javelin Dr.
- Mulford Village Pond X (west)
- 802 Marchesano Dr. (Fire Station #3)

The City does not own the detention pond in Linden Pointe Subdivision but it is responsible for the maintenance of the pond walls and outlet structure. Rockford Park District owns and provides all other maintenance for this pond.

8.1 Inspection

Inspections are to be performed in accordance with the Detention Pond Inspection Standard Operating Procedures.

8.2 Maintenance

- Ponds shall be mowed a minimum of twice per year.
- Pond mowing and cleaning work shall be scheduled when dry weather is expected.
- Remove sediment & trash from grates, placing it in a truck for disposal.
- Do a visual inspection to make sure any grates, structures, manholes, boxes and pipes are in good working order.
- Provide outlet protection where feasible to minimize the amount of debris that might leave the basin during the cleaning process.
- Remove sediment and debris from the pond bottom.
- Clean structures and pond bottom by vactor truck, sweeping or shoveling when needed.
- All material is to be disposed into a dump truck and deposited in a licensed landfill.

8.3 Documentation

The Street Division shall document when maintenance was completed, type of maintenance completed and the amount of sediment and debris removed. Documentation shall be maintained by the Street Division for the year and by the end of February each year shall provide a summary of the work completed to the Stormwater Section for inclusion in the annual report. If the detention ponds require repairs then the Stormwater Section shall be notified. The Stormwater Staff and the Street Supervisors will determine the appropriate course of action for the

repairs and which Division will be responsible for the repairs. Priority of repairs shall be based on life safety, potential pond failure and funding available.

8.0 Bridges & Box Culverts

9.1 Inspection

The Engineering Division hires a consultant that is certified to completed bridge and box culvert inspections. Per State requirement, this is completed every two years and a report is generated of all bridges and box culverts including inspection results, structural integrity, pictures and recommended maintenance. Prior to and after a major rainstorm event the bridges & box culverts shall be inspected by the Street Supervisors or Stormwater Staff to determine if any debris is obstructing the natural flow through these structures. The amount and type of debris shall be documented.

9.2 Maintenance

Debris removal from the structures shall be completed at the earliest possible time by the Street Division staff or external contractors. Structural maintenance is completed by the Engineering Division through contracted projects. Major repairs shall be prioritized by the Engineering Division based on life safety and funding available.

9.3 Documentation

The Biennial Bridge Inspection Report shall be kept by the Engineering Division. Inspections made before and after major storm events shall be kept by the Stormwater Section. If maintenance is completed by the Street Division then the Street Division shall maintain the documentation and provide a summary of the maintenance to the Stormwater Section by the end of February each year for inclusion in the Annual Report. If maintenance is completed by the Engineering Division then the Project Managers shall maintain the documentation and provide a summary of the maintenance to the Stormwater Section by the end of February each year for inclusion in the Annual Report

9.0 Publicly Owned Trash Racks

9.1 Inspection

Trash racks shall be inspected by the Street Supervisors or Stormwater Staff prior to and following a major rainstorm event (4 inches or greater in 24 hours) to document any debris and floatables obstructing the natural flow through these structures. The City-owned trash rack locations are:

- Alpine Dam (floatable site per NPDES permit)
- Page Park
- Kishwaukee & Sandy Hollow (floatable site per NPDES permit)
- Arden Ct.
- Blackhawk Rd @ Falcon Rd

Section V of the permit requires the City to establish two monitoring points (identified above) for removal of floatables, to collect floatables material at the frequency necessary to prevent flow obstruction but at a minimum of twice each year, to estimate by volume or weight the amount collected, and to report the total each year in the annual report.

Locations not required under the NPDES permit will be inspected a minimum of once per year with debris removal as needed to prevent flow obstruction.

9.2 Maintenance

Prior to the storm event the debris and floatables shall be removed from the trash racks by either the Street Division or Stormwater Staff. The amount and type of debris/floatables removed shall be documented by weight. If debris/floatables accumulated after the storm then the debris/floatables will be removed at the earliest possible time by Street Division staff or external contractors.

9.3 Documentation

Documentation of the inspection, repair or debris/floatable removal from City-owned trash racks shall include date, type and amount (weight) of debris/floatables removed and any repairs needed and/or required or completed. Documentation shall be kept by the Stormwater Section for inclusion in the Annual Report.

10.0 Snow & De-Icing Operations

The Street Division is responsible for all snow and de-icing operations. Preparation for the winter season begins in August and the Street Superintendent shall be responsible for all coordination and documentation of the snow and de-icing operations. Each year the Street Superintendent shall meet with the Rockford Township Street Superintendent to coordinate efforts and improve efficiency of jointly owned streets. The Street and Water Divisions' staff perform the snow and de-icing operations of the City's arterial and collector level streets and perform the de-icing operations for residential streets and city-owned parking lots. A contractor is used to perform the snow removal operations on residential level streets and City owned parking lots. Each year the Street Superintendent shall review which operations should be completed by a Contractor to provide a more efficient or improved level of service. All documentation related to the snow and de-icing operations is retained by the Street Superintendent. Any change to the operation as noted above shall be documented in the Annual Report. Each year prior to and through the winter season the Street Superintendent shall analyze its salt supply and the rate it is being applied during the operations. If needed the amount of salt ordered, used and applied shall be adjusted. This evaluation shall be documented within the Annual Report. Salt storage and loading operations shall be in accordance with the City Yards Stormwater Pollution Plan. Brine and sand solutions shall be evaluated yearly for possible de-icing operations. If the Street Superintendent chooses to use sand for de-icing operations then additional street sweeping and inlet cleaning operations shall be evaluated. The Street Superintendent shall track the salt/sand/brine usage for each event and provide a monthly total to the Stormwater Staff by the end of February each year for inclusion in the Annual Report. Any adjustments made

shall be documented and provided to the Stormwater Staff for inclusion in the Annual Report.

11.0 Right-of Way and City-Owned Property Maintenance

11.1 Maintenance

In the City of Rockford property owners are responsible for mowing the right-of-way adjacent to their properties. Since the City owns approximately 900 properties the Street Division and the Community & Economic Development Department are responsible for maintaining these properties and their adjacent right-of-way. There are, also, various sections of right-of-way on arterial and collector level roads that the City is responsible for regardless of adjacent property ownership. The City contracts out the maintenance of these properties and the right-of-way and the specifications for those vendors are in Appendix D – City-wide Grounds Maintenance and in Appendix E - City Streets – Tree & Landscaping Maintenance.

11.2 Documentation

The Street Division shall randomly inspect the contractors' performance and document whether the contractor is meeting the requirements of the specifications. The Street Superintendent or the Street Supervisors shall determine if the lack of performance is addressed by verbal or written communication and whether its' severity warrants a deduction from the contractor's pay request.

APPENDIX A

Chapter 4: Severe Erosion (ER)

The USA assesses the most severe eroding banks along the survey reach, particularly at places where valuable infrastructure is threatened. Specifically, you will look for potential stream repair or restoration opportunities such as bank stabilization or grade control.

4.1 About Erosion

Stream erosion reflects the natural process of channel migration and adjustment, whereby streams continuously meander, widen and narrow in an attempt to reach a stable equilibrium. The balance between sediment load and discharge can be disrupted by urbanization. Severe erosion can occur when a stream's current velocity exceeds stability thresholds for bank materials at channel boundaries. Reduced bank stability caused by increased bankfull flooding can lead to rapid and excessive bank erosion as the stream adjusts to the changing hydrologic conditions.

The process of channel widening or downcutting can worsen as streams become progressively disconnected from their flood plain. Nick points occur where significant changes in streambed elevation are caused by channel incision, and are indicators of dynamic channel processes at work. Eroding banks can cause loss of property, destroy in-stream habitat, and contribute significant sediment loads downstream. Trimble (1997) estimated that more than half of the sediment loads from highly urban watersheds were derived from eroded stream banks. Figure 19 shows various examples of stream erosion you may encounter while conducting an ER assessment.

Extensive bank erosion and channel headcuts should be expected in urban subwatersheds. The ER form only collects information on localized nick points and banks where erosion greatly exceeds average reach conditions. Broader bank stability conditions are assessed as part of the overall RCH assessment (Chapter 11).

Figure 19: Types of Stream Erosion

Active bank erosion you can expect along meander bends in urban settings (Panel A), extreme erosion events that contribute significant sediment loads to receiving waters (Panel B), and in-stream nick points indicating channel erosion occurring in an upstream direction (Panel C) are examples of severe erosion you will want to record on ER forms.

Questions to ask when assessing eroded banks:

Is this area more severe than the rest of the survey reach?

Is infrastructure or property threatened?

What appears to be the cause of the erosion?

Are the banks actively contributing sediment to the stream?

Is this site a candidate for bank stabilization or grade control?

Severely eroded banks are evaluated during the USA for several reasons:

Nature and type of channel erosion: Knowing the nature and type of erosion within urban streams can help determine how eroding areas are influencing upstream and downstream reaches. The dominant channel erosion process in an urban stream often dictates which types of stream repair and restoration practices should be applied, if any (Manual 4). Locating nick points or headcuts can indicate where upstream erosion problems may occur in the future given current hydrologic conditions. A quantitative estimate of bank erosion can be used to model subwatershed sediment loadings.

Severity of bank erosion: While most urban streams exhibit some evidence of past or current bank erosion, the ER helps identify the most severe locations for potential bank stabilization or restoration (although they may not always be practical or feasible given overall subwatershed restoration goals).

Threatened infrastructure: Excessive erosion may expose or undermine existing infrastructure such as outfalls, sewer lines, telephone polls, bridge abutments, roads, parking lots, or other structures built too close to the stream. In some cases, it may be critical to repair or stabilize eroding areas to prevent future damage to valuable infrastructure.

4.2 Introduction to the ER Form

This section introduces the severe erosion impact form (ER) that assesses individual locations of eroded stream banks encountered during your stream walk. You are asked to record basic data on the location of erosion sites, estimate current channel dynamics and dimensions, and identify potential bank stabilization opportunities at each problem site. This section describes each part of the ER form, and provides guidance on how to complete it. Appendix A contains a blank copy of the ER impact form. A completed example ER form is included at the end of this chapter in Section 4.6, along with detailed explanations to help clarify how the field crew filled out each section of the form.

The first part of the ER form contains general header information common to all impact forms, and is self-explanatory.

You may want to modify the header section to reflect your reach and site labeling system, and whether you are using GPS units to fix locations. If you are using GPS units, record the beginning and end coordinates for each site, the GPS unit ID # and an LMK number. If the eroded bank is less than 100 feet long, GPS cannot calculate an accurate length, and you should measure it by pacing or with a tape measure.

The next part of the ER form asks you to describe the general channel processes that affect the eroding bank or stream channel. You should note the location and dimensions of the eroding area, as well as the ownership of the adjacent stream corridor.

You are asked to determine the overall **channel process** affecting the erosion site (e.g., is it aggrading or degrading), and to characterize how the channel process exerts itself on the stream (e.g., scour, slope failure, etc.). Of significant interest are headcuts and **nick points**, which are locations where active channel erosion is migrating in an upstream direction. Nick points are excellent indicators of the active channel erosion dynamics and directly affect the design of stream restoration projects. **Headcuts** observed on the side of a stream may also indicate the presence of an outfall discharging to the flood plain or side slope. You should trace these headcuts to their source. **Scour** is the process of removing bed or bank material through the erosive action of flowing water. **Bank failure** occurs when the toe of the stream bank is eroded beyond the point of bank support. **Slope failure** is often used describe the failure at steep bank slopes.

While not everyone has a full understanding of urban stream geomorphology, Table 13 gives some tips on how to determine the dominant channel processes in the stream. Table 14 also illustrates what many of these channel processes look like in the stream. If you feel uncomfortable about describing the channel process, simply check the currently unknown box.

Each eroded bank section should be recorded as either left, right, or both banks, and whether it occurs on a bend in the stream, or along a relatively straight section. Headcuts branching off the stream should also be recorded as either left or right bank, while nick points are, by definition, located within the stream channel itself. Bank erosion is typically found along meander bends and may be enhanced if the bend occurs against a steep slope.

Table 13: Features Used to Determine Current Channel Process

Process	Definition	Geomorphic Evidence
Aggradation	The geologic process by which a streambed is raised in elevation by the deposition of additional material transported from upstream (opposite of degradation)*	Mid-channel bars Embedded riffles Siltation in pools Accretion on point bars Deposition in the overbank zone
Degradation	The removal of streambed materials caused by the erosional force of water flow that results in a lowering of the bed elevation throughout the reach (opposite of downcutting)*	Deepened or "entrenched" stream bed Cut face on bar forms Headcutting and nickpoint migration Suspended armor layer in bank Terrace cut through older bar material Exposed sanitary or storm sewers
Downcutting (or incision)	Deepening of stream channel cross section resulting from process of degradation*	Tall banks (may see stratification) Disconnection from flood plain May occur if widening prohibited
Headcutting	The erosion of the channel bed, progressing in an upstream direction*	Nickpoints Small drops in elevation (mini waterfalls) Abnormally steeped channel segments
Widening	Increased width of stream channel cross section resulting from degradation process	Falling/leaning trees Scour on both banks through riffle Exposed tree roots; Fracture lines along top of bank Exposed infrastructure
Stable	Channel in balance between aggrading and degrading forces	Water reaches toe of each bank Moss on rocks or extending down into bottom of bank Banks are stable; connected to flood plain Erosion is slight and limited to meander bends

** Definitions from the Washington State Aquatic Habitat Guidelines Program (2002)*

The ER form also asks for some basic channel and bank dimensions. Figure 20 provides guidance on how to measure the cross-sectional area of a stream channel. **Bank height** is typically the distance from top of water to top of bank. At streamside headcuts, be sure to estimate the length of active erosion, as well as its potential distance if the headcut has not migrated all the way to its source. For nick points, record the height and distance to the next upstream grade control structure such as a road crossing or channelized section. Alternatively, you can simply note the location of the next grade control structure and calculate the length back in the office.

The last part of the ER form allows you to recommend any potential restoration practices that may be appropriate for the eroded bank (Box 6). Envisioning stream restoration potential can seem difficult at first, but can be acquired with a little study and a lot of practice. Some practices to consider include bank stabilization, grade control, or other stream repairs. Rigid bank stabilization includes such things as boulder revetments, root wads,

Table 14: Erosion Characteristics to Note During Site Assessment

Stable reach, with low banks, stream still has access to flood plain at high flows.

Aggrading reach with obvious formation of mid channel bars.

Signs of degradation include visible stratification lines in stream bank

Downcutting reach with tall banks on either side

Presence of manhole stack in stream is evidence of stream widening process

Moss covered banks are indicators that banks have since stabilized

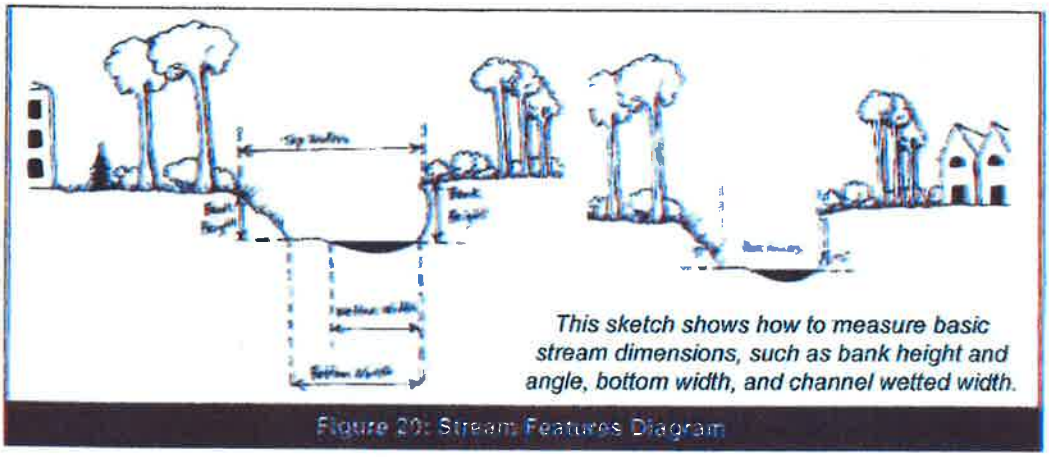
Extreme erosion can occur when streams cut into steep slopes. Check level of soil consolidation in these areas to see if actively eroding

Below this eroded bench is a stabilized stream bank. This should not be considered as active bank erosion.

Headcut rapidly migrating upwards towards an outfall. Note collapse of adjacent vegetation

rip rap, or other relatively hard structures. Soft bank stabilization practices include coir fiber logs, live fascines, brush mattresses, or other bioengineering techniques that use vegetation to protect the banks (Figure 21). Grade control practices refer to step pools, rock vanes, or log drops that prevent the migration of headcuts (Figure 22). These and other stream repair practices are described in more detail in Manual 4.

The **erosion severity score** rates the extent of erosion on a five-point scale, where five is the most severe. You should also check to see if access is available to get heavy equipment to the site. Erosion severity and access scores should be marked on the ER form to identify the most severe and accessible eroded banks in the subwatershed.



This sketch shows how to measure basic stream dimensions, such as bank height and angle, bottom width, and channel wetted width.

Figure 20: Stream Features Diagram

Figure 21: Example Hard and Soft Bank Stabilization Practices

Panel A illustrates the use of rip rap to restore an eroded section of stream. Panel B shows the mixed use of coir fiber logs and riprap to stabilize outfall and repair adjacent stream bank.

4.3 Which Eroded Banks Should I Record?

Some bank erosion should be expected in most urban streams, and it is unrealistic to have field crews GPS and assess every foot of eroded bank if restoration is not practical. Therefore, slope failures, bank sloughing, incision, or channel enlargement should only be recorded for banks that are noticeably worse than the "average" eroded bank along the survey reach (Figure 23). Sites with average bank erosion should only be counted if adjacent infrastructure is threatened or significant property loss is evident. Streamside headcuts and channel nick points with elevation changes of at least two feet should always be recorded, since they signal that active channel erosion is migrating upstream.

4.4 Field Assessment Tips

This list provides some quick tips for assessing stream erosion:

- Track all headcuts to their source, even if they are lateral to the stream.
- Only include channel nick points if the vertical change in stream elevation is more than a foot.
- Look for root hairs on stream banks to determine active erosion.
- Look for signs of major sediment deposition to determine channel degradation.
- Stratified layers in the bank may be a clue that the stream is downcutting.
- Banks composed of unconsolidated materials such as gravel, sand, or silt are often more unstable than those of compacted clay.
- If bedrock is present, then stream widening may be the dominant channel process. In this case, bank height may not be greater than average reach conditions, but the increase in cross sectional area may be greater.
- Make sure to look behind overhanging vegetation to determine extent of bank erosion and vegetative cover.

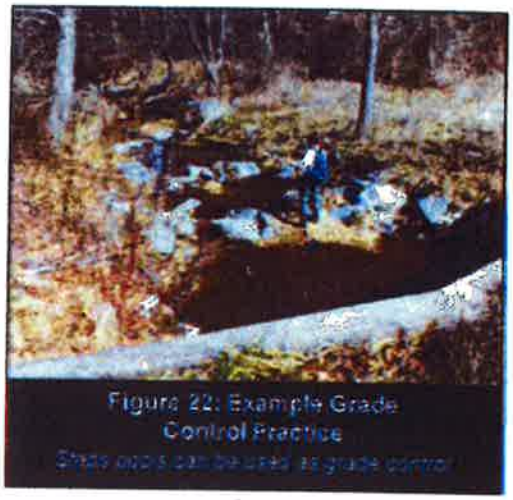


Figure 22: Example Grade Control Practice

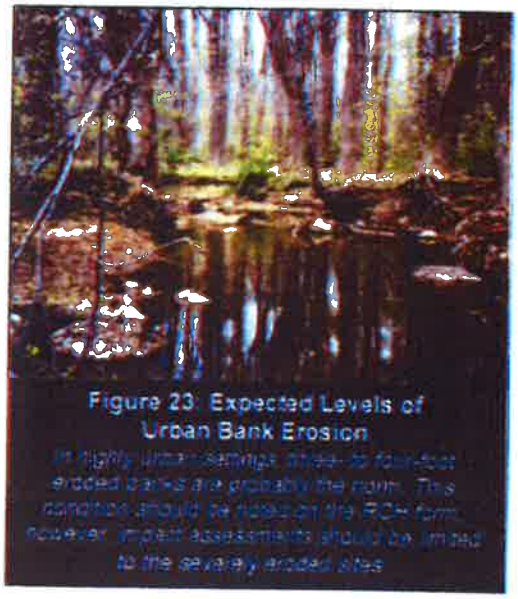


Figure 23: Expected Levels of Urban Bank Erosion

- Be sure not to confuse historic channel migration features with newly formed, actively eroding benches.
- Don't worry if you can't envision stream restoration. Take a look at Manual 4, and tour some local stream restoration projects prior to performing the ER.

Table 15: How ER Data Can Be Used	
Problem Assessed	Nature and type of channel erosion Severity of bank erosion Threatened infrastructure
Potential Restoration Practice *(Manual profile sheets)*	Potential sites for bank stabilization (R-3, R-15) Grade control (R-18 to R-21)
Stream Corridor Metric	# of severe bank erosion sites Estimated bank erosion sediment load
Output for Planning	Map of erosion sites
**The code in parentheses refers to the appropriate restoration profile sheet in the Restoration Manual Series. R- sheets can be found in Manual 4: Stream Repair Practices*	

4.5 Using ER Data in Subwatershed Restoration

Severe erosion data can be used to identify eroded banks, generate a list of potential stream repair practices, develop stream erosion metrics, and generate planning maps (Table 15). This information can show the degree to which channel erosion poses a significant threat in the stream corridor and how important stream stabilization and repair projects will be in the overall restoration plan.

4.6 Example ER Form

The severe erosion impact form (ER) assesses individual locations of eroded stream banks encountered during your stream walk. You are asked to record basic data on the location of erosion sites, estimate current channel dynamics and dimensions, and identify potential bank stabilization opportunities at each problem site. A detailed explanation of how the field crew filled out each section of this example form is included on the next page.

Severe Bank Erosion **ER**

A.

WATERSHED/SUBSHED: SMILEY RUN | DATE: 3/10/03 | ASSESSED BY: [illegible]

SURVEY REACH: 102-1 | TIME: 9:45 AM/PM | PHOTO ID (CAMERA-PIC #): A #03-04

SITE ID (Condition-#): ER-1 | START LAT ___° ___' ___" LONG ___° ___' ___" LMK ___ | END LAT ___° ___' ___" LONG ___° ___' ___" LMK ___ | GPS: (Unit ID)

B.

PROCESS: ☐ Currently unknown
☐ Downcutting ☑ Widening ☐ Headcutting ☐ Aggrading ☐ Sed. deposition
☐ Bed scour ☐ Bank failure ☐ Bank scour ☑ Slope failure ☐ Channelized

BANK OF CONCERN: ☐ LT ☑ RT ☐ Both (looking downstream)
LOCATION: ☐ Meander bend ☐ Straight section ☑ Steep slope/valley wall ☐ Other: TRAIL EMBANKMENT
DIMENSIONS:
Length (if no GPS) LT — ft and/or RT 100 ft | Bottom width 10 ft
Bank Ht LT — ft and/or RT 8.5 ft | Top width 15 ft
Bank Angle LT — ° and/or RT 90° | Wetted Width 7.5 ft

LAND OWNERSHIP: ☑ Private ☐ Public ☐ Unknown | LAND COVER: ☐ Forest ☐ Field/Ag ☐ Developed:

C.

POTENTIAL RESTORATION CANDIDATE: ☐ Grade control ☑ Bank stabilization ☐ No ☐ Other:

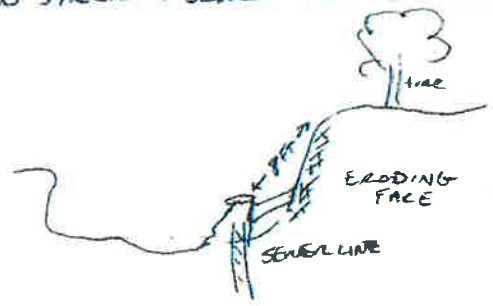
THREAT TO PROPERTY/INFRASTRUCTURE: ☐ No ☑ Yes (Describe): SEWER LINE

EXISTING RIPARIAN WIDTH: ☐ <25 ft ☑ 25-50 ft ☐ 50-75 ft ☐ 75-100 ft ☐ >100 ft

EROSION SEVERITY (circle #) Channelized- ☐ 1	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure. (5) 4	Pat downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure. 3	Grade and width stable; isolated areas of bank failure/erosion, likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use. 2 1
ACCESS:	Good access: Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails. (5) 4	Fair access: Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream. 3	Difficult access. Must cross wetland, steep slope or other sensitive areas to access stream. Minimal stockpile areas available and/or located a great distance from stream section. Specialized heavy equipment required. 2 1

NOTES/CROSS SECTION SKETCH:

BIG MESS!!
JUST UPSTREAM OF GROCERY STORE, BANK ACTIVELY ERODING, HEAVY SEDIMENT DEPOSITION IN STREAM; SEWER LINE EXPOSED.



REPORTED TO AUTHORITIES ☐ Yes ☑ No

How the Example ER Form Was Completed

Part A

The field crews in this example assessed an eroded bank in the Smiley Run subwatershed in survey reach 102-1. They took two photos at this location that also happened to be the first excessively eroded site they encountered in the reach.

Part B

In this part of the ER form, the eroded bank extended about 100 feet along the right bank and appeared to be threatening an embankment. Measured bank height was almost nine feet.

Part C

Here the field crew identified an eroded bank as a potential candidate for bank stabilization due to an exposed sewer line. Because of the immediate threat to infrastructure, the crew rated the bank erosion as a "5" for severity. Site access was considered good, although the best access was across private property.

Severe Bank Erosion **ER**

WATERSHED/SUBSHED:		**DATE:** ___/___/___	**ASSESSED BY:**
SURVEY REACH:	**TIME:**___:___AM/PM	**PHOTO ID** (CAMERA-PIC #):	/#
SITE ID: (*Condition-#*) **ER-**____	*START* **LAT** ___ ° ___ ' ___ " **LONG** ___ ° ___ ' ___ " **LMK** ____		**GPS:** (*Unit ID*)
	END **LAT** ___ ° ___ ' ___ " **LONG** ___ ° ___ ' ___ " **LMK** ____		

PROCESS: ☐ Currently unknown

☐ Downcutting ☐ Widening ☐ Headcutting ☐ Aggrading ☐ Sed. deposition

☐ Bed scour ☐ Bank failure ☐ Bank scour ☐ Slope failure ☐ Channelized

BANK OF CONCERN: ☐ LT ☐ RT ☐ Both (*looking downstream)*

LOCATION: ☐ Meander bend ☐ Straight section ☐ Steep slope/valley wall ☐ Other:

DIMENSIONS:

Length *(if no GPS)*	LT_____ft	and/or RT_____ft	Bottom width _____ft
Bank Ht	LT_____ft	and/or RT_____ft	Top width _____ft
Bank Angle	LT_____°	and/or RT_____°	Wetted Width _____ft

LAND OWNERSHIP: ☐ Private ☐ Public ☐ Unknown

LAND COVER: ☐ Forest ☐ Field/Ag ☐ Developed:

POTENTIAL RESTORATION CANDIDATE: ☐ No ☐ Grade control ☐ Bank stabilization ☐ Other:

THREAT TO PROPERTY/INFRASTRUCTURE: ☐ No ☐ Yes (Describe):

EXISTING RIPARIAN WIDTH: ☐ ≤25 ft ☐ 25 - 50 ft ☐ 50-75ft ☐ 75-100ft ☐ >100ft

EROSION SEVERITY(*circle#*) Channelized= ☐ 1	Active downcutting; tall banks on both sides of the stream eroding at a fast rate; erosion contributing significant amount of sediment to stream; obvious threat to property or infrastructure.	Pat downcutting evident, active stream widening, banks actively eroding at a moderate rate; no threat to property or infrastructure		Grade and width stable; isolated areas of bank failure/erosion; likely caused by a pipe outfall, local scour, impaired riparian vegetation or adjacent use.
	5	4	3	2 1
ACCESS:	**Good access:** Open area in public ownership, sufficient room to stockpile materials, easy stream channel access for heavy equipment using existing roads or trails.	**Fair access:** Forested or developed area adjacent to stream. Access requires tree removal or impact to landscaped areas. Stockpile areas small or distant from stream.		**Difficult access.** Must cross wetland, steep slope or other sensitive areas to access stream. Minimal stockpile areas available and/or located a great distance from stream section. Specialized heavy equipment required.
	5	4	3	2 1

NOTES/CROSS SECTION SKETCH:

REPORTED TO AUTHORITIES ☐ YES ☐ NO

APPENDIX B

Chapter 9: Channel Modification (CM)

This part of the USA examines the extent to which stream channels are modified within the urban stream corridor. Examples of channel modifications include channelization, bank armoring, channel lining, and flood plain encroachment. During the channel modification (CM) assessment, you will be specifically looking for channel segments that may need structural repair or present opportunities for a more natural stream channel design.

9.1 About Channel Modification

Many urban stream segments have been historically modified to safely convey floodwaters, maintain a stable channel, restrict channel migration, or realign channels around property or infrastructure. The basic engineering approach is to "design" a new channel or flood plain with less roughness (e.g., boulders, vegetation, large woody debris, meander bends), greater slope, and expanded cross-sectional area to pass floodwaters more quickly and efficiently. As a consequence, some urban streams are converted into straight channels that are often lined with concrete to reduce roughness. In other streams with little room for channel migration, banks are often fixed in place by armoring them with rip-rap and rock. In other situations, the capacity of the flood plain to accommodate floodwaters has been structurally altered by filling, dikes, or other measures.

In the most extreme instances, streams are entirely enclosed in underground pipes or extended culverts (note: this category of channel modification is already assessed in the USA by the SC form). Both stream and riparian habitat can be degraded or eliminated by channel modifications, and in some cases, fish passage may also be prevented. Newer, more environmentally-sensitive channel design may be a viable option to restore some natural features within modified channels. Figure 38 illustrates some of the typical channel modifications you may encounter during the USA.

Channel modifications are included in the USA survey for several reasons:

Stream Interruption: An understanding of channel modification gives you a sense of the degree of stream interruption in your subwatershed. This factor is extremely

Figure 38: Types of Channel Modifications You May Encounter
Various types of modified streams include a concrete channel and flood plain (Panel A), a concrete-lined channel (Panel B), and a straightened, armored stream segment (Panel C).

Questions to ask when assessing channel modifications:

How severely is this modification affecting stream corridor habitat?

What is the length and purpose of the modification?

Can softer bank stabilization methods be used?

Can more natural channel design be employed?

important to determine where stream restoration projects make sense across the entire stream corridor.

Channelization: In some instances, channelized segments of the stream network are candidates for restoration using techniques such as de-channelization, natural channel design, and baseflow channel creation. Also, if the CM form suggests armoring or other stabilization techniques are failing, it may be a good opportunity to replace them with bioengineering techniques (Manual 4).

Habitat Degradation: The CM form quickly identifies the portion of the urban stream network where stream or riparian habitat has been degraded or eliminated by channel modification.

Tracking Stream Bank Armoring: While some communities have been stabilizing banks for decades, institutional knowledge of these project locations may have been lost. The CM form can help generate a map of these repair/ restoration locations.

9.2 Introduction to the CM Form

This section introduces you to the channel modification (CM) assessment form. The form asks you to record basic data on the length and nature of the channel modification, and determine whether it might be a candidate for possible restoration. This section describes the four parts of the CM form, and provides guidance on how to complete each one. Appendix A provides a blank version of the CM form. A completed example CM form is included at the end of this chapter in Section 9.6, along with detailed explanations to help clarify how the field crew filled out each section of the form.

The first part of the CM form contains general header information that locates where the modified channel section is in the survey reach.

As always, the header should be modified to reflect your reach and site labeling system. If you are using a GPS unit, record the beginning and ending coordinates for each channel segment, and remember to note the GPS unit ID # and an LMK number. If the modified section is shorter than 50 feet long, GPS units cannot calculate an accurate length. Instead, measure these sections by pacing or with a tape measure. Depending on how extensively channels have been modified in the subwatershed, you may want to skip these short sections altogether.

The next part of the CM form asks you to describe the type of channel modification and the dominant material that comprises it.

Four basic options are available. **Channelization** refers to a channel that has been excavated and straightened to eliminate natural meanders and bends. **Bank armoring** consists of an extended length of bank protected by hard stabilization measures, such as rip-rap, gabions, rock, or retaining walls. Armoring can occur on one or both banks and should only be recorded if it extends more than 50 feet. Concrete channels should be checked on the CM form if the natural stream or banks have been replaced with concrete lining that extends more than 50 feet. Lastly, **flood plain encroachment** should be checked if you see obvious signs of earth fill, levees, or dikes in

the flood plain or stream corridor. Note that more than one type of channel modification can occur in each segment. If only one bank is affected by the modification, indicate this in the notes section on the CM form. Table 23 illustrates a number of common channel modifications you may encounter in the field.

Next, assess the condition of the channel, and note any perennial flow, sediment deposition, vegetative growth, or apparent connection with the flood plain. Each of these conditions provides useful clues about sediment and flow dynamics through the modified channel. You should also measure the basic dimensions of the channel modification, take a photo, and draw a rough sketch.

The next part of the CM form asks you to assess the nature of the stream corridor adjacent to the channel modification and the current baseflow channel segment. Both factors are crucial to determine if natural channel design may be suitable for the channel segment.

You should estimate the "**available**" width of the adjacent stream corridor on both sides of the channel. Available means open ground, with no obvious structures or utilities present.

Table 23. Channel Modifications to Note During Site Assessment

At crossings, only record on CM form if modification extends at least 100 feet up or downstream.

Measure the width of the channel bottom. If there is perennial flow, measure the water depth.

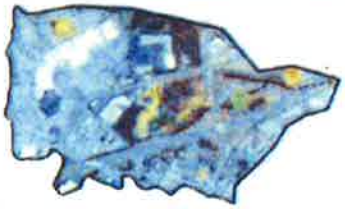
Channelized and concrete-lined segment that maintains good connectivity with the flood plain.

Sediment deposits and algal growth on bottom of a concrete-lined channel.

Rock revetments should be recorded as bank armoring.

Imbricated rip-rap used for bank stabilization; Record if 50 feet or longer

Gabion baskets used to stabilize a stream bank.



Highly urban subwatersheds frequently have most of their surface streams piped.

Exposed portion of an enclosed stream in a commercial area.

Also, note if any earthen fill, dikes, or levees occur in the adjacent stream corridor, which could constrain flood plain capacity. Lastly, you should examine the **baseflow channel**, noting the average depth of flow, and the fraction of the channel bottom over which it flows. Check to see if there is a defined low-flow channel, and record its average depth of flow.

The last part of the CM form asks you to recommend whether the modified channel might be a candidate for structural repair, more natural channel design, or fish barrier removal. Consult profile sheets R-5 to R-15, R-25, R-30, CR-32, and CR-33 in Manual 4 to familiarize yourself with these stream restoration techniques. If you don't feel comfortable making a restoration recommendation, simply check the "Can't tell" box. The CM form provides some guidance on how to score the overall **severity** of channel modification on a scale of one to five (five being the most severe). Figure 39 illustrates modified channel segments that should be considered restoration candidates.

9.3 Which Modified Channels Should I Record?

Most urban streams are extensively modified over much of their length, so only record "hard" channel modifications longer than 50 feet. Do not record channel modifications that are immediately associated with structured stream crossings unless they extend 100 feet above or below the crossing. "Soft" bank stabilization practices should not be counted.

9.4 Field Assessment Tips

Some quick tips for evaluating channel modifications in the field are provided below:

- To reduce the number of forms you will need to complete, only record channel modifications that are at least 50 feet long.
- Also, you only need to record channel modifications associated with stream crossings if they extend at least 100 feet upstream or downstream of the crossing.
- Keep in mind that channel modifications can occur on the bed, banks, and flood plain of the stream corridor.
- If a channel modification extends on both sides of a road crossing that is used as a survey reach boundary, make sure to extend the survey reach to include the entire modified channel.
- Enclosed sections or extended culverts are picked up on the SC form and should not be recorded on the CM form.

Figure 39: Restoration of Channelized Stream Segments
Candidate site for structural repair (Panel A) and natural channel restoration (Panel B)

Table 24. How CM Data Can Be Used	
Problem Assessed	Stream interruption Channelization Habitat degradation
Potential Restoration Practice *(Manual Profile sheets)*	Baseflow channel creation (R-25)* Natural channel design (CR-32) De-channelization (CR-33)
Stream Corridor Metric	Channelized length Channelized length per stream mile
Output for Planning	Map of potential fish barriers Map of channelized sections Map of potential de-channelization projects Map of grade control structures
**The code in parentheses refers to the appropriate restoration profile sheet in the Restoration Manual Series. R and CR-sheets can be found in Manual 4: Stream Repair and Practices*	

9.5 Using CM Data in Subwatershed Restoration

Channel modification (CM) data can be used in several ways for restoration planning. CM data can be used to measure stream interruption, generate a list of stream restoration practices, develop stream channelization and habitat metrics, and generate planning maps (Table 24). CM data can help you decide whether channel modifications are a significant problem in the subwatershed and how important channel restoration should be in the overall restoration plan.

9.6 Example CM Form

The CM form asks you to record basic data on the length and nature of the channel modification, and determine whether it might be a candidate for possible restoration. A detailed explanation of how the field crew filled out each section of this example form is included on the next page.

Channel Modification **CM**

A.

WATERSHED/SUBSHED: SMILEY RUN | DATE: 3/10/03 | ASSESSED BY: ACK, EVE

SURVEY REACH ID: 102-1 | TIME: 10:25 AM/PM | PHOTO ID: (Camera-Pic #) 4 # 08

SITE ID: (Condition #) CM-1 | START LAT ___° ___' ___" LONG ___° ___' ___" LMK ___ | END LAT ___° ___' ___" LONG ___° ___' ___" LMK ___ | GPS: (Unit ID)

B.

TYPE: [X] Channelization [X] Bank armoring [ ] concrete channel [ ] Floodplain encroachment [ ] Other:

MATERIAL: [ ] Concrete [ ] Gabion [X] Rip Rap [ ] Earthen [ ] Metal [ ] Other:

Does channel have perennial flow? [X] Yes [ ] No

Is there evidence of sediment deposition? [ ] Yes [X] No

Is vegetation growing in channel? [ ] Yes [X] No

Is channel connected to floodplain? [ ] Yes [X] No

DIMENSIONS: Height 6.5 (ft) Bottom Width 8.0 (ft) Top Width: 15.0 (ft) Length: 150 (ft)

C.

BASE FLOW CHANNEL

Depth of flow 10 (in)

Defined low flow channel? [X] Yes [ ] No

% of channel bottom 70 %

ADJACENT STREAM CORRIDOR

Available width LT 50 (ft) RT 100 (ft)

Utilities Present? [X] Yes [ ] No

Fill in floodplain? [ ] Yes [X] No

D.

POTENTIAL RESTORATION CANDIDATE [X] no [ ] Structural repair [ ] Base flow channel creation [ ] Natural channel design [ ] Can't tell [ ] De-channelization [ ] Fish barrier removal [ ] Bioengineering

CHANNELIZATION SEVERITY: (Circle #)

5	4	3	2	1
A long section of concrete stream (>500') channel where water is very shallow (<1" deep) with no natural sediments present in the channel.		A moderate length (> 200') but channel stabilized and beginning to function as a natural stream channel. Vegetated bars may have formed in channel.		An earthen channel less than 100 ft with good water depth, a natural sediment bottom, and rise and shape similar to the unchannelized stream reaches above and below impacted area.

NOTES: BOTTOM OF CHANNEL IS NATURAL – JUST BANKS HAVE BEEN STRAIGHTENED AND ARMORED DOWNSTREAM OF ROAD CROSSING – SEEMS A BIT EXCESSIVE – NOT MUCH REST. POTENTIAL

How the Example CM Form was Completed

Part A

In this example, the field crew assessed an armored stream section in the Smiley Run subwatershed in survey reach 102-1, and took a single photo at this location.

Part B

The field crew evaluated a channel segment armored with 150 feet of rip-rap on both banks as part of a past bank stabilization project. The channel had perennial flow, but showed no signs of deposition or vegetative growth in the channel, which also did not appear to be connected to the flood plain.

Part C

In this part of the form, the field crew observed a defined low flow channel. Flow was approximately 10 inches deep and took up most of the width of the channel. Exploring the adjacent flood plain area, the field crew observed no fill or excavation activities, though utilities did interrupt the stream corridor on the left bank.

Part D

The field crew assigned this segment a low severity rating due to its natural channel bottom and relatively short distance of modification. They were unable to envision a particular type of restoration at the site.

Channel Modification **CM**

WATERSHED/SUBSHED:	**DATE:** ___/___/___	**ASSESSED BY:**
SURVEY REACH ID:	**TIME:** ___:___ AM/PM	**PHOTO ID:** (*Camera-Pic #*) /#
SITE ID: (*Condition-#*) **CM-**____	*START* **LAT** ___° ___' ___" **LONG** ___° ___' ___" **LMK** ____	**GPS:** (*Unit ID*)
	END **LAT** ___° ___' ___" **LONG** ___° ___' ___" **LMK** ____	

TYPE: ☐ Channelization ☐ Bank armoring ☐ concrete channel ☐ Floodplain encroachment ☐ Other:

MATERIAL:		**DIMENSIONS:**
☐ Concrete ☐ Gabion	Does channel have perennial flow? ☐ Yes ☐ No	Height _____(ft)
☐ Rip Rap ☐ Earthen	Is there evidence of sediment deposition? ☐ Yes ☐ No	Bottom Width _____(ft)
☐ Metal	Is vegetation growing in channel? ☐ Yes ☐ No	Top Width: _____(ft)
☐ Other:	Is channel connected to floodplain? ☐ Yes ☐ No	Length: _____(ft)

BASE FLOW CHANNEL
Depth of flow _____(in)
Defined low flow channel? ☐ Yes ☐ No
% of channel bottom _____%

ADJACENT STREAM CORRIDOR
Available width LT_____(ft) RT_____(ft)
Utilities Present? ☐ Yes ☐ No
Fill in floodplain? ☐Yes ☐ No

POTENTIAL RESTORATION CANDIDATE ☐ Structural repair ☐ Base flow channel creation ☐ Natural channel design ☐ Can't tell ☐ no ☐ De-channelization ☐ Fish barrier removal ☐ Bioengineering

CHANNEL-IZATION SEVERITY: (*Circle #*)					
	A long section of concrete stream (>500') channel where water is very shallow (<1" deep) with no natural sediments present in the channel.		A moderate length (> 200') ,but channel stabilized and beginning to function as a natural stream channel. Vegetated bars may have formed in channel.		An earthen channel less than 100 ft with good water depth, a natural sediment bottom, and size and shape similar to the unchannelized stream reaches above and below impacted area.
	5	4	3	2	1

NOTES:

APPENDIX C

CITY OF ROCKFORD ILLINOIS USA

Guidelines for Creek/Ditch Maintenance by Creekside Property Owners

Creeks carry direct runoff from creekside properties and through linkage with manmade storm drains which carry runoff from the rest of the City's land area. This interconnected system is the means by which stormwater runoff is contained to minimize flooding. Maintenance of the creeks is the responsibility of the owner whose property includes/abuts a creek (typically property line is to the centerline of a creek). When the creek area is not properly maintained, the resulting obstructions can lead to increased flooding, changes in the course of the creek and increased erosion of the obstructed property or downstream of the property. When maintained properly, creeks are a natural resource that provide habitat for wildlife and provide aesthetic benefits that can increase the value of creekside properties. The purpose of this guide is to provide you, the creekside property owner, with practical information for the proper care and preventative maintenance of the creek as a part of your property.

The City of Rockford requires the following guidelines for maintaining the creek on your property:

- **Remove all debris and garbage:** This may include bottles and cans, broken concrete, tires, fallen fences, appliances or any other man-made objects. This also includes wood and fallen trees or tree limbs. This is the property owner's responsibility even if the object has washed down from upstream. It is recommended that all stored material on your property be placed a minimum of 10 feet away from the top of the bank to avoid material washing away into the creek during heavy storms. Sheds and minor structures should be anchored to the ground if closer than 10 feet.
- **Remove vegetation except low ground cover from the bottom of the stream channel up to the top of the bank (flood line):** This includes shrubs, tulle, pampas grass, cattails and bamboo. Leave all root systems in place to help with erosion prevention. Remove hanging vines that may create an obstruction to the natural flow of the water in the creek. Berry vines should be trimmed back to the bank.
- **Remove tree limbs within or hanging over the creek to within 2 feet of the toop of the creek bank:** Any single tree of 2 inch diameter or greater which is living and not leaning toward the creek may remain. Trim any trees growing in clusters, trees with mulitple trunks or trees within the stream channel that may cause an obstruction to the flow of waterr, but leaving the root system in place.
- **Do not clear-cut the creek slope:** Leave gournd cover such as low grasses or vines. Trees should be cut at ground level with roots left in the ground.
- **Keep slope stabilization measures in good condition:** If you have existing slope stabilization measures such as rip-rap (rock, concrete, etc.) a retaining wall, or jute covering, keep these measures in good conditioin. If these measures require any repair of if you want to install a measure to stabilize a slope, you must first contact the jurisdictional agencies to determine if a permit will be necessary. If any work is done to alter the creek including widening, filling, dredging/altering the natrual creek flow, an Army Corps of Engineers and Illinois Departement of Natural Resources permit may be required.

Ditch Maintenance: You may have a ditch or drainage swale on your property that is there to convey stormwater either to the rear or front of your property or from one side of your property to the other. These ditches/swales shall be mowed regularly, kept clear of obstruction and shall not be filled with dirt or mulch. Lack of proper maintenance may cause flooding in and around your property.

For assistance, please contact the Stormwater & Environmental Team by calling 815-987-5570, Mon.-Fri. between 8am-5pm.

April, 2014

425 East State Street, Rockford, Illinois 61104-1068 USA
(815) 987-5570 (815) 967-7068 fax www.rockfordil.gov

APPENDIX D

Appendix D

City-Wide Grounds Maintenance

1.0 Specific Requirements

1.1 Seasonal Work. The vendor shall remove all leaves and winter debris or trash from beds, turf and non-turf areas twice a year, once in the spring and once in the fall.

1.2 On-site preparation and cleanup. Prior to each mowing occurrence the vendor shall pick clean the entire site, removing all litter, trash, branches, glass, and debris. The first cycle of mowing will generally entail an increased amount of litter picking over subsequent cycles. The vendor will not be paid additional any amount over and above what is bid for each site, therefore should consider this in their overall bid submittal. The vendor shall notify the City Representative of excessive litter, illegal dumping or large tree limbs. If this condition exists, it will be addressed by the City upon inspection and approval of the City Representative. Paper, cups and other litter must not be mowed so as not to detract from the sites' appearance. When mowing along roadways, the first two (2) swaths cuts along the curb or roadway edge shall be made in such a direction that all clippings discharged from mowers shall be away from the curb or roadway edge. If the Vendor is determined by the City Representative to be in violation of the aforementioned standards, said Vendor shall be subject to liquidated damages as outlined in paragraph 4.10. and any additional cost to the City for cleanup shall be deducted from subsequent invoices submitted by the Vendor.

1.3 Trimming. Final trimming around permanent objects such as trees, posts, shrubs, fences, guard rails, signs, curbsides, and roadway edges, will be accomplished with suitable mechanical equipment at the same cutting height as the rest of the turf so as not to detract from the appearance of the site. Trimmings are to be cleaned from all hard surfaces (sidewalks, curbs, driveways, and streets).

1.4 Labor, Tools, and Equipment. The vendor agrees to furnish all necessary labor, tools and equipment in connection with the grounds maintenance of the specified locations. Vendor shall provide a list of available staffing to be used in his operation.

1.5 Equipment. Mowing equipment can include riding mowers, walk behind mowers, nylon line trimmers and hand clipping, where necessary. Mowing equipment shall be kept in good, safe operating condition with sharp blades so that the grass is cut properly and in such a condition that oil and gasoline are not leaked. Vendor shall submit a list of equipment and indicate the age of said equipment to be used for mowing.

1.6 Equipment/safety. The vendor shall remove equipment at the completion of the workday. The City of Rockford does not assume any responsibility, at any time, for the protection of or loss of equipment or supplies either at the work site or elsewhere.

1.7 Fueling and Oiling. Spilled gasoline and oil kills grass. Mowers will not be fueled and oiled in grass areas: they should be moved to paved areas for this function.

1.8 Scheduling. The vendor will perform the work in accordance with the schedule provided or the instructions received from the City representative. Generally, the work may be performed between the hours of 7:00 a.m. and 6:00 p.m. and on any day or days of the week in accordance with the City's noise ordinance (see section 2.2). If special circumstances require different hours the vendor shall seek approval for such a change from the City. The City reserves the right to add additional sites during the mowing season under the terms of this contract. Contractor quotes for any additional sites shall be consistent with other sites of similar size and difficulty currently included in this contract. The City also reserves the right to adjust the frequency of the mowing cycle based on need, or request site specific mowing on demand. The respective City representative shall be notified within 24 hours upon completion of a scheduled mowing cycle. All invoices shall be submitted to City representative within 10 days of completing a mowing cycle and must include a valid invoice number, the specific cycle for which the invoice is presented, the group or Block of sites, and the correct date. Do not submit invoices directly to the City Finance Department. They will not be paid until validated by respective City representative(s).

1.9 Liquidated Damages. The Vendor is responsible to remove trash & debris prior to each mowing occurrence, and is also responsible for the removal of grass clippings from all adjacent hard surfaces subsequent to mowing each site as outlined in paragraph 4.2. If the Vendor fails to effectively remove trash, debris and clippings based on the observance of the Designated City of Rockford representative, the City will notify him of default. In the event of default, the City will either use City staff or a third party to complete clean-up and any *additional cost to the City shall be deducted from subsequent payment(s) owed the Vendor.*

2.0 Detailed Specifications

2.1 Public Works Division – Right of Ways and Properties

2.1.1 Maintenance. Mow lawn as instructed by schedule provided by the City representative. Mowing should be done from the street curb inward, using cement property markers, utility poles, fences, bushes and tree lines, and farm fields to determine the right-of-way boundary width. When mowing along roadways, the first two (2) swath cuts shall be made in such a manner as to discharge all clippings away from the roadway edge or curb.

2.1.2 Height of Grass/Height of Cut. Grass should never exceed six inches in height. Grass when cut should be 2" in height and no windrows of grass shall remain.

2.1.3 Weeds. Removal of weeds growing from along curb lines, roadway edges or sidewalks and drive approaches, so as not to detract from the appearance of the site, are the responsibility of the vendor. Weeds shall be

defined as all grasses, annual plants, and vegetation overgrowth and underbrush other than trees or shrubs provided.

2.1.4 Inaccessible areas. All areas too wet, too steep or otherwise inaccessible for use of standard mowers shall be line trimmed at the same frequency as the mowing schedule.

2.1.5 Frequency. Each location has listed an estimated amount of cuts during the contract period and is no guarantee of work to be performed under this contract. The total number of cuts is an estimate based on previous years. The City representative will establish and provide the vendor with a final schedule of mowing dates that is appropriate for each block of sites.

2.1.6 Locations. The City breaks out the maintenance of properties into packages to allow multiple vendors to complete the tasks as outlined above. The packages are broken down by Block and are shown in the next several tables.

	Block A – Weekly Mow
Site #	**Location**
A-1	**Whitman St. & Ridge Ave.** – Grant Ave. Cul-De-Sac Greenspace [*approx .18 acres*]
A-2	**Fairview Blvd.** (middle island Blvd. from Morsay Dr north) Bag clippings [*approx .16 acres*]
A-3	**Morsay Dr. from NEX Fairview to Lynmar Ct.** [*approx .3 acres*]
A-4	**Arden Ct. Detention Pond Drainage Area** – If conditions are too wet to mow bottom, must string trim all. [*approx. 1 acre*]
A-5	**Midway Theater Lot** – East side of building. [*approx. .75 acres*]
A-6	**Charles St. & 7th St** – NW & SE Corner landscape areas. [*approx. .07 acres*]

	Block B – Mow Every 2 Weeks
Site #	**Location**
B-1	**1000 Block, W State St. -** as listed – [*approx .24 acres each – approx. 2.8 acres total*] Includes 1019, 1025, 1040, 1045, 1046, 1049, 1050, 1053, 1055, 1057, 1059, 1061, & 1062.
B-2	**1100 Block, W State St.-** as listed – [*approx .43 acres each – approx. .85 acres total*] Includes 1101, 1119, 1121, 1125, 1133, & 1137
B-3	**1200 Block, W State St-** as listed – [*approx .14 acres each – approx. .82 acres total*] Includes 1211, 1215, 1225, 1233, 1237, & 1239
B-4	**1300 Block, W State St.-** as listed – [*approx .13 acres each – approx. 1.63 acres total*] Includes 1304, 1305, 1307, 1308, 1311, 1312, 1315, 1316, 1319, 1322, 1323, 1326, 1332, & 1336
B-5	**1400 Block, W State St., -** as listed – [*approx .27 acres each – approx. 1.9 acres total*] Includes 1412, 1416, 1420, 1424, 1430, 1434, & 1455
B-6	**1500 Block, W State St.-** as listed – [*approx .14 acres each – approx. .43 acres total*] Includes 1503, 1505, & 1509
B-7	**1600 thru 2000 Blocks, W State St.-** as listed – [*approx .19 acres each – approx. 2.24 acres total*] Includes 1601, 1605, 1625, 1701, 1711, 1719, 1804, 1807, 1810, 1821, 1916, 1923, 2003, & 2007
B-8	**2100 thru 2500 Blocks, W State St. -** as listed – [*approx .17 acres each – approx. 2.4 acres total*] Includes 2104, 2108, 2123, 21XX, 2201, 2202, 2205, 2228, 2304, 2307, 2317, 2412, 2505, & 2510
B-9	**2600 thru 2700 Blocks, W State St.-** as listed – [*approx .19 acres each – approx. 1.9 acres total*] Includes 2601, 2607, 2710, 2716, & 2717
B-10	**113 Carson Ct. –** Lot behind 2223 W. State St. [*approx .22 acres*]
B-11	**Forest Ave, 109, 113 & 125 –** [*approx .1 acres each – approx .3 acres total*]
B-12	**112 Lakin Terrace –** [*approx .1 acre*]
B-13	**Mulberry St. –** 1010, 1042, 1050, 1056, 1060 & 1510 – [*approx .2 acres each – approx. 1.2 acre total*]
B-14	**N. Avon St – 111 & 119** – [*approx .33 acres total*]
B-15	**N. Central Ave** – 120, 124 & 128 (3 Adjacent Lots)– [*approx .51 acres total*]
B-16	**S. Avon St – 107, 109 & 113** – [*approx .14 acres total*]
B-17	**114 Oakley Ave. –** [*approx .07 acre*]
B-18	**Oakwood Ave. – 106 & 109** – [*approx .05 acres total*]
B-19	**117 S. Independence Ave. –** [*approx .04 acre*]
B-20	**110 S. Johnston** – [*approx .04 acre*]
B-21	**115 N Day Ave -** [approx .09 acres]
B-22	**Irving Ave - 119, 122, & 129 -** [approx .15 acres total]

	Block C – Weekly Mow
Site #	**Location**
C-1	**1740 Colorado** – Drainage Area [*approx .14 acres*] If unable to mow due to being wet, need to string trim
C-2	**2208 & 2211 Colorado** – Drainage Areas [*approx .5 acres*] If unable to mow due to being wet, need to string trim
C-3	**1620 Log Cabin -** Vacant Lot [approx .27 acres]
C-4	**1623 & 1649 Log Cabin** – Vacant lots and part of this is a Drainage Area [*approx .39 acres*] - If unable to mow due to being wet, need to string trim
C-5	**1822 Nebraska -** Vacant Lot [approx .21 acres]
C-6	**1827 Nebraska** – Vacant Lot [*approx .13 acres*]
C-7	**3533 Louisiana** – Vacant Lot [*approx .28 acres*]
C-8	**1727 MacArthur** – Vacant Lot [*approx .19 acres*]
C-9	**1731 MacArthur -** Vacant Lot [approx .19 acres]
C-10	**1716 Sexton -** Vacant Lot [approx .20 acres]
C-11	**2003 Montana** – Drainage Area [*approx .19 acres*] If unable to mow due to being wet, need to string trim
C-12	**3522 Westgate Pkwy** – Vacant Lot [*approx .12 acres*]
C-13	**WESLEYAN ST. DRAINAGE AREA (Flats Only) –** From 20th St. to East of Ohio Pkwy. [*approx. 8.25 acres*]
C-14	**20th ST. VIADUCT –** South of Wesleyan North of Viaduct – **Open Lot and Right of Way** on both sides of 20th St. South of viaduct litter pick & string trim both sides of road railroad tracks. [*approx.75 acres*]

	Block D – Mow Every 2 Weeks
Site #	**Location**
D-1	**1200/ 1300 Block 6th Ave – City Lots as listed** – [*approx. 1 acre total*] 1241, 1303, 1307, 1311, 1317, 1321, 1325, 1329, 1335, 1339, 1343, 1349, 1353, 1357
D-2	**1400 Block 6th Ave & 700 Block 11th St – City Lots as listed** – [approx. 1.38 acres total] 1403, 1407, 1411, 1417, 1424, 1427, 1429, 1435, 1439, **ALSO** 701 & 705 11th St
D-3	**1500 Block 6th Ave – City Lots as listed** – [approx. .82 acres total] 1501, 1507, 1515, 1519, 1525
D-4	**1600 Block 6th Ave & 700 Block of 13th St – City Lots as listed** – [approx. 2.5 acres total] 1601, 1602, 1609, 1611, 1615, 1621, 1625, 1629, 1633, 1637, 1641, 1645, 1649, 1653, 1657, 1659 ALSO 702 & 710 13th St
D-5	**1300-1500 Blocks 7th Ave - 700 Block 9th St & 11th St– City Lots as listed** – [approx. .98 acres total] 1310, 1316, 1320, 1324, 1340, 1342, 1346, 1352, 1358, 1408, 1414, 1420, 1430, 1444, 1450, 1502, 1506, 1510, 1514, 1516, 1522, ALSO 718, 724 & 726 9th St & 721 11th St
D-6	**1600-1700 Blocks 7th Ave – City Lots as listed** – [approx. 1.9 acres total] 1602, 1606, 1614, 1616, 1620, 1621, 1624, 1628, 1634 1650, 1658, 1662
D-7	**700 – 900 Blocks 13th St & 700 Block of 7th Ave, City Lots as listed** – [approx. .96 acres total] 800, 807, 811/ 813, 816, 817, 818, 901, 902, 913, 914 ALSO 1718 & 1724 (2 small lots) 7th Ave
D-8	**800-1000 Blocks 14th St, City Lots as Listed** – [approx. 1.2 acres total] 804, 808, 815, 816, 821, 825, 913, 917, 1009, 1015
D-9	**800-900 Blocks 15th St, City Lots as Listed** – [approx .65 acres total] 809, 815, 819, 919

	Block E – Mow Every 2 Weeks
Site #	**Location**
E-1	**NW corner of N Main St and Vernon St** - See Map, L Shaped Vacant Lot
E-2	**SW corner of N Main St and Vernon St** - See Map, Vacant Lot
E-3	**SE corner of Auburn St and N Main St** - See Map, Large Triangular Vacant Lot
E-4	**NE corner of Myott Ave and N Main St** - See Map, Large Vacant Lot
E-5	**1430 N Court St** - Parcel # 11-14-402-014 (approx. 0.11 acres)
E-6	**CAMPUS HILLS BLVD.** – West of N. Main. (Island) [*approx 0.12 acres*]
E-7	**RIVERSIDE ST.** – Between Halsted Rd. & Belmont St. to RR Tracks. [*approx. 1.0 acres*]
E-8	**MERRIOTT CLOSE** - Island [*approx 0.9 acres*]
E-9	**RIVERSIDE BLVD** -N. Rockton Av. to Central Av/Owens Center Rd. (south side of road) [*approx 2.2 acres*] (north side of road) [*approx 2.2 acres*]
E-10	**NW DRAINAGE DITCH** Belmont Blvd. to Riverside Blvd. (*access from Grouse Ct*) [*approx 4.6 acres} (Both sides of ditch)*
E-11	**RIVERSIDE BLVD** -N. Main St to N. Rockton Ave (southside of road) [*approx 1.6 acres*] (north side of road) [*approx 1.5 acres*]
E-12	**N. ROCKTON AV.** - Embury to Elmwood Rd. (east side of road) [*approx 1.2 acres*] (west side of road) [*approx .7 acres*]
E-13	**ROCKTON AVE. & HALSTED RD**. Lot on the south east corner next to Fire Station [*approx .3 acres*]
E-14	**RIDGE & CUSTER** – NW Corner & area West of RR. Tracks on south side of Custer Ave. [*approx .2 acres*]
E-15	**HALSTED RD** -Hazel St. to Searles Av. (south side of road) [*approx .14 acres*]
E-16	**HALSTED RD.** – Hazel to Central (north side) [*approx 1 acres*]
E-17	**AUBURN & HORSMAN** - NW Corner Mow between RR track and Auburn St [*approx 0.9 acres*]
E-18	**ROW** - Between Ridge Ave. & Huffman Blvd., RR Tracks to Adolphson St. [*approx. .8 acres*]
E-19	**COUNTRY CLUB TERRACE** – Mow Island (eastside of road) [*approx .25 acres*]
E-20	**COUNTRY CLUB TERRACE @ WILLOUGHBY** – Northwest corner west to Edson St.. {*approx .1 acres*}
E-21	**4608 AUBURN ST.** – City Lot [*approx. .5 acres*]
E-22	**AUBURN ST.** - From 3916 Auburn St to Johnston Ave (south side road) [*approx 1.6 acres*]
E-23	**AUBURN ST.** – South side of Auburn St. from Auburn High School to Springfield Ave. [*approx. .5 acres*]
E-24	**GRACE ST. DEAD END** – West of 2323 Grace St. & 1722 Tacoma to RR Tracks. [*approx. .3 acres*]
E-25	**CENTRAL AV** -Auburn St. to Kent Creek (eastside of road) [*approx 1.2 acres*]

	Block F – Mow Every 2 Weeks
Site #	**Location**
F-1	**3300 thru 3400 Blocks, W State St.- as listed** – [*approx .19 acres each – approx. 1.9 acres total*] Includes 33xx, 3320, 3330, 34xx, & 3410
F-2	**Kilburn Ave, 111 & 125** – [*approx. .57 acres*]
F-3	**112 Carbaugh Ave** - [approx .16 acres]
F-4	**302 & 234 N Hinkley Ave** - Parcel # 11-22-106-032, 11-22-109-016 (approx. 0.33 acres)
F-5	**118, 122, 124, 126 Concord Ave** - Parcel # 11-20-277-002, 007, 008, 009, 010 (approx. 0.82 acres)
F-6	**3xx Concord Ave** - Parcel # 11-20-281-005 (approx. 0.10 acres)
F-7	**430 Concord Ave** - Parcel # 11-20-426-007 (approx. 0.19 acres)
F-8	**3417 Green St** - Parcel # 11-20-281-007 (approx. 0.08 acres)
F-9	**130 Lexington Ave** - Parcel # 11-20-278-011 (approx. 0.18 acres)
F-10	**316 Lexington Ave** - Parcel # 11-20-282-004 (approx. 0.18 acres)
F-11	**3417 Chestnut St** - Parcel # 11-20-279-013 (approx. 0.07 acres)
F-12	**409, 411 S Horace Ave** - Parcel # 11-21-306-026, 027 (approx. 0.37acres)
F-13	**5xx S Horace Ave** - Parcel # 11-21-326-012 (approx. 0.12 acres)
F-14	**3915 Delaware St** - Parcel # 11-20-402-014 (approx. 0.17 acres)
F-15	**520 Hartford Ave** - Parcel # 11-20-429-012 (approx. 0.12 acres)
F-16	**418 Albert Ave** - Parcel # 11-21-226-011 (approx. 0.09 acres)
F-17	**1130 Andrews St** - Parcel # 11-22-131-010 (approx. 0.23 acres)
F-18	**1131 Andrews St** - Parcel # 11-22-128-014 (approx. 0.07 acres)
F-19	**1402 Andrews & 330 N Hinkley Ave** - Parcel # 11-22-106-024, 025 (approx. 0.16 acres)
F-20	**452 N Avon St** - Parcel # 11-22-128-017 (approx. 0.13 acres)
F-21	**614 N Avon St** - Parcel # 11-15-379-057 (approx. 0.27 acres)
F-22	**715 Bluefield St** - Parcel # 11-15-378-010 (approx. 0.11 acres)
F-23	**17xx Chestnut St & 218 S Independence Ave** - Parcel # 11-21-285-009, 004 (approx. 0.24 acres)
F-24	**1918 Elm St** - Parcel # 11-21-284-001 (approx. 0.09 acres)
F-25	**1417 Mulberry St** - Parcel # 11-22-109-032 (approx. 0.14 acres)
F-26	**1435 Mulberry St** - Parcel # 11-22-109-026 (approx. 0.15 acres)
F-27	**1329 School St** - Parcel # 11-15-380-038 (approx. 0.18 acres)
F-28	**1502 School St** - Parcel # 11-22-102-006 (approx. 0.11 acres)
F-29	**210 Tay St** - Parcel # 11-22-183-002 (approx. 0.06 acres)
F-30	**211, 213, 219, 227 N Avon St, 2xx, 220, 226, 228 Ogden Ave, 10xx, 1045, 1047, 1051, 1055, 1061, 1067 Mulberry St & 10xx, 1036, 1044, 1050, 1056, 1060 W Jefferson St** - Parcel # 11-22-251-001, 003, 004, 005, 016, 017, 018, 019, 020, 021, 037, 031, 030, 029, 028, 036, 010, 009, 008, 007, 006 (approx. 5.12 acres)
F-31	**416 Underwood St** - Parcel # 11-22-202-015 (approx. 0.14 acres)
F-32	**436 & 440 Underwood St** - Parcel # 11-22-202-008, 007 (approx. 0.28 acres)
F-33	**450 Underwood St** - Parcel # 11-22-202-005 (approx. 0.02 acres)
F-34	**219 N Johnston Ave** - Parcel # 11-21-209-005 (approx. 0.16 acres)

F-35	**617 Greenview Ave** - Parcel # 11-16-377-001 (approx. 0.14 acres)
F-36	**1535 Andrews St (neigborhood park)** - Parcel # 11-22-102-023 (approx. 0.09 acres)
F-37	**8xx & 824 Lee St** - Parcel # 11-22-205-004, 003 (approx. 0.016 acres)
F-38	**1027 Woodlawn Ave** - Parcel # 11-14-352-007 (approx. 0.11 acres)
F-39	**729 & 733 N Rockton Ave** - Parcel # 11-23-103-002, 001 (approx. 0.09 acres)
F-40	**713 Locust St** - Parcel # 11-22-234-012 (approx. 0.07 acres)
F-41	**903 Acorn St** - Parcel # 11-22-229-022 (approx. 0.05 acres)
F-42	**309 Horsman St** - Parcel # 11-22-280-004 (approx. 0.24 acres)
F-43	**W. STATE & CHESTNUT CROSSOVER** – SWX & Triangle Island [*approx. .6 acres*]
F-44	**W. State & Kilburn Ave** – NEX, City Lot [approx. .6 acres]
F-45	**HORSMAN ST.** – Along Old Quarry & City Lots South of Quarry. [*approx. .5 acres*]
F-46	**WHITMAN ST** -Horsman St. to N. Rockton Av. (south side of road) [*approx 1.2 acres*]
F-47	**W. JEFFERSON ST/MULBERRY ST.** - Kilburn Av. (south side of road) [*approx .26 acres*]
F-48	**OGDEN ST.** – City Lot @ Mulberry St. & W. Jefferson between Ogden St. & RR Tracks. [*approx. .4 acres*]
F-49	**CITY LOTS** – West side of Kent Creek from Mulberry St. to South of Elm St.. [*approx. 2.4 acres*]
F-50	Island at **FISHER AV. & HASKELL AV.** [*approx .09 acres*]
F-51	**ROCKTON & CHERRY** – East Side from street to south end of parking area. [*approx .09 acres*]
F-52	Triangle Lot at **PRESTON ST**, at Howard Av, and Anderson St. [*approx .06 acres*]
F-53	**S. PIERPONT & PRESTON ST.** – NWX, City Lot [*approx .4 acres*]
F-54	**N. PIERPONT AV.** -W. State St. to School St. (west side of road). [*approx .6 acres*] Mow back to edge of farm field or tree line
F-55	**SCHOOL ST.** -N. Pierpont Av. to Springfield Av. (both sides of road) [*approx 1.2 acres*] Mow back to edge of farm field or tree line
F-56	**W. STATE ST.** -Daisyfield Rd. to Springfield Ave (south side of rd.) Between W. State & Service Rd. [*approx 1 acre*]
F-57	**W. STATE ST.** – From Fire Station # 6 west to Springfield Ave (north side of road) Mow back to edge of farm field or tree line. [*approx 1.2 acres*]
F-58	**1326 Chestnut St** - Parcel # 11-22-326-004 (approx. 0.18 acres)

	Block G – Mow Every 2 Weeks
Site #	**Location**
G-1	**CURVE ST.** -S. Avon St. to Corbin St. (Road north - both sides of RR tracks plus vacant lot on SW corner of Selden and Avon St) [*approx 1.3 acres*]
G-2	**523 CENTRAL AVE** – Chip lot & Hill, both sides of fence and weed whip along guardrail. Mow south to southernmost RR Tracks. [*approx 3.8 acres*]
G-3	**PIERPONT & LEXINGTON** – Drainage Area, East and West side of Pierpont St. [*approx .5 acres*]
G-4	**E. SIDE OF HORACE AVE. @ HUDSON ST.** – City Lot [*approx. 6.4 acres*]
G-5	**TAY ST.** -Cedar St. to Curve St. (both sides of road, and along RR Tracks) [*approx .1 acres*]
G-6	**CENTRAL AV.** -Cunningham St. to City Yards Entrance (2 triangle lots, one on each side of the road and ROW on both sides) [*approx 1.9 acres*]
G-7	**CUNNINGHAM ST.** -1521 Cunningham St to Morgan St. (north side of road) and;
G-8	**MORGAN ST.** – Cunningham St to Central Ave. (south side of road) [*approx 1.6 acres*]
G-9	**MARYLAND & HUDSON** – City Right of Way [*approx .9 acres*]
G-10	**1026 S. MAIN** – City lot [*approx. .1 acres*]
G-11	**700/800 S Main** – Old Train Depot (See Map) [*approx.4.75 acres*]
G-12	**1101 S. Church St.** – [*approx .12 acres*]
G-13	**525 S Main St (actually two lots)** - Parcel # 11-22-489-002 & 11-22-489-001 (approx. 0.75 acres)
G-14	**609 S Main St** - Parcel # 11-27-226-010 (approx. 1.08 acres)
G-15	**616 Newport Ave** - Parcel # 11-20-454-006 (approx. 0.11 acres)
G-16	**636 Hartford Ave** - Parcel # 11-20-477-013 (approx. 0.13 acres)
G-17	**4xx Short Horsman St** - Parcel # 11-22-405-018 (approx. 0.31 acres)
G-18	**201 Kent St** - Parcel # 11-27-282-002 (approx. 0.31 acres)

	Block H – Mow Every 2 Weeks
Site #	**Location**
H-1	**206, 210, 214 Lane St** - Parcel # 11-27-429-008, 007, 006 (approx. 0.38 acres)
H-2	**430 Knowlton St** - Parcel # 11-27-405-001 (approx. 0.20 acres)
H-3	**325 Salter Ave** - Parcel # 11-27-405-020 (approx. 0.17 acres)
H-4	**ARAGONA & REGINA** – City Right of Way between Dead Ends. [*approx .2 acres*]
H-5	**MONTAGUE RD.** -Pierpont Av. to Montague St. – intermittent as indicated. Mow to edge of farm field, pole line or tree line. [*approx 1 acres*]
H-6	**S. MAIN ST. & MARCHESANO DR.** (northeast corner lot) Street east to tree line, fence north to bookstore. [*approx .2 acres*] Southeast corner south to House. [*approx. .1 acres*]
H-7	**FORSYTHIA DR.** – Drainage area from fence on east end of property to tree line on west side of Forsythia. Includes waterway. [*approx. 1.7 acres*] (**Must** string trim anywhere mowers can't be used)
H-8	**SAUK DR.** – City Right of way, North and South sides, wherever property is undeveloped. [*approx. .7 acres*]
H-9	**SIMPSON RD.** – Right of Way adjacent to cul-de-sac near S. Main St. [*approx. .2 acres*]
H-10	**PRAIRIE RD. & S. MAIN ST.** – Right of Way along S. Main and Prairie Rd. and open lot on NW corner [*approx. 3.2 acres*]
H-11	**S MAIN ST & HARRISON AVE., North and south side of Harrison** -S. Main St. to the River, Mow from street curb in, using utility poles, fence, bush & tree lines to determine right of way boundary width. Trim along all guardrails. Wrap both corners of Harrison & S. Main about 100 yards on Main St for visibility. [*approx 1.5 acres*]

	Block I – Mow Every 2 Weeks
Site #	**Location**
I-1	**MILFORD AV** -11th St to 9th St. (north side of road) (Must trim around guardrail) [*approx .6 acres*]
I-2	**NEW MILFORD SCHOOL RD** -1968 New Milford School Rd to Falcon Rd. (north side of road) [*approx .6 acres*]
I-3	**LINDEN RD** -S. Alpine Rd. to 35th St. (north side of road) [*approx .3 acres*] (south side of road) [*approx .2 acres*]
I-4	**35TH ST** -Linden Rd. to Bonanza Way (east side of road) [*approx 1.1 acres*] (west side of road) [*approx .7 acres*]
I-5	**SAMUELSON RD** -S. Alpine Rd. to 11th St. (south side of road) [*approx 3.6 acres*] (north side of road) [*approx 3.6 acres*]
I-6	**SAMUELSON RD** -11th St. to Falcon Rd. (north side of road) [*approx .1 acres*] (south side of road) [*approx .1 acres*]
I-7	**EASY ST.** – Boulevard between Easy St. & 6th St. [*approx. 1.5 acres*]
I-8	**AIRPORT DR. & S. 6TH ST.** – City Lot between 39th Ave & Airport Dr. from S. 6th St. to S. 9th St. [*approx.3.6 acres*]
I-9	**RESEARCH PKWY.** – City Right of Way in front of Retention Pond. [*approx. .4 acres*]
I-10	**20TH ST. RIGHT OF WAY** – Bypass 20 to Samuelson Rd. (both sides of road, where residents don't mow) [*approx. .6 acres*]

	Block J – Mow Every 2 Weeks
Site #	**Location**
J-1	**HARRISON AV.** -From the River to Kishwaukee St. Mow from street curb in using utility poles, fence, bush & tree lines to determine right of way boundary width. Trim along all guardrails Cut back to fenceline on the NE corner of Harrison and Seminary. (south side of road) [*approx 2 acres*] (north side of road) [*approx 2 acres*]
J-2	**SEMINARY ST.** -Harrison Ave to Blackhawk Park Ave. Also mow triangle lots at Seminary & Magnolia. (west side of road) [*approx 1.0* acres] (east side of road) [*approx 1.0 acres*]
J-3	**SANER RD.** – Along RR Tracks between Kishwaukee St. & S. 4th St. [*approx.1.6 acres*]
J-4	**REED AVE. & HORTON ST.** – Large City Lot on South side of Reed Ave. [*approx. 3.8 acres*]
J-5	**HARRISON AVE.** -11th St. to Alpine Rd. Trim along all guardrails. Mow from street curb to drainage ditch. Wrap NW corner of Harrison & 20th for visibility. Mow back to private fenceline on south side, west of Ohio Pkwy. Include landscaped terrace in front of Duplex' in 3600 block. (south side of road) [*approx 2 acres*] (north side of road) [*approx 2.2 acres*]
J-6	**25th ST. DEAD END** - See map, Vacant Lots and ROW, String trim around guardrail. [*approx .25 acres*]
J-7	**1604 6th St** - Parcel # 11-35-229-001 (approx. 0.11 acres)
J-8	**2614 10TH St** - Parcel # 15-01-103-017 (approx. 0.15 acres)
J-9	**S. ALPINE & GRINNELL** – SWX, Right of Way. [*approx. .1 acres*]
J-10	**S. ALPINE & O'CONNELL** – SW Quadrant behind homes SEE MAP (Utility Easement). [*approx. 3 acres*]
J-11	**MANCHESTER DR.** -Harrison Av. to Middlebury Ave. Steep slope must be string trimmed if unable to mow. (westside of road) [*approx 1.2 acres*]
J-12	**18th ST SOUTH OF BROADWAY** – West side of street along RR Tracks. [*approx. .3 acres*]
J-13	**22ND AVE BOULEVARD** – Between Kishwaukee St. & 7th St. [approx .7 acres]
J-14	Island at **APPLE ORCHARD LA.** [*approx .08 acres*]
J-15	**S. ALPINE RD.** -Longmeadow La. to Apple Orchard La. (eastside of road) [*approx .3 acres*]

	Block K – Mow Every 2 Weeks
Site #	**Location**
K-1	**S. ALPINE RD.** -Larson Ave. to E. State. St. String trim along both sides of guardrail (west side of road) [*approx 1 acre*]
K-2	**BROADWAY/WOODRUFF VIADUCT** (See Map, ROW and about two passes behind sidewalks on both sides of Broadway) [*approx .1 acres*]
K-3	**WOODRUFF AVE.** -Broadway to 9th Street. Mow from pavement edge to railroad tracks or tree line. Steep slope must be string trimmed if unable to mow. (south side of road) [*approx 2 acres*]
K-4	**100 Blk even side of Fairview Ave** on southside of creek - mow from Fairview back east to tree line, from creek south to parking lot
K-5	**100 Blk odd side of Fairview Ave** on northside of creek - Weed whip/ mow from Fairview west for about 200' on both sides of guardrail and down into creek about 8'
K-6	**NW corner of S 6th St and 11th Ave** - SEE MAP, actually two triangle city lots
K-7	**Oak Grove** – City Lot [*approx 1 acre*]
K-8	**7th Avenue & 5th Street** – SW Corner Trim both sides of guardrail all the way west to first driveway [*approx .25 acres*]
K-9	**712 4th Ave (L shaped lot)** - Parcel # 11-26-251-009 (approx. 0.14 acres)
K-10	**521 College Ave** - Parcel # 11-26-179-005 (approx. 0.28 acres)
K-11	**724 7th Ave** - Parcel # 11-26-401-003 (approx. 0.07 acres)
K-12	**715 7th Ave** - Parcel # 11-26-404-006 (approx. 0.14 acres)
K-13	**702 S 3rd St** - Parcel # 11-26-108-001 (approx. 0.14 acres)
K-14	**312 Penfield Pl** - Parcel # 11-26-159-016 (approx. 0.17 acres)
K-15	**325 Penfield Pl** - Parcel # 11-26-160-006 (approx. 0.17 acres)
K-16	**819 Seminary St** - (approx. 0.15 acres)
K-17	**Windpoint Deadend** - 600/ 700 blk of Parkside Dr, large vacant lot
K-18	Island at **GROVE ST. & KISHWAUKEE ST.** [*approx .02 acres*]
K-19	**Oak Grove at Glendale** – City ROW [approx .1 acres]
K-20	**326 Bremer St.** – [*approx .11 acres*]
K-21	**805 S. 5th St.** – this needs to be mowed all the way south to the alley [*approx .34 acres*]
K-22	**5TH AV.** between KISHWAUKEE ST TO 4TH ST (south side of street) [*approx .1 acres*]
K-23	**5TH AV.** : RR crossing-Kishwaukee-4th St (north side of street) including slopes of overpass [*approx .03 acres*]
K-24	SW Triangle Lot: **5th Av**-5th St-RR tracks [*approx .1 acres*]
K-25	NE Triangle Lot: **5 th Av**-4th St-RR tracks [*approx .1 acres*]
K-26	Island on **CENTER TERR.** between Point Av. and Coco Joes, (south side of the road) [*approx .1 acres*]
K-27	**N. ALPINE RD** -Maray Dr. to north side of creek. (westside of road) [*approx .07 acres*]
K-28	**N. ALPINE RD** -from Seventh Day Adventist Church to Aldeen Park property line (eastside of road) [*approx .14 acres*]
K-29	**426 N. 3rd St.** – City Lot, L shaped lot [*approx .2 acres*]
K-30	Island at **REVELL AV.** & 9TH ST. (north east side) [*approx .09 acres*]

K-31	Island between **HALL ST.** & 6TH ST. & JEFFERSON ST. (north east corner) [*approx .1 acres*]
K-32	Island at **JEFFERSON ST.** & 6TH ST. & 5TH ST. (south west corner -by Uncle Nick's) [*approx .09 acres*]
K-33	**11TH ST & CHARLES ST.** – SE corner right of way by Marie's Pizza. Includes lot next to house on 11th St. side. [approx .1 acres]
K-34	**1006 Kishwaukee St.** – [*approx .17 acres*]
K-35	**1310 Kishwaukee St. & ROW across Lorden Ct along concrete wall** – [*approx .30 acres*]
K-36	**808 & 812 10th Ave** – [*approx .34 acres*]
K-37	**7xx Kishwaukee Ct.** – (3 lots combined) [*approx. 1.4 acres*]
K-38	**735 8th Ave** – [*approx .24 acres*]
K-39	**807 8th Ave** – [*approx .06 acres*]
K-40	**802 – 804 S. 5th St.** – [*approx .53 acres*]
K-41	**8xx S. 6th St.** – [*approx .48 acres*]
K-42	Island on **SKYLARK DRIVE** between Crosby St and Fairview Blvd. [*approx .1 acres*]

	Block L – Mow Every 2 Weeks
Site #	**Location**
L-1	**City Lot** – Between Highcrest Rd. & Parkview Dr. – South side of Springcreek Rd., and:
L-2	**City Right of Way** – North side of Springcreek Rd. from Stoneridge east to end of wooded area. [*approx. 1.25 acres*]
L-3	Island at end of **ALPINE CT.** [*approx .46 acres*]
L-4	Island at **GREENWOOD AV. & SKYLARK DR.** [*approx .4 acres*]
L-5	Island at 2000 **BIRCHWOOD DR.** (south side of street) [*approx .02 acres*]
L-6	**EDGEWOOD DR.** – Along Golf Course from Forest Hills Rd. East to where Edgewood turns South (mostly string trim). [*approx. .3 acres*]
L-7	**N. ALPINE & BROOKVIEW RD.** – NWX on Alpine. [*approx. .2 acres*]
L-8	**N. ALPINE RD** - Olde Lyme Dr. to Innsbruck Dr. (eastside of road) [*approx 1.9 acres*]

	Block M – Mow Every 2 Weeks
Site #	**Location**
M-1	**SPRING CREEK RD** -Shaw Woods Dr. to Dior Dr. (south side of road) [*approx .4 acres*]
M-2	**SHAW WOODS DR** -Spring Creek Rd. to Spring Brook Rd. (west side of road) [*approx .9 acres*]
M-3	**SPRING BROOK RD** –Woodhill to Mulford Rd. (south side of road, includes drainage area west of Applewood Ln *THIS MUST BE WEED WHIPPED*) [*approx .8 acres*] **SPRING BROOK RD** -Spring Lake Dr to Mulford Rd. (north side of road) [*approx .2 acres*] NWX(mow 100' North), SWX, SEX (Mow 100' South), of Spring Brook & Mulford (right of ways only – includes string trimming around all guard rails).
M-4	**REID FARM & TRAINER RD.** – City Right of way (see map). [*approx .2 acres*]
M-5	**REID FARM RD** -Olde Creek Rd to Barrick Dr. (eastside of road) [*approx .55 acres*]
M-6	**OLDE CREEK RD** (*old Spring Creek Rd)* -Perryville Rd. to Reid Farm Rd. (south side of road) [*approx .73 acres*]
M-7	**BELL SCHOOL RD. -** Spring Creek Rd. to Spring Brook Rd, both sides of street except where landscaped. [*approx 1 acre*]
M-8	**ROTH RD.** – Old Creek Rd. North to Dead End, both sides. East side only mow ½. Remainder is County Highway property. [*approx. 2 acres*]
M-9	**Springwheat Dr -** Large vacant lot [approx. 12 acres] - mow from roads edge north to approx creek line. Starting at the property line of 3688 Springwheat mow east to tree line just before Bell School Rd. Also at north east corner there is a small area that needs to be mowed all the way to the edge of Bell School.

	Block N – Mow Every 2 Weeks
Site #	**Location**
N-1	**49xx Guilford Rd** - ONLY mow from edge of road to tree line
N-2	**EASTLAWN DR.,** South of CREEKVIEW RD. Weed whip along guardrail and south end of creek wall. [*approx .46 acres*]
N-3	**NEWBURG RD. & S. MULFORD RD.** – City Lot, NWX. [*approx. .3 acres*]
N-4	**NEW TOWNE & JAVELIN** – NWX, Drainage area. [*approx. 1 acres*]
N-5	**ROTE RD.** – Lyford Rd. to Bell School Rd., both sides & trim along guardrails. [approx. 1 acre]
N-6	**LYFORD RD.** – Rote Rd. to E. State St. Right of Way. [*approx. 1.8 acres*]
N-7	**LYFORD RD.** – City Lot (see map) [*approx. 10.2 acres*]
N-8	**N. MULFORD RD** -680 N. Mulford Rd. to Garrett La. (west side of road) [*approx .1 acres*]

	Block O – Mow Every 2 Weeks
Site #	**Location**
O-1	**MULFORD RD.** -Harrison Ave. to Charles St. (east side of road) [*approx .4 acres*] (west side of road) [*approx .5 acres*]
O-2	**SANDY HOLLOW RD** - Mulford Rd to S Alpine Rd (northside of road) [*approx 2.7 acres*] (south side of road) [*approx 2.3 acres*]
O-3	**SANDY HOLLOW RD** -11th St. to S. Alpine Rd. (north side of road) [*approx .6 acres*] (south side of road) [*approx 1.1 acres*]
O-4	**SANDY HOLLOW RD** -Kishwaukee St. to 11th St. (north side of road) [*approx .6 acres*] (south side of road) [*approx .2 acres*] (**Must** string trim anywhere mowers can't be used including all of ditches along here)

	Properties & Complexes
Site #	**Location**
PC-1	1200 Rock St. (Barber Coleman Complex)
PC-2	1200 & 1300 S. Main St (Barber Coleman out lots)
PC-3	301 S. Water St. (Ingersoll) * HILLS MUST BE WEED WHIPPED ONCE A MONTH *
PC-4	1419 Blaisdell (Church School)
PC-5	615 Furman St. (CD Lot)
PC-6	605 N Main St (Armory)
PC-7	302 S. Main St (Brown Lot)
PC-8	523 S Central Ave (City Yards) SEE MAP

APPENDIX E

Appendix E

City Streets - Tree, & Landscaping Maintenance

1.0 General Scope

1.1 Scope of Work Adjustment. The City representative retains the right to adjust the scope of work at each site location. The vendor will provide a written proposal for any cost adjustment to the City representative prior to performing any additional work over and above the specifications listed in this document.

1.2 On-site preparation work. Prior to each mowing occurrence the vendor shall pick clean the entire site, removing all litter, trash, branches, glass, and debris. Paper, cups and other litter must not be mowed so as to detract from the sites' appearance.

1.3 Trimming. Final trimming around permanent objects such as trees, posts, shrubs, fences, guard rails, signs, curbsides, and roadway edges, will be accomplished with suitable mechanical equipment at the same cutting height as the rest of the turf so as not to detract from the appearance of the site. Trimmings are to be cleaned from all hard surfaces (sidewalks, curbs, driveways, and streets).

1.4 Labor, Tools, and Equipment. The vendor agrees to furnish all necessary labor, tools and equipment in connection with the grounds maintenance of the specified locations. Vendor shall provide a list of available staffing to be used in his operation.

1.5 Equipment. Mowing equipment can include riding mowers, walk behind mowers, nylon line trimmers and hand clipping, where necessary. Mowing equipment shall be kept in good, safe operating condition with sharp blades so that the grass is cut properly and in such a condition that oil and gasoline are not leaked. Vendor shall submit a list of equipment and indicate the age of said equipment to be used for mowing.

1.6 Equipment/safety. The vendor shall remove equipment at the completion of the workday. The City of Rockford does not assume any responsibility, at any time, for the protection of or loss of equipment or supplies either at the work site or elsewhere.

1.7 Fueling. All equipment shall be fueled on paved surfaces and the vendor shall be responsible for any cleanup necessary due to spillage.

1.8 Scheduling. The vendor will perform the work in accordance with the schedule provided or the instructions received from the City representative. Generally, the work may be performed between the hours of 6:00 a.m. and 6:00 p.m. and on any day or days of the week in accordance with the City's noise ordinance (see section 2.3). If special circumstances require different hours the vendor shall seek approval for such a change from the City. The City reserves the right to add additional mowing cycles or site specific mowing. The City may also determine that a scheduled mowing cycle is unnecessary due to dry weather conditions. The respective City Representative shall be notified within 24 hours upon completion of a scheduled mowing cycle. All invoices shall be submitted to the City Representative within 10 days of completing a mowing

cycle and must include a valid invoice number, the specific cycle for which the invoice is presented, the group or Block of sites, and the correct date. Do not submit invoices directly to the City Finance Dept. They will not be paid until validated by respective City Representative(s).

1.9 Site Locations. The sites that are included in this bid specification are as follows:

Harrison Ave. - Between Alpine Rd. & Mulford Rd., along both sides of the right of way and the center parkway area. Includes Forestview & Eastrock Boulevards only.

Kishwaukee Berm – Between Chestnut St. and East State St. along the east side of S. Third St.

South Second Street- There are four berm areas. Two of them are on each side of S. Second St, after you cross the bridge going south. The third berm is over next to the railroad tracks on the south side of South Third St. at the north end of South Third St. where it dead ends above the railroad tracks. The fourth berm is located on the north side of South Third St. where it dead ends above the railroad tracks.

Spring Creek Road Area- The area on both the north and south sides of Spring Creek Road between McFarland Rd. & Bell School Rd.

Auburn St. & N. Main St. Roundabout Area – This area includes the actual roundabout, and all grass and planting areas on medians, parkways and the city parking lot on the southwest corner of the intersection as highlighted on the attached aerial map.

Morgan Street Bridge Area – This area includes all grass and planting areas on College Ave. / Morgan St. from S. 3rd St. to Kent St. as highlighted on the attached aerial map.

The City of Rockford reserves the right to add additional sites to the contract subsequent to award as new construction projects are completed or other properties are acquired by the City.

2.0 Scope of work

2.1 Harrison Ave. The vendor shall perform the following services at this location:

2.1.1 As soon as weather is cooperative or at direction of City Representative in late March or April, contractor shall remove all leaves and winter debris from beds, trees, shrubs, turf and non-turf areas.

2.1.2 In early April, the vendor shall cut down all ornamental grasses left up over the winter, to within 2" of ground and remove clippings from site. Vendor shall examine all trees and shrubs in parkway and right of way areas for damage from

winter season. Vendor shall note in writing to City of Rockford Arborist any damaged trees, shrubs and their location.

2.1.3 In early April, vendor shall "work up" mulch areas around all trees, shrubs and planting areas and install new "chocolate" mulch 1" thick around all plants, shrubs and trees in right of way and parkway areas.

2.1.4 In middle of April and once a month there after until the end of October the vendor shall spread 10-10-10 granular plant and tree fertilizer around all trees, shrubs and in all planting beds. The vendor shall spread the fertilizer with suitable spreader type equipment for this application. The City of Rockford Arborist will instruct the vendor on the type and amount of fertilizer to use.

2.1.5 In July, or at the first appearance of the Japanese beetles, the vendor shall spray, or use an injected treatment around all plants, trees and shrubs that are affected by the Japanese beetles. This treatment shall be performed twice a week until the Japanese beetles have disappeared for the season at the direction of City of Rockford Arborist. The frequency the treatment is applied shall be adjusted, if needed, by the City of Rockford Arborist.

2.1.6 All tree and shrub pruning is under the direction of the City of Rockford Arborist. The arborist will instruct the vendor on how and when to prune all shrubs and trees which is typically once a year.

2.1.7 All ground mowing areas shall receive a suitable fertilizer for that season. All grass areas shall receive one application of granular fertilizer in early April and one more application in early October. The City of Rockford Arborist shall instruct the vendor on what type and brand of granular fertilizer to use. The fertilizer shall be spread with suitable spreader type equipment. The vendor shall take precautionary measures to make sure that the fertilizer for the grass does not become deposited in the mulch areas around the trees, shrubs and planting beds.

2.1.8 As grass begins growing and is suitable for mowing, in April, all right of way and parkway areas shall be mowed once a week to a height of 1 ½ inches. All grass clippings that enter the roadway areas, shall be swept up and removed after each mowing. In addition, all areas not accessible with mowing equipment shall be trimmed using string fed trimming equipment to the same height of the grass. This includes all shrub, tree and planting bed areas. Care shall be taken as not to cause any damage to any shrubs, trees, and planting beds from the use of string trimming equipment. Any damage must be immediately reported to The City of Rockford Arborist no later than the same day of occurrence.

2.1.9 Beginning in late April all weeds should be removed from planting beds, shrubs and trees areas. Weeding shall be performed first before each mowing cycle is performed weekly.

2.1.10 Beginning the first week in October and continuing until the middle of November, the vendor will use leaf vacuum equipment to remove leaves from all parkway and right of way areas, once a week, in addition to mowing until grass stops growing.

2.1.11 All Pest control and weed spraying shall be performed under the direction of the City of Rockford Arborist. All vendor pesticide applicators and their equipment must have prior approval of the City of Rockford Arborist before performing this operation.

2.2 Kishwaukee Berm. The vendor shall perform the following services at this location:

2.2.1 As soon as weather is cooperative in late March or April, contractor shall remove all leaves and winter debris from beds, turf and non-turf areas.

2.2.2 In early April, the vendor shall cut down all ornamental grasses left up over the winter to within 2" of ground and remove clippings from site. Vendor shall examine all trees and shrubs in parkway and right of way areas for damage from winter season. The vendor shall note in writing to City of Rockford Arborist any damaged trees, shrubs and their location.

2.2.3 In early April, vendor shall "work up" mulch areas around all trees, shrubs and planting areas and install new "chocolate" mulch 1" thick around all plants, shrubs and trees in right of way and parkway areas.

2.2.4 In middle of April and once a month there after until the end of October the vendor shall spread 10-10-10 granular plant and tree fertilizer around all trees, shrubs and in all planting beds. The vendor shall spread the fertilizer with suitable spreader type equipment for this application. The City of Rockford Arborist will instruct the vendor on the type and amount of fertilizer to use.

2.2.5 In July, or at the first appearance of the Japanese beetles, the vendor shall spray all plants, trees and shrubs that are affected by the Japanese beetles twice a week until the Japanese beetle has disappeared for the season.

2.2.6 All tree and shrub pruning is under the direction of the City of Rockford Arborist. Arborist will instruct the vendor on how and when to prune all shrubs and trees.

2.2.7 All mowing areas shall receive a suitable fertilizer for that season. All grass areas shall receive one application of granular fertilizer in early April and one more application in early October. The City of Rockford Arborist shall instruct the vendor on what type and brand of granular fertilizer to use. The fertilizer shall be spread with suitable spreader type equipment. The vendor shall take precautionary measures to make sure that the fertilizer for the grass does not become deposited in the mulch areas around the trees, shrubs and planting beds.

2.2.8 As soon as grass begins growing and is suitable for mowing, all right of way and parkway areas shall be mowed once a week to a height of 1 ½ inches. All grass clippings that enter the roadway areas, shall be swept up and removed after each mowing. In addition, all areas not accessible with mowing equipment shall be trimmed using string fed trimming equipment to the same height of the grass. This includes all shrub, tree and planting bed areas. Care shall be taken as not to cause any damage to any shrubs, trees, and planting beds from the use of string

trimming equipment. Any damage must be immediately reported to The City of Rockford Arborist no later than the same day of occurrence.

2.2.9 Beginning in late April all weeds shall be removed from planting beds, shrubs and tree areas. Weeding shall be performed first before each mowing cycle is performed weekly.

2.2.10 Beginning the first week in October and continuing until the middle of November, the vendor will use leaf vacuum equipment to remove leaves and debris from all parkway and right of way areas once a week in addition to mowing until grass stops growing.

2.2.11 All Pest control and weed spraying shall be performed under the direction of the City of Rockford Arborist. All vendor pesticide applicators and their equipment must have prior approval of the City of Rockford Arborist before performing this operation.

2.3 South Second Street. The vendor shall perform the following services at this location:

2.3.1 As soon as weather is cooperative in late March or April, contractor shall remove all leaves and winter debris from beds, turf and non-turf areas.

2.3.2 In early April, the vendor shall cut down all ornamental grasses left up over the winter to within 2" of ground and remove clippings from site. Vendor shall examine all trees and shrubs in parkway and right of way areas for damage from winter season. The vendor shall note in writing to City of Rockford Arborist any damaged trees, shrubs and their location.

2.3.3 In early April, vendor shall "work up" mulch areas around all trees, shrubs and planting areas and install new "chocolate" mulch 1" thick around all plants, shrubs and trees in right of way and parkway areas.

2.3.4 In middle of April and once a month there after until the end of Oct. the vendor shall spread 10-10-10 granular plant and tree fertilizer around all trees, shrubs and in all planting beds. The vendor shall spread the fertilizer with suitable spreader type equipment for this application. The City of Rockford Arborist will instruct the vendor on the type and amount of fertilizer to use.

2.3.5 In July, or at the appearance of the Japanese beetles, the vendor shall spray all plants, trees and shrubs that are affected by the Japanese beetles twice a week until the Japanese beetle has disappeared for the season.

2.3.6 All tree and shrub pruning is under the direction of the City of Rockford Arborist. He will instruct the vendor on how and when to prune all shrubs and trees.

2.3.7 All mowing areas shall receive a suitable fertilizer for that season. All grass areas shall receive one application of granular fertilizer in early April and one more application in early October. The City of Rockford Arborist shall instruct the vendor on what type and brand of granular fertilizer to use. The fertilizer shall be spread with suitable spreader type equipment. The vendor shall take precautionary

measures to make sure that the fertilizer for the grass does not become deposited in the mulch areas around the trees, shrubs and planting beds.

2.3.8 As soon as grass begins growing and is suitable for mowing, all right of way and parkway areas shall be mowed once a week to a height of 1 ½ inches. All grass clippings that enter the roadway areas, shall be swept up and removed after each mowing. In addition, all areas not accessible with mowing equipment shall be trimmed using string fed trimming equipment to the same height of the grass. This includes all shrub, tree and planting bed areas. Care shall be taken as not to cause any damage to any shrubs, trees, and planting beds from the use of string trimming equipment. Any damage must be immediately reported to The City of Rockford Arborist no later than the same day of occurrence. Failure to do so will subject the vendor to a violation of their contract with the City of Rockford.

2.3.9 Beginning in late April all planting beds, shrubs and trees areas shall be weeded and removed from site. Weeding shall be performed first before each mowing cycle is performed. (Once a week)

2.3.10 Beginning the first week in October and continuing until the middle of November, the vendor will use leaf vacuum equipment to remove leaves and debris from all parkway and right of way areas, once a week, and in addition to mowing until grass stops growing.

2.3.11 All Pest control and weed spraying shall be performed under the direction of the City of Rockford Arborist. All vendor pesticide applicators and their equipment must have prior approval of the City of Rockford Arborist before performing this operation.

2.4 Spring Creek Road Area. The vendor shall perform the following services at this location:

2.4.1 In early April, vendor shall "work up" mulch areas around all trees, and install new "chocolate" mulch 1" thick around all trees located on the south side of Spring Creek. These trees are located approximately 10ft. from the sidewalk that runs from McFarland Rd. to Bell School Rd.

2.4.2 In middle of April and once a month there after until the end of Oct. the vendor shall spread 10-10-10 granular plant and tree fertilizer around all trees located on the south side of Spring Creek located 10 ft. in from the sidewalk. The vendor shall spread the fertilizer with suitable spreader type equipment for this application. The City of Rockford Arborist will instruct the vendor on the type and amount of fertilizer to use.

2.4.3 In July, or at the appearance of the Japanese beetles, the vendor shall spray all trees that are affected by the Japanese beetles twice a week until the Japanese beetle has disappeared for the season.

2.4.4 All tree pruning shall be performed in accordance with ISA standards (International Society of Arboriculture) and under the direction of the City of

Rockford Arborist. This person will instruct the vendor on how and when to prune all shrubs and trees.

2.4.5 All mowing areas shall receive a suitable fertilizer for that season. All grass areas shall receive one application of granular fertilizer in early April and one more application in early October. The City of Rockford Arborist shall instruct the vendor on what type and brand of granular fertilizer to use. The fertilizer shall be spread with suitable spreader type equipment. The vendor shall take precautionary measures to make sure that the fertilizer for the grass does not become deposited in the mulch areas around the trees, shrubs and planting beds.

2.4.6 As soon as grass begins growing and is suitable for mowing, all right of way and areas shall be mowed once a week to a height of 1 ½ inches. The north side of the road between McFarland and Bell School Rd. shall be mowed from the road to the fence. The south side of the road shall be mowed from the sidewalk out to the road, just in the right of way area. All grass clippings that enter the roadway areas, shall be swept up and removed after each mowing. In addition, all areas not accessible with mowing equipment shall be trimmed using string fed trimming equipment to the same height of the grass. This includes all tree and areas. Care shall be taken as not to cause any damage to any trees from the use of string trimming equipment. Any damage must be immediately reported to The City of Rockford Arborist no later than the same day of occurrence. Failure to do so will subject the vendor to a violation of their contract with the City of Rockford.

2.4.7 Beginning in late April all tree areas shall be weeded and removed from site. Weeding shall be performed first before each mowing cycle is performed. (Once a week)

2.4.8 All Pest control and weed spraying shall be performed under the direction of the City of Rockford Arborist. All vendor pesticide applicators and their equipment must have prior approval of the City of Rockford Arborist before performing this operation.

2.5 N. Main & Auburn Roundabout. The vendor shall perform the following services at this location:

2.5.1 As soon as weather is cooperative in late March or April, contractor shall remove all leaves and winter debris from beds, turf and non-turf areas.

2.5.2 In early April, the vendor shall cut down all ornamental grasses left up over the winter to within 2" of ground and remove clippings from site. Vendor shall examine all trees and shrubs in parkway and right of way areas for damage from winter season. The vendor shall note in writing to City of Rockford Arborist any damaged trees, shrubs and their location.

2.5.3 In early April, vendor shall "work up" mulch areas around all trees, shrubs and planting areas and install new "chocolate" mulch 1" thick around all plants, shrubs and trees in right of way and parkway areas.

2.5.4 In middle of April and once a month there after until the end of Oct. the vendor shall spread 10-10-10 granular plant and tree fertilizer around all trees, shrubs and in all planting beds. The vendor shall spread the fertilizer with suitable spreader type equipment for this application. The City of Rockford Arborist will instruct the vendor on the type and amount of fertilizer to use.

2.5.5 In July, or at the appearance of the Japanese beetles, the vendor shall spray all plants, trees and shrubs that are affected by the Japanese beetles twice a week until the Japanese beetle has disappeared for the season.

2.5.6 All tree and shrub pruning is under the direction of the City of Rockford Arborist. He will instruct the vendor on how and when to prune all shrubs and trees.

2.5.7 All mowing areas shall receive a suitable fertilizer for that season. All grass areas shall receive one application of granular fertilizer in early April and one more application in early October. The City of Rockford Arborist shall instruct the vendor on what type and brand of granular fertilizer to use. The fertilizer shall be spread with suitable spreader type equipment. The vendor shall take precautionary measures to make sure that the fertilizer for the grass does not become deposited in the mulch areas around the trees, shrubs and planting beds.

2.5.8 As soon as grass begins growing and is suitable for mowing, all right of way and parkway areas shall be mowed once a week to a height of 1 ½ inches. All grass clippings that enter the roadway areas, shall be swept up and removed after each mowing. In addition, all areas not accessible with mowing equipment shall be trimmed using string fed trimming equipment to the same height of the grass. This includes all shrub, tree and planting bed areas. Care shall be taken as not to cause any damage to any shrubs, trees, and planting beds from the use of string trimming equipment. Any damage must be immediately reported to The City of Rockford Arborist no later than the same day of occurrence. Failure to do so will subject the vendor to a violation of their contract with the City of Rockford.

2.5.9 Beginning in late April all planting beds, shrubs and trees areas shall be weeded and removed from site. Weeding shall be performed first before each mowing cycle is performed. (Once a week)

2.5.10 Beginning the first week in October and continuing until the middle of November, the vendor will use leaf vacuum equipment to remove leaves and debris from all parkway and right of way areas, once a week, and in addition to mowing until grass stops growing.

2.5.11 All Pest control and weed spraying shall be performed under the direction of the City of Rockford Arborist. All vendor pesticide applicators and their equipment must have prior approval of the City of Rockford Arborist before performing this operation.

2.6 Morgan St. Bridge. The vendor shall perform the following services at this location:

2.6.1 As soon as weather is cooperative in late March or April, contractor shall remove all leaves and winter debris from beds, turf and non-turf areas.

2.6.2 In early April, the vendor shall cut down all ornamental grasses left up over the winter to within 2" of ground and remove clippings from site. Vendor shall examine all trees and shrubs in parkway and right of way areas for damage from winter season. The vendor shall note in writing to City of Rockford Arborist any damaged trees, shrubs and their location.

2.6.3 In early April, vendor shall "work up" mulch areas around all trees, shrubs and planting areas and install new "chocolate" mulch 1" thick around all plants, shrubs and trees in right of way and parkway areas.

2.6.4 In middle of April and once a month there after until the end of Oct. the vendor shall spread 10-10-10 granular plant and tree fertilizer around all trees, shrubs and in all planting beds. The vendor shall spread the fertilizer with suitable spreader type equipment for this application. The City of Rockford Arborist will instruct the vendor on the type and amount of fertilizer to use.

2.6.5 In July, or at the appearance of the Japanese beetles, the vendor shall spray all plants, trees and shrubs that are affected by the Japanese beetles twice a week until the Japanese beetle has disappeared for the season.

2.6.6 All tree and shrub pruning is under the direction of the City of Rockford Arborist. He will instruct the vendor on how and when to prune all shrubs and trees.

2.6.7 All mowing areas shall receive a suitable fertilizer for that season. All grass areas shall receive one application of granular fertilizer in early April and one more application in early October. The City of Rockford Arborist shall instruct the vendor on what type and brand of granular fertilizer to use. The fertilizer shall be spread with suitable spreader type equipment. The vendor shall take precautionary measures to make sure that the fertilizer for the grass does not become deposited in the mulch areas around the trees, shrubs and planting beds.

2.6.8 As soon as grass begins growing and is suitable for mowing, all right of way and parkway areas shall be mowed once a week to a height of 1 ½ inches. All grass clippings that enter the roadway areas, shall be swept up and removed after each mowing. In addition, all areas not accessible with mowing equipment shall be trimmed using string fed trimming equipment to the same height of the grass. This includes all shrub, tree and planting bed areas. Care shall be taken as not to cause any damage to any shrubs, trees, and planting beds from the use of string trimming equipment. Any damage must be immediately reported to The City of Rockford Arborist no later than the same day of occurrence. Failure to do so will subject the vendor to a violation of their contract with the City of Rockford.

2.6.9 Beginning in late April all planting beds, shrubs and trees areas shall be weeded and removed from site. Weeding shall be performed first before each mowing cycle is performed. (Once a week)

2.6.10 Beginning the first week in October and continuing until the middle of November, the vendor will use leaf vacuum equipment to remove leaves and debris from all

parkway and right of way areas, once a week, and in addition to mowing until grass stops growing.

2.6.11 All Pest control and weed spraying shall be performed under the direction of the City of Rockford Arborist. All vendor pesticide applicators and their equipment must have prior approval of the City of Rockford Arborist before performing this operation.

3.0 Liquidated Damages. The Vendor is responsible to remove trash and debris prior to each mowing occurrence. If the Vendor fails to effectively remove trash and debris based on the observance of the Designated City of Rockford representative or his designee, the City will notify him of default. The City will assess liquidated damages against the Vendor in the amount of 50% per site, per mowing occurrence. This amount may be deducted from any payments due the Vendor by the City.

D-5

Street Sweeping

THE CITY OF
ROCKFORD
ILLINOIS, USA

STREET SWEEPING
STANDARD OPERATING PROCEDURES

June 2015

1.0 General

It is the responsibility of the City of Rockford to provide street sweeping services to its citizens in an effort to enhance the overall stormwater quality, health and aesthetic beauty of the City. This process shall begin in the spring season, as weather conditions allow and continue in various cycles thru the autumn season to capture fallen leaves. The protocol for street sweeping activities is as follows:

2.0 Equipment

1. Contracted – City contractor shall provide a total 5 street sweepers comprised of both mechanical and vacuum models for Arterial, Residential, Central Business District and municipal parking lot sweeping.

2. Internal – City shall maintain a total of 2 vacuum sweepers for special event sweeping as well as emergency response to soil & debris from weather related events or accidental loose material spills.

3. Dump Trucks – City shall have on hand 2 tandem axle haul trucks for the immediate removal of internally generated street sweepings to an appropriate landfill site.

3.0 Personnel

1. The Street Superintendent will oversee street sweeping operations at the administrative level and will assign 2 field supervisors, one as primary and one secondary, to manage day to day sweeping operations. The primary field supervisor is responsible for managing and scheduling the city's sweeping contractor as well as overseeing any internal sweeping activities. Field supervisors shall inspect and approve all street sweeping activities to ascertain the quality of work meets City standards. The secondary supervisor will oversee operations in the absence of the primary supervisor.

2. A sufficient number of City of Rockford field staff, usually 8 to 10 employees, will be trained in the operation of street sweepers in order to maintain qualified individuals on staff to provide Emergency Street sweeping in order to address debris or material spills as well as cleanup subsequent to windstorms or flooding.

    a. This training shall be in accordance with the Stormwater and Environmental Education Standard Operating Procedures.
    b. All training records shall be saved and maintained by the street supervisor. All sign in sheets and training records may be kept on either electronic and/or paper files.

3. The City sweeping contractor (see appendix A) shall provide sufficient staffing to complete their various cycles within a time frame that is acceptable to the City.

4.0 Material Disposal

The City and/or its contractor shall dispose of all street sweepings at a licensed landfill facility. Street sweepings shall not be utilized for general backfill under any circumstances. The cost for disposal shall be the responsibility of the entity or vendor generating the material at a price negotiated prior to beginning seasonal sweeping operations.

5.0 Scheduling

The following street sweeping schedule is weather dependent and will begin subsequent to each winter season and continue thru late November. The schedule should be re-evaluated annually and adjusted based on weather conditions.

1. Arterial Streets – Arterial streets will be swept 3 times by the City's contractor beginning with the first cycle in April, the second in late June or early July, and the third cycle in September. Median tops are to be cleaned in conjunction with the first and third cycle of arterial street sweeping.

2. Central Business District – What is considered the Central Business District will be swept by the City's contractor twice a month beginning in April and ending late November, between the hours of midnight and 7 AM for a total of 14 to 16 cycles.

3. Municipal Parking Lots – The 38 municipal surface lots owned by the City of Rockford will be swept by the City's contractor once a month beginning in April and ending late November for a total of 7 to 8 cycles.

4. Residential Streets – Residential streets shall be swept by the City's contractor twice a year; once in the spring beginning in late April continuing for approximately six to eight weeks until completion. The second residential sweeping cycle will begin late September / early October continuing for approximately 8 to 10 weeks as weather will allow.

5. Special Events – The frequency of Special Events street sweeping is dependent on the number of scheduled events and their potential to produce litter and debris. On average, there are four to six of these functions annually. Special Events street sweeping will normally be performed by city staff utilizing city owned vacuum sweepers. Special events can include but not be limited to:

    a. Memorial Day Parade
    b. St. Patrick's Day Parade
    c. Fourth of July Parade & Fireworks
    d. Labor Day Parade
    e. Annual Holiday Stroll (beginning in 2013)

6.0 Documentation and Record Management

The Street Superintendent and Field Supervisors shall be responsible for the collection and reporting of the following data:

1. Curb miles swept shall be recorded on a daily basis (internal & external).
    a. Contractor shall track curb miles they have swept and provide to the City by December 31st of each year.
    b. All records of miles swept shall be maintained electronically within the Street Division share drive.

2. Daily street sweeping tonnage (internal & external).
    a. Contactor shall track daily tonnage they have collected and provide to the City by December 31st of each year.
    b. All records of tonnage swept shall be kept electronically within the Street Division share drive.

3. Regular & overtime man-hours (internal only).
    a. Hours worked shall be tracked within the City's timekeeping system and the Street Division share drive.

4. Log of all special events or emergency street sweeping shall include location/area, man-hours, tonnage and type of material removed.
    a. Records of special events sweeping shall be logged and kept within the Street Division share drive. Emergency street sweeping records shall be recorded within the Hansen request for service program.

5. Street sweeping mileage shall be evaluated as noted above and the mileage determination shall be documented along with the mileage that was actually completed.

D-6

Pesticide, Herbicide and Fertilizer Applications

D-6

Pesticide, Herbicide and Fertilizer Applications

THE CITY OF ROCKFORD ILLINOIS, USA

PESTICIDE, HERBICIDE AND FERTILIZER APPLICATIONS

STANDARD OPERATING PROCEDURES FOR CITY OF ROCKFORD

June 2015

1.0 GENERAL

The purpose of this standard operating procedure is to comply with Part II, A, 6, a of the City of Rockford's NPDES Stormwater Permit (ILS000001). This document addresses City of Rockford procedures when applying pesticides, herbicides and fertilizers on City owned properties.

2.0 LICENSING/PERMITTING

The City of Rockford has submitted and received the IEPA General NPDES Permit for Pesticide Application Point Source Discharges (ILG870147). The City is a Level 1 applicator based on IEPA's designations and shall base their application procedures on those requirements. In addition, City of Rockford employees who apply pesticides, herbicides & fertilizers shall be trained and licensed through the Illinois Department of Agriculture's (IDOA), Pesticides Use and Regulation Program (http://www.agr.state.il.us/Environment/Pesticide/usereg.html). As licensed employees are within the street division all training and management of licensing shall be tracked by the Forestry Supervisor.

The City requires all contracted applicators to comply with these and any other applicable requirements. Proof of Licensing shall be provided to the City prior to execution of City contracts.

3.0 PROCEDURES

3.1 General

Staff applying chemicals shall wear all appropriate personal protective equipment and fully understand their rights to know what chemicals they are applying through the availability of on-site Material Safety Data Sheets.

a. Though the City does not presently apply fertilizers, future applications will be based on soil test results prior to application to avoid the economic and environmental costs that can be incurred with excess fertilizer use.
b. Staff and contractors will follow label directions when storing, handling, mixing, recycling, and disposing of chemicals and empty containers.
c. Applicators shall make every effort not to transfer, pour or dispose of chemicals indoors. When those activities occur outdoors, handling of chemicals shall be a minimum of fifty (50) feet from storm drains, or drainageways.
d. Staff and contractors will have spill cleanup materials available in case of a spill and clean up chemical spills promptly with dry methods, if possible. All spills shall be reported to their supervisor immediately and documented. Report shall indicate: location, chemical spilled, approximate quantity, and how it was cleaned up. The Stormwater and Environmental Team (SWET) shall be notified within 24 hours of the spill and shall initiate an illicit discharge investigation as detailed in the Illicit Discharge Detection and Elimination Program Standard Operating Procedures. The Fire Department Hazardous Material Team or 911 Emergency shall be notified for any spill that exceeds the threshold quantity as noted on its Safety Data Sheet.
e. Spill Kits are located in the chemical storage room at the City Yards.

3.2 Application

a. All pesticides, herbicides and fertilizers shall be used strictly in accordance with their labels, ILG87 and all applicable federal, state, and local laws, regulations, and ordinances, as applicable.
b. Always follow the manufacturer's recommendation on handling and applying the chemicals.
    1. Chemicals should not be applied during rain storms, within 24 hours of a forecast rain storm or while the area is being irrigated.
    2. Chemicals should not be applied right before or during high-wind events nor should any chemical susceptible to drift be applied if wind conditions are likely to exceed 5 MPH.
    3. Apply only the recommended amounts of chemicals. Chemical application in excess of the manufacturers label is not an environmentally responsible practice and could promote excessive runoff or soil leaching.
c. Use caution not to overspray (applying in an undesired location) the chemicals onto an impervious surface, such as a sidewalk or roadway and clean up all over-sprayed chemicals.
d. Do not apply landscape chemicals to frozen ground or during snow melt.
e. Do not over water recently fertilized areas to minimize the amount of runoff into streets and into storm drains.
f. Only mix enough chemical to complete the application. Excess or expired chemicals shall be returned to the supplier for proper disposal.

3.3 Application Schedule

The following is a list of City maintained locations and approximate pesticide / herbicide application schedules for the targeted areas within the City of Rockford (Appendix A – Detailed application schedule):

a. Sidewalks – May 1st thru June 30th
b. Raised Medians – May 1st thru June 30th (Attachment B).
c. Paved Ditches - June 1st thru July 31st
d. Creeks – July 31st thru October 31st
e. Ash Trees – June 1st thru August 31st - City-wide (Attachment C)

Note: This is a tentative schedule; actual schedule may vary due to weather conditions.

A log shall be kept indicating the amount of chemicals used during each application event.

3.4 Chemical Storage

All chemicals shall be stored according to label directions and shall not exceed threshold quantities as stated on the Safety Data Sheets.

All herbicides, fungicides and insecticides shall be stored in an enclosed, secure building at the maintenance facility. The materials shall be stored in accordance with all current federal, state and local laws, regulations and ordinances. Access to the storage area should be limited to licensed pesticide operators or applicators. Non-licensees requesting access to the storage area for any reason should be accompanied by a licensed pesticide operator or applicator.

3.5 Application Equipment

The following items shall be required for maintenance and use of application equipment:

a. No sprayer should be used that is not approved for the type of chemical being applied.
b. Spreaders shall be used to apply materials that are available only in granular forms.
c. Fertilizers and pesticides should be loaded into application equipment over impervious surfaces, so that any spills can be cleaned without seeping into ground water.
d. Properly calibrate application equipment according to manufactures instructions to ensure the recommended amount of chemical is applied.

e. To avoid build up and cross contamination, application equipment shall be cleaned after each use. Cleaning shall be completed according to manufacturer's recommendations.

4.0 EMPLOYEE TRAINING

All training shall be in accordance with the Standard Operating Procedures for Stormwater and Environmental Education. Training shall also be completed as required by the employee's IDOA Pesticides Applicators License. Records of employee training will be maintained by the Forestry Supervisor in the Street Division.

5.0 RECORD KEEPING

All application and maintenance records for the City of Rockford shall be kept by the Street Division of Public Works. For contracted PHF applications the Street Division shall receive copies of the maintenance records from the contractor by December 15th of every year or as directed otherwise.

Attachment A

ROCKFORD
ILLINOIS USA

Timothy S. Hanson
Director of Public Works
Department of Public Works

May 16, 2013

RE: Application of Pesticide/Herbicide and related schedule.

The following is a list of locations and approximate pesticide / herbicide application schedules for the targeted areas within the City of Rockford:

1. Sidewalks – May 1st thru June 30th
   a. CBD – Area bordered by 4th St. on the east, Winnebago St. on the west, Jefferson St./Park Ave. on the north and Cedar St./Chestnut St. / Walnut St. on the south.
   b. CBD – 7th St. between E. State St. and 6th Ave.
   c. CBD – Broadway between 6th St. and 9th St.

2. Raised Medians – May 1st thru June 30th (see attached list for locations).

3. Paved Ditches - June 1st thru July 31st
   a. Northwest Drainage Ditch – Between W. Riverside Blvd. and Kent Creek.
   b. Westleyan / SE Drainage Ditch – Between Ohio Pkwy. and Kishwaukee St.
   c. Upland / Holmes Drainage Ditch – Between Wilmette Ct. and Harrison Ave.

4. Creeks – July 31st thru October 31st
   a. Keith Creek – Between Fairview Blvd. and Kishwaukee St. (Incremental, applied over a 5 year period).
   b. Kent Creek – Between Central Ave. and Cedar St. (Incremental, applied over a 3 year period).

5. Ash Trees – June 1st thru August 31st - City-wide (see attached list)

Note: This is a tentative schedule; actual schedule may vary due to weather conditions.

425 East State Street, Rockford, Illinois 61104-1068 USA
Phone (815) 987-5670 Fax (815) 967-6942 www.rockfordil.gov

Attachment B

MEDIAN LIST

	LIN FT	START	COMP
RIVERSIDE FROM N MAIN TO ROBEY AVE	258		
MAIN FROM RIVERBLUFF TO ELMWOOD	5847		
CENTRAL FROM LIBERTY TO 50' SOUTH OF AUBURN	1090		
AUBURN ST FROM SUNSET TO OAKLEY	574		
RIDGE AVE 40' NORTH AND SOUTH OF AUBURN	100		
RIDGE 100' NORTH OF WHITMAN	100		
SOUTH BOUND 2ND ST OFF RAMP FROM WHITMAN BRIDGE (LONG MEDIAN)	1064		
FOREST HILLS 200' SOUTH OF LANDSTROM	450		
N 2ND ST FROM WHITMAN TO SPRING CREEK	2863		
N 2ND ST JERSEY WALL OVER SPRING CREEK BRIDGE	3118		
WHITMAN FROM N MAIN TO N 2ND ST	2757		
WHITMAN FROM N MAIN TO LEE ST	1882		
KILBURN FROM JEFFERSON TO BRUCE	2357		
SCHOOL ST 100' EAST AND WEST OF CENTRAL	200		
KILBURN FROM SAFFORD TO 100' EAST OF CENTRAL	480		
CENTRAL 200' NORTH AND SOUTH OF KILBURN	300		
CENTRAL 100' NORTH AND SOUTH OF HALSTED	200		
CENTRAL 100' NORTH AND SOUTH OF RIVERSIDE	200		
RIVERSIDE WEST OF CENTRAL	825		
SPRING CREEK FROM RIVER TO STARKWEATHER	393		
SPRING CREEK FROM 150' WEST OF ALPINE TO 200' EAST OF SPRINGBROOK	830		
SPRING CREEK FROM SHAW WOODS TO TANGLEWOOD	3383		
ALPINE FROM RIVERSIDE TO BROOKVIEW	676		
ALPINE FROM DEMPSTER TO 150' SOUTH OF HARRISON	5997		
ALPINE FROM SAMUELSON TO SANDY HOLLOW	4740		
ARRISON FROM S MAIN TO PRAIRIE RD	1180		
HARRISON FROM 18TH ST TO ALPINE	7261		
HARRISON FROM ALPINE TO MULFORD (NEW 08)	7210		
20TH ST FROM ALTON TO CENTER ST	1113		
BROADWAY FROM ALPINE TO POINT	786		
NEWBURG FROM ALPINE TO QUENTIN RD	643		
NEWBURG 200' EAST AND WEST OF MULFORD	1074		
CHARLES ST FROM 28TH ST TO PARKSIDE	2618		
FAIRVIEW BLVD 100' NORTH AND SOUTH OF MORSAY DR	150		
MORSAY 150' EAST OF FAIRVIEW	350		
MULFORD FROM HARRISON TO E RIVERSIDE	25533		
SPRINGBROOK 150' EAST OF PERRYVILLE	290		
BELL SCHOOL 100' SOUTH OR RIVERSIDE	100		
E STATE FROM LYFORD TO MILL RD	6097		
E STATE FROM MILL RD TO ROXBURY	5595		
COLLEGE EAST AND WEST OF SEMINARY	185		
MORGAN ST BRIDGE WALL EAST AND WEST	2026		
	101,830		

G:MARK / MEDIAN LIST

Attachment C

Emerald Ash Borer Treatment Log as of August 26, 2015

EAB TREATMENTS - SW

						PESTICIDE USED			ACTIVE INGREDIENT
						TREE-AGE			IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
1	5-19-15	1209 Corbin St.	4	10	50	Myron Cottage	47°C Cloudy	#144229	Slow uptake
2	" "	1215 Corbin St.	2	21	120	Myron Cottage	47°C Cloudy	#144230	
3	" "	1127 Corbin St.	6	25	160	Myron Cottage	47°C Cloudy	#144242	
4	" "	1117 Corbin St.	4	22	135	Myron Cottage	47°C Cloudy	#144243	
5	" "	909 Corbin St.	2	17	85	Myron Cottage	47°C Cloudy	#144245	
6	" "	825 Kent St.	22	23	150	Myron Cottage	51°C Cloudy	#144244	
7	" "	907 Kent St.	2	19	100	Myron Cottage	51°C Cloudy	#146956	
8	5-20-15	1215 Kent St.	2	9	40	Myron Cottage	42°C Cloudy	#146959	
9	" "	" "	6	9	40	Myron Cottage	42°C Cloudy	#146959	
10	" "	906 Rose Ave	22	18	90	Myron Cottage	42°C Cloudy	#146955	
11	" "	1703 Hulin "	6	7	40	Myron Cottage	46°C Cloudy	#146970	Slow uptake
12	" "	15275 Central Ave.	5	25	160	Myron Cottage	45° Light Rain	#144218	
13	5-21-15	2362 Meadow View Ln.	4	6	25	Myron Cottage	44°C Cloudy	#144228	
14	" "	" "	6	6	25	Myron Cottage	44°C Cloudy	#144228	
15	" "	2502 Forsythia Dr.	3	9	40	Myron Cottage	44°C Cloudy	#144226	
16	" "	2160 Gilby Rd	3	21	120	Myron Cottage	55° Partly Sunny	#136845	
17	"Empty Lot"	2000 Gilby Rd & Bird St.	2	11	50	Myron Cottage	55° Partly Sunny	#146957	
18	" "	416 Webster Ave.	7	21	120	Myron Cottage	55° Partly Sunny	#144214	
19	" "	2028 Green St.	12	27	180				By Pass Treatment
20	" "	615 Royal Ave.	6	27	180	Myron Cottage	56° Partly Sunny	#143174	→ NW Rockford

EAB TREATMENTS - SE

PESTICIDE USED: TREE-AGE

ACTIVE INGREDIENT: IMMEMECTIN BENZOATE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
1	5-29-15	Empty Lot 901 13th St.	8	14	70	Myron Cottage	68° Cloudy	*141904	
2	" "	" "	10	15	70	Myron Cottage	68° Cloudy	*141904	
3	" "	" "	12	17	85	Myron Cottage	68° Cloudy	*141904	
4	" "	918 13th St.	7	10	50	Myron Cottage	68° Cloudy	*141894	Very slow uptake
5	" "	1408 12th St.	23	16	75	Myron Cottage	77 Cloudy	*141905	
6	6-2-15	1625 9th Ave.	1	18	90	Myron Cottage	52° cloudy +sun	*141892	
7	" "	" ↓ "	4	16	75	Myron Cottage	52° cloudy +sun	*141892	
8	" "	1629 9th Ave	3	15	70	Myron Cottage	52° cloudy +sun	*141893	
9	" "	1636 9th Ave.	5	16	75	Myron Cottage	52° cloudy +sun	*141881	
10	" "	1633 9th Ave.	5	21					Present Top Crown Dieback Past + Present
11	" "	1641 9th Ave.	2	17	85	Myron Cottage	62° Sunny	Field	
12	" "	" "	6	14	70	Myron Cottage	62° Sunny	Field	
13	6-3-15	2227 9th Ave.	6	18	90	Myron Cottage	52° Sunny	*141880	
14	" "	2215 10th Ave.	4	4	25	Myron Cottage	62° Sunny	*141879	
15	" "	1211 12th Ave	2	7	40	Myron Cottage	65° Sunny	*141965	
16	" "	1130 17th Ave.	5	21	120	Myron Cottage	72° Sun	*142283	
17	6-4-15	624 Blenheim Dr.	5	4	25	Myron Cottage	68° Cloudy	*141730	
18	" "	1820 Colorado Ave.	5	14	70	Myron Cottage	70° Cloudy	*141993	
19	" "	3303 California Rd.	4	11	50	Myron Cottage	70° Cloudy	*142232	
20	" "	1903 Arizona Ave.	10	9	40	Myron Cottage	70° Cloudy	*141969	

EAB TREATMENTS - SE						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
161	5-22-15	815 28th St.	2	8	40	Myron Cattage	55° Sunny	supervisor	
162	" "	6802 Blenheim Dr.	4	14	70	Myron Cattage	55° Sunny	Supervisor	← #141731
163	" "	4864 flintridge	6	23	150	Myron Cattage	66° Sunny	Supervisor	
164	5-26-15	517 Washington St.	3	20	110	Myron Cattage	70° Cloudy	#141830	
165	" "	331 Washington St.	23	12	50	Myron Cattage	70° Rain	#141832	
166	5-27-15	1220 31st St.	4	11	50	Myron Cattage	64° Cloudy	#141870	
167	" "	512 29th St.	3	14	70	Myron Cattage	65° Cloudy	#141738	
168	" "	608 27th St.	1	18	90	Myron Cattage	66° Cloudy	#141737	
169	" "	524 27th St.	2	25	160	Myron Cattage	66° Cloudy	#134405	
170	" "	604 27th St.	3	4	25	Myron Cattage	66° Cloudy	#141733	very slow uptake
171	" "	1504 24th St.	5	13	70	Myron Cattage	66° Cloudy	#141988	
172	5-28-15	1614 24th St.	3	11	50	Myron Cattage	57° Partly Sunny	#141992	
173	" "	908 21st St.	7	15	70	Myron Cattage	57° Partly Sunny	#141877	
174	" "	2715 2nd Ave.	7	8	40	Myron Cattage	57° Sunny	#141808	
175	" "	1520 20th St	8	15	70	Myron Cattage	66° Sunny	142278	
176	" "	1803 18th St.	12	18	90	Myron Cattage	66° Sunny	#141878	
177	" "	1919 15th St.	23	12	50	Myron Cattage	76° Cloud & Sun	#142274	
178	" "	" "	24	11	50	Myron Cattage	76° Cloud & Sun	#142274	
179	6-4-15	2117 Calgary Ct.	3	10	50	Myron Cattage	77° Cloudy	#142252	
180	6-9-15	304 S. 2nd St.	2	9	40	Myron Cattage	62° Cloud & Sun	#147402	

EAB TREATMENTS - SW

						PESTICIDE USED: TREE-AGE			ACTIVE INGREDIENT: IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
21	5-19-15	1707 Clifton Ave.							Notice Orange Dot over ½ Decline
22	5-22-15	224 Webster Ave.	5	22	135	Myron Cottage	71° Sunny	#144217	
23	6-30-15	1325 Blake St.	4	19	100	Myron Cottage	60° Fog	#146712	
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EAB TREATMENTS - NW

						PESTICIDE USED: TREE-AGE			ACTIVE INGREDIENT: IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
1	5-21-15	615 Royal Ave	6	27	180	Myron Cattage	56° Partly Sunny	*143174	
2	5-26-15	710 Royal Ave.	3	16	75	Myron Cattage	67° Cloudy	*143173	
3	" "	830 Royal Ave.	1	21	120	Myron Cattage	69° Cloudy	*143172	
4	" "	607 Royal Ave.	1	27	180			*143175	By Pass (Badly Lifting Sidewalk)
5	6-22-15	215 N. Day Ave.	5	24	155	Myron Cattage	73° Cloudy	*143199	
6	" "	211 N. Day Ave	5	24	155	Myron Cattage	73° Cloudy	*143200	
7	" "	304 Miriam Ave.	22	20	110	Myron Cattage	74° Light Rain	*143176	
8	" "	↓	5	18	—	—	—	*143176	By Pass Structural Damage
9	" "	415 N Independence Ave.	5	21	120	Myron Cattage	72° Light Rain	*143012	
10	6-23-15	714 N. Day St.	6	15	—	—	—	*143195	By Pass (Marked + Letter)
11	" "	118 N Johnston Ave.	3	24	155	Myron Cattage	67° Sunny	*143970	
12	" "	611 N. Johnston Ave.	5	14	70	Myron Cattage	67° Sunny	*143969	
13	" "	811 N. Johnston Ave.	4	24	155	Myron Cattage	71° Sunny	*143967	
14	" "	903 N. Johnston Ave.	5	21	120	Myron Cattage	74° Sunny	*143963	
15	" "	916 N. Johnston Ave.	5	26	170	Myron Cattage	76° Sunny	*143965	
16	6-24-15	2319 Sherman Ave.	4	21	120	Myron Cattage	60° Cloudy	*143114	
17	" "	2307 Sherman Ave.	3	24	155	Myron Cattage	61° Cloudy	*143113	
18	" "	2206 Sherman Ave	20	20	110	Myron Cattage	63° Cloudy	*143966	
19	" "	2003 Sherman Ave	4	25	160	Myron Cattage	65° Cloudy	*143112	
20	" "	2201 School St.	—	—	—	—	—	*143193	No Ash tree Present

EAB TREATMENTS - SE

PESTICIDE USED: TREE-AGE

ACTIVE INGREDIENT: IMMEMECTIN BENZOATE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	previous HANSEN REQUEST #	COMMENTS
181	6-5-15	2212 Montana Ave.	3	11	50	Myron Cottage	67° Cloudy	#142244	Very Very Slow Uptake (Take off Treatment List)
182	" "	3503 Wesleyan Ave.	2	9	40	Myron Cottage	69° Cloudy	#142271	
183	" "	" "	3	12	50	Myron Cottage	69° Cloudy	#142271	
184	" "	3115 Wesleyan Ave	2	14	70	Myron Cottage	74° Cloudy	#142243	
185	" "	2306 Richard Ave	22	11	50	Myron Cottage	74° Cloudy	#142272	
186	" "	" "	6	12	50	Myron Cottage	74° Cloudy	#142272	
187	6-8-15	440 Black Hawk Park Ave.	#1	11	50	Myron Cottage	61° Sunny	#147795	#1 Eastbound
188	" "	" "	#2	11	50	Myron Cottage	61° Sunny	#147795	#2
189	" "	" "	#3	11	50	Myron Cottage	61° Sunny	#147795	#3
190	" "	" "	#4	13	50	Myron Cottage	61° Sunny	#147795	#4
191	" "	" "	#5	17	85	Myron Cottage	69° Sunny	#147795	#5
192	" "	" "	#6	16	75	Myron Cottage	69° Sunny	#147795	#6
193	" "	" "	#7	15	70	Myron Cottage	76° Sunny	#147795	#7
194	" "	" "	#8	14	70	Myron Cottage	76° Sunny	#147795	#8
195	" "	3105 S. 1st St. (North Empty Lot)	1	8	40	Myron Cottage	79° Sunny	#147408	
196	6-9-15	409 S. 1st St.	1	9	40	Myron Cottage	63° Cloudy	#147404	
197	" "	" "	6	8	40	Myron Cottage	63° Cloudy	#147404	
198	" "	405 S. 1st St.	9	8	40	Myron Cottage	63° Cloudy	#147773	
199	" "	401 S. 2nd St.	10	11	50	Myron Cottage	76° Clouds + Sun	#147401	
200	" "	410 S. 3rd St.	3	16	75	Myron Cottage	76° Clouds + Sun		

EAB TREATMENTS - SE

						PESTICIDE USED			ACTIVE INGREDIENT
						TREE-AGE			IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
201	6-10-15	934 S. 3rd St.	6	24	155	Myron Cottage	76° Sun	#147784	
202	" "	2020 S. 4th St.	6	11	50	Myron Cottage	76° Sun	#142275	
203	" "	2108 S. 4th St.	7	10	—			#142276	Tree Completely Dead
204	" "	615 S. 5th St.	14	21	120	Myron Cottage	86° Sunny	#141967	
205	" "	" "	21	13	70	Myron Cottage	86° Sunny	#141967	
206	" "	234 Highland Ave	8	8	40	Myron Cottage	86° Sunny	#141867	Slow Very Uptake
207	" "	" "	12	10	50	Myron Cottage	86° Sunny	#141867	
208	6-11-15	217 S. Prospect St.	4	15	70	Myron Cottage	70° cloudy	#141869	
209	" "	235 S. Chicago Ave.	23	22	135	Myron Cottage	72° T-Storm	#141866	
210	" "	301 S. Chicago Ave	10	12	50	Myron Cottage	72° T-Storm	#141833	
211	" "	2265 London Ave	3	—	—			#141868	No Tree (but) Remove Spot & Fresh Grass
212	" "	524 St. Louis Ave.	3	6	25	Myron Cottage	70° T-Storm	#141831	
213	" "	3911 Shirley Rd.	1	21	120	Myron Cottage	70° T-Storm	#141728	
214	6-12-15	2703 Hooker Ave	3	20	110	Myron Cottage	63° Light Fog	#141829	
215	" "	" "	5	18	90	Myron Cottage	63° Light Fog	#141829	
216	" "	807 Jordan Pl	6	16	75	Myron Cottage	68° Light Fog	#141742	
217	" "	[redacted]	[redacted]	[redacted]	[redacted]			#141802	Same Location
218	" "	3616 Larson Ave.	2	16	75	Myron Cottage	63° Mist	#141741	
219	" "	" "	5	15	70	Myron Cottage	63° Mist	#141741	
220	" "	3817 Larson Ave	2	24	155	Myron Cottage	63° Mist	#141732	

EAB TREATMENTS - NE						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
41	6/5/15	625 Calvin Park BLVD	4	15	70	A-24	67° Cloudy	141516	
42	6/5/15	3620 Crosby ST	6	9	40	A-24	69° Cloudy	141693	
43	6/5/15	3608 Crosby ST	3	18	90	A-24	70° Cloudy	141696	
44	6/5/15	3906 Crosby ST	2	20	110	A-24	70° Cloudy	141676	
45	6/5/15	3906 Crosby ST	4	18	90	A-24	70° Cloudy	141676	
46	6/8/5	120 Skylark Dr	6	18	90	A-24	67° P/Cloudy		
47	6/8/15	4340 Marsay Dr	4	13	70	A-24	74° Fair		
48	6/8/15	316 Hemlock Ln	2	25	160	A-24	77° P/Cloudy		
49	6/8/15	316 Hemlock Ln	6	22	135	A-24	77° P/Cloudy		
50	6/9/15	3906 Crosby ST	21	16	75	A-24	60° Cloudy	141676	
51	6/9/15	516 Hemlock Ln	4	20	110	A-24	64° Cloudy		
52	6/9/15	3000 Rural ST		23	150	A-24	70° Cloudy		In Park on W
53	6/10/15	3000 Rural ST		20	110	A-24	75° P/Cloudy		In Park on Rural side
54	6/10/15	507 Vale	6	19	100	A-24	83° Cloudy		~~In Park on Botsford Ave~~
55	6/10/15	507 Vale	3	8	40	A-24	83° Cloudy		
56	6/10/15	602 James	23	11	50	A-24	85° Cloudy		
57	6/10/15	431 Dawson Ave	23	32	240	A-24	86 m/Cloudy		
58	6/11/15	3603 Greenwood	3	13	70	A-24	71° Cloudy		Incomplete - Complete
59	6/11/15	3603 Greenwood	6	14	70	A-24	73° Cloudy		
60	6/17/15	317 Fairview	7	18	90	A-24	66° Cloudy		

EAB TREATMENTS - SE

						PESTICIDE USED			ACTIVE INGREDIENT
						TREE-AGE			IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
1	6-15-15	2931 Oak Grove W.	4	18	90	Myron Cottage	72° Rain	#141828	
2	" "	" "	7	19	100	Myron Cottage	72° Rain	#141828	
3	" "	" "	13	15	70	Myron Cottage	72° Rain	#141828	
4	" "	720 Woodland Dr.	4	24	155	Myron Cottage	75° Cloudy	#141804	
5	" "	1736 Sexton Dr.	6	9	40	Myron Cottage	75° Cloudy	#141997	
6	" "	504 Sawyer Rd.	—	—	—	—	—	#147789	No Ash tree Present
7	" "	824 Taft Rd.	2	14	70	Myron Cottage	76° Cloudy	#142439	
8	6-16-15 "	711 Seminary St.	2	15	70	Myron Cottage	66° Partly Sunny	#147779	Very slow uptake
9	" "	717 Seminary St.	2	14	70	Myron Cottage	66° Partly Sunny	#147780	Very slow uptake
10	" "	809 Seminary St.	6	6	25	Myron Cottage	71° Sunny	#147781	Very slow Uptake
11	" "	815 Seminary St.	1	9	40	Myron Cottage	71° Sunny	#147782	Very slow uptake
12	" "	2902 Sawell St.	7	6	25	Myron Cottage	75° Sunny	#142437	
13	6-17-15	3022 Utah Pl.	5	12	50	Myron Cottage	59° Cloudy	#141968	
14	" "	3208 Minnesota Dr.	4	9	40	Myron Cottage	59° Cloudy	#141994	
15	" "	3445 Minnesota Dr.	21	21	120	Myron Cottage	62° Cloudy	#142281	
16	" "	3316 Thalma St.	6	7	40	Myron Cottage	62° Cloudy	#142257	
17	" "	2303 Cornell Dr.	11	25	160	Myron Cottage	68° Cloudy	#142279	
18	" "	2208 Ohio PKWY	23	27	180	Myron Cottage	68° Cloudy	#142273	
19	" "	" "	21	20	110	Myron Cottage	68° Cloudy	#142273	
20	6-18-15	1316 Farmella St.	5	7	40	Myron Cottage	71° Cloudy	#141907	

EAB TREATMENTS - SE

						PESTICIDE USED			ACTIVE INGREDIENT
						TREE-AGE			IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
221	6-18-15	6324 Parmelle St	2	7	40	Myron Cottage	71° Cloudy	*141906	
222	" "	1913 EastGate PKWY	6	22	135	Myron Cottage	72° Cloudy	*128711	
223	" "	2342 EastGate PKWY	—	—	—	—	—	*141996	No Ash tree present
224	" "	923 Parkside Dr.	1	25	160	Myron Cottage	77° Cloudy	*141724	
225	" "	704 Parkside Dr.	3	24	155	Myron Cottage	77° Cloudy	*141723	
226	" "	408 Parkside Dr.	—	—	—	—	—	*141722	No Ash tree present
227	6-19-15	2116 Portland Pl.	4	9	40	Myron Cottage	56° Sunny	*142250	
228	" "	4015 Laramie Ln.	3	9	40	Myron Cottage	56° Sunny	*142254	
229	" "	" "	6	8	40	Myron Cottage	56° Sunny	*142254	
230	" "	4112 Laramie Ln.	7	9	40	Myron Cottage	61° Sunny	*142255	
231	" "	" "	2	8	40	Myron Cottage	61° Sunny	*142255	
232	" "	4125 Laramie Ln.	5	14	70	Myron Cottage	61° Sunny	*142256	
233	" "	3415 Michael Dr.	5	9	40	Myron Cottage	67° Sunny	*141739	
234	6-30-15	2119 Christina St.	4	19	100	Myron Cottage	62° Fog	*147785	
235	" "	2216 Christina St.	4	16	17	Myron Cottage	64° Cloudy	*147788	
236	7-1-15	2201 Harrison Ave.	13	14	70	Myron Cottage	59° Cloudy	*142434	
237	" "	" "	11	—	—	Myron Cottage	—	*142434	
238	" "	" "	9	12	50	Myron Cottage	59° Cloudy	*142434	
239									
240									

EAB TREATMENTS - NE

						PESTICIDE USED			ACTIVE INGREDIENT
						TREE-AGE			IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
61	6-22-15	518 Fairview	6	16	75	A-24	74° Cloudy	141705	
62	6-23-15	1410 Benton st	4	6	25	A-24	65° Sunny	141657	
63	6-23-15	425 Gardner	2	11	50	A-24	65° Sunny	need #	
64	6-23-15	425 Gardner	4	11	50	A-24	65° Sunny	need #	
65	6-23-15	419 Gardner	2	12	50	A-24	69 Sunny	need #	
66	6-23-15	419 Gardner	4	13	70	A-24	69 Sunny	need #	
67	6-23-15	401 Gardner	5	26	170	A-24	72 Sunny	need #	
68	6-23-15	406 Gardner	4	17	85	A-24	77 Sunny	need #	
69	6-24-15	312 N. Gardner	2	7	40	A-24	62 cloudy	need #	very slow intake
70	6-24-15	533 London	21	23	150	A-24	67 cloudy	need #	
71	6-24-15	603 N. chicago Ave							Tree Has been Removed
72	6-24-15	516 N. Chicago	8	8	40	A-24	69 cloudy	need #	
73	6-24-15	303 N. Prospect	6	17	85	A-24	74 cloudy	need #	
74	6-29-15	5872 Shelford	1	24	155	A-24	62 fog	need #	
75	6-29-15	5872 Shelford	3	23	150	A-24	62 fog	need #	
76	6-29-15	1912 Shaw woods	4	7	40	A-24	64 cloudy	need #	uns
77	6-29-15	773 N. 1st St	2	18	90	A-24	65 cloudy	need #	
78	6-29-15	724 N. 1st St	2	11	50	A-24	69 cloudy	need #	
79	6-29-15	730 N 1st ST	2	20	110	A-24	69 cloudy	need #	
80	7-1-15	602 N. 1st	2	6	25	A-24	58 cloudy	147774	

EAB TREATMENTS - NW						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
21	6-24-15	2223 School St.	21	17	85	Myron Cottage	73° Cloudy	#143194	
22	" "	815 Hoban Ave.	5	24	155	Myron Cottage	75° cloudy	#143236	
23	6-25-15	711 Alliance Ave.	2	30	225	Myron Cottage	67° Cloudy	#143198	
24	" "	2505 Ashland Ave	4	28	195	Myron Cottage	69° Cloudy	#143202	
25	" "	2511 Ashland Ave.	5	30	225	Myron Cottage	77° Partly Sunny	#143201	
26	" "	" "	1	27	180	Myron Cottage	77° Partly Sunny	#143201	
27	" "	2516 Ashland Ave.	2	22	135	Myron Cottage	76° Cloudy	#143237	
28	6-26-15	601 Albert Ave	6	17	85	Myron Cottage	61° cloudy	#143132	
29	" "	2416 Ashland Ave	5	26	170	Myron Cottage	61° Cloudy	#143968	
30	" "	720 N. Sunset Ave.	10	18	90	Myron Cottage	61° Cloudy	#143115	
31	" "	422 N. Sunset Ave	4	17	85	Myron Cottage	61° Cloudy	#143013	
32	6-29-15	314 Underwood St	3	18	90	Myron Cottage	62° fog	8-21-2013 List	
33	" "	452 Underwood St.	6	16	75	Myron Cottage	63° fog	8-20-2013 List	
34	" "	436 Jilson Ave.						#142981	No Ash tree Present
35	" "	528 N. Hartman St	1	8	40	Myron Cottage	70° cloudy	#143357	
36	" "	" "	6	8	40	Myron Cottage	70° Cloudy	#143357	
37	" "	1203 Taylor St.	13	20	110	Myron Cottage	73° Cloudy	List 8-23-2013	
38	" "	1417 Sherman Ave.	1	19	100	Myron Cottage	73° Cloudy	#143025	
39	" "	1427 Sherman Ave.	5	19	100	Myron Cottage	73° Cloudy	#143020	
40	6-30-15	1004 Andrews St.	20	16	75	Myron Cottage	64° Cloudy	#142942	

EAB TREATMENTS - NW

						PESTICIDE USED: TREE-AGE			ACTIVE INGREDIENT: IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
61	7-1-15	1221 Camp Ave	4	25	160	A-24	64° cloudy	143961	
62	7-6-15	703 Cottage Grove	10	18	90	A-24	70° cloudy	142514	
63	7-6-15	1331 Post	4	16	75	A-24	72° cloudy	143463	
64	7-6-15	1326 Post	2	23	150	A-24	74° cloudy	143462	
65	7-6-15	1415 Camp	5	28	195	A-24	76° Rain	139195	
66	7-6-15	1421 Camp	2	12	50	A-24	75° Light Rain	143945	
67	7-8-15	1502 Camp	21	4	25	A-24	54° cloudy	143944	
68	7-8-15	1508 Camp	2	11	50	A-24	54° cloudy	143943	
69	7-8-15	1603 Camp	10	22	135	A-24	57° cloudy	143942	
70	7-8-15	1626 Camp	3	9	40	A-24	61° cloudy	143941	
71	7-8-15	1818 Camp	2	18	90	A-24	64° cloudy	143634	
72	7-8-15	1818 Camp	4	18	90	A-24	64° cloudy	143635	
73	7-8-15	1742 Douglas	2	15	70	A-24	67 cloudy	142516	
74	7-8-15	1742 Douglas	9	7	40	A-24	67° cloudy	need #	
75	7-8-15	1742 Douglas	13	15	56	A-24	67° cloudy	need #	
76	7-8-15	1742 Douglas	11	15	70	A-24	67° cloudy	need #	
77	7-13-15	1788 Douglas	6	8	40	A-24	67° cloudy	142515	
78	7-13-15	2221 Douglas	21	10	50	A-24	71° sunny	142513	
79	7-13-15	2204 Douglas	4	15	70	A-24	74° cloudy	142512	
80	7-13-15	2204 Douglas	23	11	50	A-27	74° cloudy	need #	

EAB TREATMENTS - NW

PESTICIDE USED: TREE-AGE

ACTIVE INGREDIENT: IMMEMECTIN BENZOATE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
1	7-1-15	1325 Blaisdell St.						#143027	No Ash tree Present
2	Location	1333 Blaisdell St.	2	20	110	Myron Cottage	59° Cloudy	Field Location	Empty House
3	" "	704 Irving Ave	21	9	40	Myron Cottage	59° Cloudy	#143011	
4	7-7-15	1503 Yonge St.	6	9	40	Myron Cottage	63° Cloudy	8-8-2013	
5	" "	" "	8	22	135	Myron Cottage	63° Cloudy	8-8-2013	
6	" "	1283 N. Main St.	10	23	150	Myron Cottage	63° Cloudy	#143960	
7	" "	1321 N. Court St.	22	19	100	Myron Cottage	65° Cloudy	#143416	
8	" "	" "	" "	" "	" "	" "	" "	#143417	
9	" "	618 Oakley Ave	3	11	50	Myron Cottage	65° Cloudy	#143010	
10	" "	2008 Shelley Dr.	3	24	155	Myron Cottage	71° Cloudy	#143014	
11	7-8-15	1726 N. Court St.	1	25	160	Myron Cottage	53° Cloudy	#142923	
12	" "	2309 N. Court St.	5	19	100	Myron Cottage	58° Cloudy	#142917	
13	" "	2310 N. Court St.	3	17	85	Myron Cottage	63° Cloudy	#142919	
14	" "	33565 Sun Valley Ter.	6	16	75	Myron Cottage	63° Cloudy	#142584	
15	" "	[illegible]						#142589	
16	" "	33485 Sun Valley Ter.		22	135	Myron Cottage	63° Cloudy	#142590	
17	" "	"		19	100	Myron Cottage	63° Cloudy	#142590	
18	" "	2208 Clinton Pl.	5	14	70	Myron Cottage	66° Cloudy	Blank	2 years (Ago) tree was bypassed because of surface roots & structu
19	" "	1810 Oxford St.	7	11	50	Myron Cottage	66° Cloudy	#142478	
20	7-15-15	1005 Haskell Ave.	3	23	150	Myron Cottage	57° Sunny	#143414	

EAB TREATMENTS - NW

PESTICIDE USED	ACTIVE INGREDIENT
TREE-AGE	IMMEMECTIN BENZOATE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
21	7-9-15	2040 Oxford St.	6	13	70	Myron Cattage	62° Cloudy	#142477	
22	" "	" "	11	14	70	Myron Cattage	62° Cloudy	#142477	
23	" "	1742 Oxford St.	6	21	120	Myron Cattage	62° Cloudy	#142479	
24	" "	1302 National Ave.	2	17	85	Myron Cattage	65° Cloudy	#143443	
25	" "	1210 National Ave.	—	—	—	—	—	#143444	No Ash tree present
26	" "	1214 National Ave.	—	—	—	—	—	#143460	No Ash tree Present
27	" "	1420 Grant Ave.	2	19	100	Myron Cattage	69° Cloudy	#143430	
28	" "	1422 Grant Ave.	5	19	100	Myron Cattage	69° Cloudy	#143429	
29	" "	1404 Grant Ave.	7	23	150	Myron Cattage	70° Cloudy	#143431	
30	7-14-15	1110 Grant Ave.	6	25	160	Myron Cattage	72° Sunny	#143432	
31	" "	1306 Grant Ave.	4	12	50	Myron Cattage	72° Sunny	#143433	
32	" "	2118 Kilburn St.	above 4	31	—	Past Bypass Treatment		→	Orange Dot over 1/2 decline
33	" "	705 Kilburn St.	13	7	40	Myron Cattage	79° Cloudy	#143245	
34	" "	" "	11	7	40	Myron Cattage	79° Cloudy	#143245	
35	" "	" "	8	4	25	Myron Cattage	79° Cloudy	#143245	
36	" "	1011 Haskell Ave.	1	26	170	Myron Cattage	79° Cloudy	#143413	
37	7-15-15	721 Locust St.	4	21	120	Myron Cattage	59° Sunny	#143244	
38	" "	1516 Midway Dr.	6	16	75	Myron Cattage		#142610	
39	" "	1841 Harlem Blvd.	—	—	—	—	→	#143633	No Ash tree present
40	7-20-15	2010 Harlem Blvd.	3	20	110	Myron Cattage	62° Clouds	#142485	

EAB TREATMENTS - NW						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
81	7-13-15	1825 Douglas	2	9	40	A-24	78° Fair	142517	
82	7-13-15	2020 Cumberland	2	15	70	A-24	78°	142476	
83	7-20-15	3318 Charles st	11	20	110	A-24	66°	141740	
84	7-20-15	2102 Cumberland	20	19	100	A-24	69°	142537	
85	7-20-15	2037 Clinton st	2	16	75	A-24	75°	142486	
86	7-20-15	703 Auburn st	9	7	40	A-24	78°	142220	
87	7-20-15	1605 Grace st	6	9	40	A-24	80°	142616	
88	7-20-15	1603 Burton st	10	16	75	A-24	83°	142922	
89	7-20-15	1603 Burton ST	12	16	75	A-24	83°	need #	
90	7-21-15	523 Brown	2	7	40	A-24	64 sunny	142540	
91	7-21-15	523 Brown	6	21	120	A-24	64 sunny	need #	
92	7-21-15	1320 Boilvin Ave	6	20	110	A-24	71 sunny	143461	
93	7-23-15	1211 Garrison Ave	4	7	40	A-24	64° sunny	143439	
94	7-23-15	1211 Garrison Ave	6	9	40	A-24	64° sunny	need #	
95	7-23-15	2216 Dresden	6	26	170	A-24	83° sunny	134733	
96	7-24-15	818 Ellis Ave	6	12	50	A-24	64 cloudy	142533	
97	7-24-15	2416 Ashland ave	5	26	170	A-24	76 cloudy	143968	
98	7-24-15	523 Chisholm Trl	2	20	110	A-24	79 cloudy	143235	
99	7-24-15	1820 Melrose	3	14	70	A-24	82 cloudy	142491	
100	7-27-15	1742 Hancock	4	13	70	A-24		142536	

EAB TREATMENTS - NW

						PESTICIDE USED			ACTIVE INGREDIENT
						TREE-AGE			IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
41	7-15-15	1724 Harlem Blvd.	6	7	40	Myron Cottage	75° Sunny	#143962	
42	" "	"	3	7	"	"	"	#143962	Cell=3 Marked + Letter Structural Damage
43	" "	412 Mulberry St.	5	9	40	Myron Cottage	75° Sunny	Not on List 2013 year	
44	7-16-15	130 N. Church St.	6	8	40	Myron Cottage	63° cloudy	#143441	
45	" "	126 N. Church St.	7	8	40	Myron Cottage	63° cloudy	#143612	Very Sparse + Very Slow Uptake
46	" "	132 N. Church St.	9	8	40	Myron Cottage	64° cloudy	#143613	Very Slow uptake
47	" "	408 Mulberry St.	4	8	40	Myron Cottage	64° cloudy	#143617	Very Slow uptake
48	7-17-15	3333 N. Church St.	9	13	70	Myron Cottage	74° Sunny	#142582	
49	" "	2203 Latham St.	6	17	85	Myron Cottage	74° Sunny	#142612	
50	" "	1904 Latham St.	5	18	90	Myron Cottage	74° Sunny	#142925	
51	" "	1704 Latham St.	4	13	70	Myron Cottage	77° Sunny	#142618	
52	" "	416 King St.	3	18	90	Myron Cottage	77° Sunny	#143415	
53	" "	504 King St.	5	20	110	Myron Cottage	85° Sunny	#143418	
54	7-20-15	2024 Harlem Blvd.	2	17	85	Myron Cottage	62° Clouds	#142483	
55	" "	2026 Harlem Blvd.	2	25	160	Myron Cottage	69° Cloudy	#142484	
56	" "	" "	5	21	120	Myron Cottage	69° Cloudy	#142484	
57	" "	2333 Harlem Blvd.	1	13	70	Myron Cottage	83° Cloudy	#142482	
58	" "	" "	4	15	70	Myron Cottage	83° Cloudy	#142482	
59	" "	" "	7	13	70	Myron Cottage	83° Cloudy	#142482	
60	7-21-15	" "	13	11	50	Myron Cottage	62° Sunny	#142482	

EAB TREATMENTS - NE						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
101	7-27-15	1742 Hancock	8	14	70	A-24		need #	
102	7-27-15	1742 Hancock	12	14	70	A-24		need #	
103	7-27-15	225 Hancock	4	23	150	A-24		#143442	
104	7-27-15	225 Hancock	6	21	120	A-24		#143459	
105	7-27-15	225 Hancock	23	15	70	A-24		need #	
106	7-28-15	2040 Melrose	1	16	50	A-24	71°	#142496	
107	7-28-15	2040 Melrose	7	11	50	A-24	71°	need #	
108	7-28-15	2321 Melrose	7	20	110	A-24	76°	#142494	
109	7-29-15	1915 Melrose	5	18	90	A-24	75°	#142493	
110	7-29-15	1901 Melrose	6	21	120	A-24	76°	#142492	
111	7-29-15	1824 Melrose	6	20	110	A-24	79°	#142487	
112	7-29-15	1826 Melrose	5	20	110	A-24	79°	#142488	
113	7-29-15	1906 Hancock	2	19	100	A-24	82°	#142982	
114	7-30-15	1516 Midway	7	16	75	A-24	71°	#142610	
115	7-30-15	715 W. State	20	25	160	A-24	76°	need #	
116									
117									
118									
119									
120									

EAB TREATMENTS - NE

						PESTICIDE USED: TREE-AGE			ACTIVE INGREDIENT: IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
21	7-1-15	312 Lafayette Ave.	1	18	90	Myron Cathage	64° cloudy	#147783	
22	7-1-15	309 Roland Ave.	6	12	50	Myron Cathage	67° cloudy	#141707	
23	" "	4205 Eastridge Dr.	6	21	120	Myron Cathage	67° cloudy	#141673	
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
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38									
39									
40									

EAB TREATMENTS - NW						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	Previous HANSEN REQUEST #	COMMENTS
101	7-21-15	2403 Harlem Blvd.	4	14	70	Myron Cottage	62° Sunny	*142481	
102	" "	2426 Harlem Blvd.	3	14	70	Myron Cottage	71° Sunny	*142480	
103	" "	2220 Logan St.	1	15	70	Myron Cottage	71° Sunny	*142511	
104	" "	1906 Hancock St.	2	19	100	Myron Cottage	71° Sunny	*142982	
105	" "	1902 Hancock St.	21	11	50	Myron Cottage	75° Sunny	*142534	
106									
107									
108									
109									
110									
111									
112									
113									
114									
115									
116									
117									
118									
119									
120									

K-Treats

EAB TREATMENTS - SW E

PESTICIDE USED: TREE-AGE

ACTIVE INGREDIENT: IMMEMECTIN BENZOATE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
1	6-2-14	4826 Antioch Dr.	6	12	40	Myron Cattage	Cloudy 75°	167127	uptake Very Slow
2	6-2-14	3306 Jacqueline Dr.	4	11	40	Myron Cattage	Partly Sunny 76	167129	uptake Very Slow
3	6-3-14	2505 Revelation LN.	1	14	50	Myron Cattage	Sunny 65°	167130	
4	6-3-14	2505 Revelation LN.	6	10	30	Myron Cattage	Sunny 65°	167131	
5	6-3-14	2523 Revelation LN.	7	15	60	Myron Cattage	Sunny 67°	167132	
6	6-3-14	2551 Revelation LN.	7	16	65	Myron Cattage	Sunny 69°	167133	
7	6-3-14	2563 Revelation LN.	7	18	80	Myron Cattage	Sunny 69°	167134	
8	6-3-14	2565 Revelation LN.	2	16	65	Myron Cattage	Sunny 71°	167135	
9	6-3-14	2617 Revelation LN.	7	18	80	Myron Cattage	Sunny 75°	167136	
10	6-3-14	2629 Revelation LN.							Stump DBH=26
11	6-4-14	2657 Revelation LN.	7	23	150	Myron Cattage	Light Rain 62°	167139	
12	6-4-14	5087 Valley Pines Dr.	1	15	60	Myron Cattage	Light Rain 62°	167140	
13	6-4-14	3904 Lookout Dr.	13	9	30	Myron Cattage	Cloudy 61°	167170	
14	6-4-14	3904 LookOut Dr.	11	8	25	Myron Cattage	Cloudy 61°	167170	
15	6-5-14	3717 MAYWood Ct.	6	8	25	Myron Cattage	Sunny 53°	167172	
16	6-5-14	5181 Houston Rd.	4	18	80	Myron Cattage	Mostly Sunny 65°		
17	6-5-14	3122 Breazeway Dr.	5	18	80	Myron Cattage	Mostly Sunny 63		
18	6-5-14	3084 Breazeway Dr.	11	7	20	Myron Cattage	Mostly Sunny 67°		
19	6-6-14	1212 Asche Ave.	Westside #10						Marked + Letter Bad death
20	6-6-14	1212 Asche Ave.	Westside #14						Marked + Letter 3/4 Decline over

Re-Treats

5048

EAB TREATMENTS - SWE						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL#	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
21	6-5-14	1212 Asche Ave.	Westside #11	6	20	Myron Cottage	Mostly Sunny 72°		Uptake Very Slow
22	6-5-14	1212 Asche Ave.	Westside #12	6	20	Myron Cottage	Mostly Sunny 72°		Uptake Very Slow
23	6-5-14	1212 Asche Ave.	Westside #13	8	25	Myron Cottage	Mostly Sunny 72°		Uptake Very Slow
24	6-6-14	1212 Asche Ave.	Westside #15	8	25	Myron Cottage	Mostly Sunny 59°		
25	6-6-14	1212 Asche Ave.	Westside #17	9	30	Myron Cottage	Mostly Sunny 59°		
26	6-6-14	1212 Asche Ave.	Westside # 18	8	25	Myron Cottage	Mostly Sunny 59°		
27	6-6-14	1212 Asche Ave.	Westside #19	9	30	Myron Cottage	Mostly Sunny 59°		
28	6-6-14	1212 Asche Ave	Westside #1	9	30	Myron Cottage	Sunny 77°		
29	6-6-14	1212 Asche Ave	Westside #2	9	30	Myron Cottage	Sunny 77°		
30	6-6-14	1212 Asche Ave.	Westside #3		100	Myron Cottage	Sunny 77°		
31	6-6-14	1212 Asche Ave.	Westside #4	9	30	Myron Cottage	Sunny 77°		
32	6-9-14	4607 Newcastle Rd.	5	16	65	Myron Cottage Asst	Sunny 72°		
33	6-10-14	1212 Asche Ave	5	10	30	Myron Cottage	Light Rain 65°		
34	6-10-14	1212 Asche Ave	1	11	40	Myron Cottage	Light Rain 65°		
35	6-11-14	3469 Precision Dr.	3	18	80	Myron Cottage	Light Rain 61°		
36	6-11-14	3469 Precision Dr.	5	16	65	Myron Cottage	Light rain 61°		
37	6-11-14	3469 Precision Dr.	7	15	60	Myron Cottage	Light Rain 61°		
38	6-11-14	3230 PYRamid Dr.	24	16	65	Myron Cottage	Cloudy 63°		
39	6-11-14	3230 PYRamid Dr.	21	14	50	Myron Cottage	Cloudy 63°		
40	6-12-14	3230 PYRamid Dr.	20	14	change 70 mil	Myron Cottage	Light Fog 57°		

EAB TREATMENTS - SE

						PESTICIDE USED: TREE-AGE			ACTIVE INGREDIENT: IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
141	6-10-14	4635 Newcastle	5	22	135	A-24	62° Cloudy		
142	~~———~~	~~↓~~	~~2~~	~~30~~	~~n/A~~	"	"	~~———~~	by passed / Sidewalk Lifting
143		1836 Apple Tree Ln	4	16	65	"	62° Cloudy		
144	~~———~~	~~↓~~	~~1~~	~~27~~	~~n/A~~	~~———~~	"	~~———~~	by passed too Large
145	6-11-14	4603 Longmeadow Ln	5	21	120	A-24	61° rain		Two Day intake
146	6-12-14	4628 Longmeadow Ln	5	14	70	A-24	55° Fog		
147	6-12-14	1817 Arnold Ave		16	75	"	65° Cloudy		
148	6-12-14	1817 Arnold Ave		22	115	"	61° Cloudy		
149	6-12-14	1619 Arnold Ave	11	18	75	"	61° Cloudy		
150	6-12-14	1520 Kerstin CT	2	21	120		61°		
151	6-13-14	1520 Kerstin CT	4	~~22~~	135	A-24	53° Sunny		
152	6-13-14	1532 Kerstin CT	4	23	150	"	58 sunny		
153	~~6-13-14~~	~~1532 Kerstin CT~~	~~1~~	~~21~~	~~n/A~~	"	"	~~———~~	non-Treatment Bark Falling Away
154	6-19-14	1517 Kerstin CT	1	25	160	A-24	67 cloudy		
155	6-19-14	1517 Kerstin CT	4	22	135	"	67 cloudy		
156	~~6-20-14~~	~~1517 Kerstin CT~~	~~12~~	~~27~~	~~n/A~~	~~A-24~~	~~71 Cloudy~~	~~———~~	Defective vascular system (Removal)
157	6-20-14	1517 Kerstin CT	10	~~24~~	155	"	71 Cloudy		
158		~~1517 Kerstin CT~~				"			
159	6-20-14	5326 Cybele Ln	3	18	90	"	73 Cloudy		
160	~~6-20-14~~	~~5326 Cybele Ln~~	~~6~~	~~11~~	~~n/A~~	~~———~~		~~———~~	Defective VASCULAR system marked for Removal

Re-Treats

EAB TREATMENTS - SW E						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
41	6-12-14	5060 27th Ave	1	19	100	Myron Cottage	Cloudy 67°		
42	~~6-12-14~~	4217 O'Connell St.	3						Badly Lifting Sidewalk (By Pass)
43	6-12-14	4308 Mayflower Ave	2	19	100	Myron Cottage	Cloudy 74°		
44	6-13-14	3475 Holiday Dr.	6	18	90	Myron Cottage	Sunny 52°		Flat Picture Looks City
45	6-13-14	4608 Traylor CIR	5	18	90	Myron Cottage	Sunny 55°		
46	6-13-14	4309 Redleaf Rd.	3	31	240	Myron Cottage	Sunny 62°		Sidewalk (Starting) Drop
47	6-13-14	3223 New England Dr.	3	31	240	Myron Cottage	Sunny 62°		
48	6-13-14	4329 Majesty Ct.	2	22	135	Myron Cottage	Sunny 62°		
49	6-13-14	3351 Tannenbaum LN.	4	16	75	Myron Cottage	Sunny 62°		
50	6-16-14	3315 Jacqueline Dr.	2	20	110	Myron Cottage	Partly Sunny 62°		
51	6-16-14	3310 Jacqueline Dr.	11	9	40	Myron Cottage	Partly Sunny 65°		
52	6-16-14	3310 Jacqueline Dr.	8	9	40	Myron Cottage	Partly Sunny 65°		
53	~~6-16-14~~	3310 Jacqueline Dr.	9	15	70				Lifting Sidewalk (By Pass)
54	~~6-16-14~~	3404 Jacqueline Dr	4						Lifting Sidewalk (By Pass)
55	~~6-16-14~~	3404 Jacqueline Dr.	2						Start of Lifting Sidewalk (By Pass)
56	6-16-14	3009 Foliage LN.	3						over 1/2 Decline Marked & Letter
57	6-16-14	3003 Greendale Dr.	4	18	90	Myron Cottage	Partly Sunny 81°		
58	6-19-14	2303 Winnetka Dr.	5	16	75	Myron Cottage	Cloudy 73°		
59	6-19-14	2308 Winnetka Dr.	1	15					Marked & Letter after 1/2 decline
60	~~6-19-14~~	2906 Concordia Dr.	4						By Pass Bulging terrace Lifting Sidewalk

Re-Treats

EAB TREATMENTS - SW E						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
61	6-17-14	5048 American Rd	1	9	40	Myron Cattage	Cloudy 70°		
62	6-17-14	5048 American Rd.	2	8	40	Myron Cattage	Cloudy 70°		
63	6-17-14	5048 American Rd	3	8	40	Myron Cattage	Cloudy 70°		
64	6-17-14	5048 American Rd	6		40	Myron Cattage	Cloudy 70°		
65	6-18-14	2810 North Moor Dr.	2	21	120	Myron Cattage	Cloudy 76°		
66	6-18-14	2920 North Moor Dr.	1	16	75	Myron Cattage	Cloudy 77°		
67	6-1814	2722 Colorado Ave	5	16	75	Myron Cattage	T-storms 67°		
68	6-18-14	2606 Colorado Ave	3	16	75	Myron Cattage	Cloudy 69°		
69	~~6-19-14~~	~~5111 UPland Dr.~~	3	—	—				Notice Orange Dot Present
70	~~6-19-14~~	~~5112 UPland Dr.~~	4	—	—				Notice Orange Dot Present
71	6-19-14	5020 UPland Dr.	3	17	85	Myron Cattage	Cloudy 67°		
72	~~6-19-14~~	~~4612 UPland Dr.~~	11	—	—				Lifting Sidewalk
73	~~6-19-14~~	~~4612 UPland Dr.~~	9	—	—	—			Roots / Lean
74	6-19-14	4511 UPland Dr.	2	19	100	Myron Cattage	Cloudy 67°		
75	6-19-14	4511 UPland Dr.	5	19	100	Myron Cattage	Cloudy 67°		
76	~~6-19-14~~	~~4503 UPland Dr.~~	—	—					No (Ash tree) Present
77	~~6-19-14~~	~~4804 UPland Dr.~~	6	—					Notice Orange Dot Present
78	~~6-19-14~~	~~2315 Holmes St.~~	5	—					Bulging terrace / Lean
79	~~6-19-14~~	~~2315 Holmes St.~~	2	—					Bulging terrace / Lean / Past replacement Sidewalk
80	~~6-19-14~~	~~2200 (2214 & 2220) Holmes St.~~	6/1	—					Notice Orange Dot Present

EAB TREATMENTS - SWE

						PESTICIDE USED: TREE-AGE			ACTIVE INGREDIENT: IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
81	~~6-19-14~~	~~2615 Bucknell Dr.~~	~~1~~	~~—~~					~~By Pass Bulging terrace New Sidewalk By Pass treatment~~
82	~~6-19-14~~	~~2615 Bucknell Dr.~~	~~6~~	~~—~~					~~Marked Letter Bad Decline~~
83	~~6-20-14~~	~~2706 Ohio Parkway~~	~~10~~	~~—~~					~~By Pass Bulging terrace curb~~
84	6-24-14	25116 Skokie Dr.	4	14	70	Myron Cottage	cloudy 72°		
85	~~6-24-14~~	~~2528 Skokie Dr.~~	~~4/1~~	~~22/23~~					~~By Pass 1) Lifting Sidewalk 2) New Sidewalks~~
86	6-24-14	5362 Dierks Dr.	13	13	70	Myron Cottage	Partly Sunny 88°		
87	6-24-14	5345 Dierks Dr.	10	13	70	Myron Cottage	Partly Sunny 83°		
88	6-25-14	5334 Dierks Dr.	19	13	70	Myron Cottage	Mostly Sunny 66°		
89	6-25-14	5379 Dierks Dr.	23	10	50	Myron Cottage	Partly Sunny 69°		
90	6-25-14	5386 Dierks Dr.	8	13	70	Myron Cottage	Partly Sunny 69°		
91	~~6-25-14~~	~~1806 Highridge Rd~~	~~2/6~~						~~By Pass Lifting Sidewalks~~
92	6-25-14	1904 Highridge Rd.	5	13	70	Myron Cottage	Mostly Sunny 76°		
93	~~6-25-14~~	~~1904 Highridge Rd.~~	~~2~~	~~—~~					~~By Pass Location full~~
94	~~6-25-14~~	~~6679 Grassridge Rd.~~	~~2~~	~~—~~					~~By Pas Location full somewhat & Lifting Sidewalk~~
95	~~6-25-14~~	~~6679 Grassridge Rd.~~	~~3~~	~~—~~					~~By Pass V-Crotched trunks Area (Tall crown)~~
96	6-25-14	1999 Santa Monica Dr.	2	21	120	Myron Cottage	Mostly Sunny 76°		
97	6-25-14	11669 TeleMark Dr.	3	21	120	Myron Cottage	Partly Sunny 81°		
98	6-25-14	11669 TeleMark Dr.	5	20	110	Myron Cottage	Partly Sunny 81°		
99	~~6-26-14~~	~~1720 Telemark Dr.~~	~~4~~	~~26~~	~~170~~				~~By Pass (Weaker Crown Area V=Crotch)~~
100	~~6-26-14~~	~~1601 Highridge Rd~~	~~2/6~~						~~By Pass (Lifting Sidewalks)~~

EAB TREATMENTS - SW

						PESTICIDE USED			ACTIVE INGREDIENT
						TREE-AGE			IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
141	6/23/14	5321 Cybele Ln	4	18	85	A-24	68°		
142	6/23/14	5321 Cybele Ln	7	21	120	" "	68°		
143	6/23/14	1522 Powderhorn Dr	20	18	90	" "	73°		
144	6/23/14	1522 Powderhorn Dr	23	21	120	" "	73°		
145	7/2/14	954 ANEE	2	15	70	A24	Sunny/60°		
146	7/2/14	895 ANEE	5	13	70	" "	Sunny/60°		
147	7/2/14	895 Anee	2	12	50	" "	Sunny/60		
148	7/2/14	1252 Anee	1	17	85	" "	Cloudy 64°		
149	7/2/14	949 Britania	4	11	50	" "	Cloudy 64°		Intake Slow Fished 7-3-14
150	7/3/14	913 Candlewood	5	20	110	A-24	P. Sunny 64°		
151	7/3/14	875 Stone Field	3	16	50	" "	P. Sunny 64°		
152	7/7/14	875 Stone Field	7	9	40	A-24	Fog 72°		
153	7/7/14	6673 Southfield	3	13	70	"	Cloudy 75°		2 dr. Complete 7-8-14
154	7/8/14	6643 Sandalwood	6	11	50	A-24	Cloudy 67°		
155	7/8/14	6648 Sandalwood	1	17	85	" "	Cloudy 67°		
156	7/8/14	6683 Sandalwood	2	18	90	" "	Cloudy 74°		
157	7/8/14	6683 Sandalwood	21	16	75	"	Cloudy 74°		
158	7/8/14	1364 Revere Ridge	4	16	75	" "	Cloudy 75°		
159	7/8/14	1377 Revere Rids	24	12	50	" "	Cloudy 75°		
160	7/9/14	1190 Revere Ridge	1	12	50	" "	Cloudy 60°		

EAB TREATMENTS - [redacted] NE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	PESTICIDE USED: TREE-AGE — APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	ACTIVE INGREDIENT: IMMEMECTIN BENZOATE — COMMENTS
101	6-26-14	1460 Livingston Dr.	5	9	40	Myron Cottage	Cloudy 63°		
102	6-26-14	1434 Livingston Dr.	4/6						BYPass (Lifting Sidewalks)
103	6-26-14	1404 Livingston Dr.	1						BYPass (Lifting Sidewalks)
104	6-26-14	1340 Livingston Dr.	5	12	50	Myron Cottage	Cloudy 65°		
105	6-26-14	1340 Livingston Dr.	7	7	40	Myron Cottage	Cloudy 65°		
106	6-26-14	7353 Fairmont LN	12	11	50	Myron Cottage	Cloudy 65°		
107	6-27-14	7380 Fairmont LN	3						BYPass stress + structural
108	6-27-14	7412 Fairmont LN	3						BYPass Structural Weak
109	6-27-14	7412 Fairmont LN.	7	12	50	Myron Cottage	Cloudy/Sun 66°		
110	6-27-14	1357 Sandhurst LN.	1						BYPass Lifting Sidewalk
111	6-27-14	1753 Oak Park Dr.	20	12	50	Myron Cottage	Mostly Sunny 71°		Add on List
112	6-27-14	7236 Sentinel Rd.	1	16	75	Myron Cottage	Mostly Sunny 78°		
113	6-27-14	7236 Sentinel Rd.	3	16	75	Myron Cottage	Mostly Sunny 78°		
114	6-27-14	7218 Sentinel Rd	4						B Marked + Letter over ½ decline
115	6-27-14	7218 Sentinel Rd	6						BYPass (Poor Root System)
116	6-27-14	7090 Sentinel Rd	3	15	70	Myron Cottage	Mostly Sunny 78°		
117	6-27-14	7085 Sentinel Rd	6	15	70	Myron Cottage	Partly Sunny 85°		
118	6-27-14	7085 Sentinel Rd	4	16	75	Myron Cottage	Partly Sunny 85°		
119	6-27-14	7085 Sentinel Rd	7						BYPass (Storm damage trunk in the heartwood)
120	7-9-14	1619 Marshfield	11	12	50	Myron Cottage	Partly Sunny 71°		(Add to List)

7-17-14 1431 Sandhurst Dr. BYPass Lifting Sidewalk

EAB TREATMENTS - ~~SW~~NE

PESTICIDE USED: TREE-AGE

ACTIVE INGREDIENT: IMMEMECTIN BENZOATE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
121	6-30-14	1608 Oakforest Dr.	4	12	50	Myron Cottage	Cloudy 69°		
122	6-30-14	1552 Oakforest Dr.	6	12	50	Myron Cottage	Cloudy 69°		
123	6-30-14	1648 Rawntree	6	13	70	Myron Cottage	Cloudy 70°		
124	6-30-14	1463 Ramsey	6	23	150	Myron Cottage	Cloudy 75°		
125	6-30-14	1463 Ramsey	2	23	150	Myron Cottage	Cloudy 75°		
126	6-30-14	7217 Centennial Tr.	7	12	50	Myron Cottage	Cloudy 74°		
127	6-30-14	1150 Fox Chase Lane	3	10	50	Myron Cottage	Cloudy 76°		
128	7-1-14	7112 Weathered Oak Ln.	6	12	50	Myron Cottage	Cloudy 64°		
129	7-1-14	7150 Weathered Oak Ln.	7	10	50	Myron Cottage	Cloudy 64°		
130	7-1-14	6951 ACADamy Tri.	5	10	50	Myron Cottage	Cloudy 66°		
131	7-1-14	6951 ACADamy Tri.	2	13	70	Myron Cottage	Cloudy 66°		
132	7-1-14	6758 Academy Tri.	4	14	70	Myron Cottage	Cloudy 71°		
133	7-1-14	6758 Academy Tri.	6	17	85	Myron Cottage	Cloudy 71°		
134	7-1-14	6758 Academy Tri.	2	19	100	Myron Cottage	Partly Sunny 75°		
135	7-1-14	1617 Albany Ln.	4	11	50	Myron Cottage	Sunny 75°		
136	7-9-14	1585 Marshfield	1	16	75	Myron Cottage	Partly Sunny 66°		
137	7-9-14	1585 Marshfield	3	18	90	Myron Cottage	Partly Sunny 66°		
138	~~7-9-14~~	~~1585 Marshfield~~	~~5~~	~~—~~	~~—~~				Bypass Lifting Sidewalk
139	~~7-9-14~~	~~1585 Marshfield~~	~~7~~	~~—~~	~~—~~				Bypass Lifting Sidewalk
140	7-9-14	1640 Albany Ln.	4	11	50	Myron Cottage	Partly Sunny 69°		*Slow uptake

EAB TREATMENTS - SE						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
61	7/9/14	1308 Revere Ridge	7	20	110	A. 24	60° cloudy		
62	7/9/14	1309 Revere Ridge	5	18	90	"	60° cloudy		
63	7/9/14	6652 Timberline	6	14	70	"	69° P. Sunny		
64	7/9/14	6655 Timberline	7	12	50	"	69° P. Sunny		
65	7/9/14	1338 Brandywine	6	14	70	"	71° P. Sunny		
66	7/9/14	1340 Brandywine	1	11	50	"	71° P. Sunny		Added Ash to Treatment list
67	7/11/14	1009 Trainer Rd	7	12	50	"	59° Sunny		
68	7/11/14	943 Trainer Rd	2	9	40	"	66° Sunny		
69	7/11/14	943 Trainer Rd	6	8	40	"	66° Sunny		
70	7/11/14	894 Trainer Rd	4	10	50	"	72° Cloudy		
71	7/11/14	6364 Spring Hill	20	19	100	"	72° cloudy		
72	7/11/14	6364 Spring Hill	19	15	70	"	72° cloudy		
73	7/28/14	5340 Forest View Ave	3	22	135	"	57° Sunny		
74	7/28/14	5340 Forest View Ave	7	17	85	"	57° Sunny		
75	7/28/14	1522 Powder horn	3	25	160	"	57 sunny		
76	7/28/14	1522 Powder horn	6	20	110	"	57 Sunny		
77									
78									
79									
80									

EAB TREATMENTS - ~~SW~~ NE

						PESTICIDE USED			ACTIVE INGREDIENT
						TREE-AGE			IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
141	7-9-14	6835 Cody LN.	3	23	150	Myron Cattage	Partly Sunny 75°		
142	7-10-14	6244 Featherstone ct.	2	12	50	Myron Cattag	Mostly Sunny 56°		
143	7-6-14	6459 Shiloh Close	1	12	50	Myron Cattage	Mostly Sunny 59°		
144	7-10-14	6459 Shiloh Close	5	10	50	Myron Cattage	Mostly Sunny 59°		
145	7-10-14	6358 Brigantine LN.	2	12	50	Myron Cattage	Partly Sunny 64°		
146	7-10-14	6333 Brigantine LN.	5	14	70	Myron Cattage	Partly Sunny 64°		
147	7-10-14	6382 Brigantine LN.	7	12	50	Myron Cattage	Partly Sunny 69°		(Add to List)
148	7-10-14	2203 Carrington Chase	3	12	50	Myron Cattage	Partly Sunny 74°		(Add to List)
149	7-10-14	6377 Brigantine LN.	4	17	85	Myron Cattage	Sunny 74°		(Add to List)
150	7-10-14	6377 Brigantine LN.	19	13	70	Myron Cattage	Sunny 74°		(Add to List)
151	7-11-14	2187 Carrington Chase	4	17	85	Myron Cattage	Mostly Sunny 59°		
152	7-11-14	2141 Carrington Chase	4	15	70	Myron Cattage	Mostly Sunny 59°		
153	7-11-14	2042 Wembley Place	18	16	75	Myron Cattage	Partly Sun 66°		
154	7-11-14	2042 Wembley Place	83	17	85	Myron Cattage	Cloudy 66°		
155	7-11-14	2082 Wembley Place	6	17	85	Myron Cattage	Mostly Cloudy 72°		
156	7-11-14	2130 Wembley Place	7	16	75	Myron Cattage	Mostly Sunny 75°		
157	7-14-14	2145 Wembley Place	1	16	75	Myron Cattage	Cloudy 61°		(Add to list)
158	7-14-14	2172 Wembley Place	1	15	70	Myron Cattage	Cloudy 61°	~~Yes~~ Not sure	
159	7-14-14	2210 Wembley Place	1	15	Advised (Private) treatment done				but Add to City Tr treatment List → Wait for Call
160									

EAB TREATMENTS - ~~SW~~ NE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	PESTICIDE USED: TREE-AGE — APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	ACTIVE INGREDIENT: IMMEMECTIN BENZOATE — COMMENTS
161	~~7-14-14~~	~~2209 Wembley Place~~	6	10					Marked + Letter Declining
162	7-14-14	2209 Wembley Place	21	14	70	Myron Cottage	Partly Sunny 72°		
163	7-15-14	6483 Muirfield LN.	3	17	85	Myron Cottage	Partly Sunny 53°		
164	7-15-14	6658 Old Hunters Run	6	19	100	Myron Cottage	Partly Sunny 53°		
165	7-15-14	6235 Muirfield LN.	3	14	70	Myron Cottage	Cloudy 55°		(Add to List)
166	7-15-14	6235 Muirfield LN.	6	14	70	Myron Cottage	Cloudy 55°		(Add to List)
167	7-15-14	6670 Timberline LN.	1	10	50	Myron Cottage	Cloudy 58°	SE	(Add to List)
168	7-15-14	6636 Timberline LN.	7	10	50	Myron Cottage	Cloudy 58°	↓	(Add to List)
169	7-15-14	1205 Woodcreek Bend	10	9	40	Myron Cottage	Cloudy 58°		
170	7-15-14	1205 Woodcreek Bend	12	9	40	Myron Cottage	Cloudy 58°		
171	7-16-14	1303 Hillcrest Rd.	5	26	170	Myron Cottage	Fog 52°		
172	~~7-16-14~~	~~1115 Charlotte Dr.~~			ByPass		Poor Condition Cell=1, 3, 6, 7		
173	7-16-14	4909 Carla Cir	21	21	120	Myron Cottage	Sunny 55°		
174	7-16-14	5005 Carol Ct.	2	19	100	Myron Cottage	Sunny 60°		
175	7-16-14	721 Woodridge Dr.	12	22	135	Myron Cottage	Sunny 64°		
176	7-16-14	5123 David Dr.	4	20	110	Myron Cottage	Sunny 67°		
177	7-16-14	1214 Mondale Dr.	4	26	170	Myron Cottage	Partly Sunny 69°		
178	7-17-14	4926 Orchard Ct.	3	14	70	Myron Cottage	Cloudy 56°		(Add to List)
179	7-17-14	1104 Fieldcrest Dr.	6	5	25	Myron Cottage	Cloudy 57°		(Add to List)
180	7-17-14	5614 Elaine Dr.	1	18	90	Myron Cottage	Cloudy 62°	↓	(Add to List)
	7-17-14	5614 Elaine Dr.	5	18	90	Myron Cottage	Cloudy 62°		

EAB TREATMENTS - ~~SW~~ NE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	PESTICIDE USED: TREE-AGE APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	ACTIVE INGREDIENT: IMMEMECTIN BENZOATE COMMENTS
181	7-17-14	1254 NorthCrest Dr.	1	13	70	Myron Cottage	Partly Sunny 71°		
182	~~7-17-14~~	~~1213 NorthCrest Dr.~~	4	—	—				ByPass Lifting Sidewalk
183	7-17-14	5553 Tasselbury Ct.	10	16	75	Myron Cottage	Partly Sunny 71°		
184	7-18-14	415 S. Mulford Rd	20	20	110	Myron Cottage	Partly Sunny 76°		
185	7-18-14	415 S. Mulford Rd.	21	9	40	Myron Cottage	Partly Sunny 76°		
186	7-18-14	415 S. Mulford Rd.	23	17	85	Myron Cottage	Partly Sunny 76°		
187	7-18-14	415 S. Mulford Rd	24	21	120	Myron Cottage	Partly Sunny 76°		
188	7-18-14	415 S Mulford Rd.	2	19	100	Myron Cottage	Partly Sunny 76°		
189	7-18-14	415 S Mulford Rd.	3	16	75	Myron Cottage	Partly Sunny 76°		
190	7-18-14	415 S. Mulford Rd	4	16	75	Myron Cottage	Partly Sunny 76°		
191	7-18-14	415 S. Mulford Rd	5	11	50	Myron Cottage	Partly Sunny 76°		(Slow uptake)
192	7-18-14	415 S. Mulford Rd	6	16	75	Myron Cottage	Partly Sunny 76°		
193	7-21-14	3227 Orleans Ave.	4	15	70	Myron Cottage	Sunny 63°		(Very Slow uptake)
194	~~7-21-14~~	~~812 Wood Rd~~	1	—	—		66' R.O.W		*Note Posted to tree (TruGreen said)
195	7-21-14	1915 23rd st.	23	23	150	Myron Cottage	Sunny 76°		
196	7-21-14	1915 23rd st.	19	19	100	Myron Cottage	Sunny 76°		(Very Slow Uptake) " "
197	7-22-14	809 Highview Ave.	6	17	85	Myron Cottage	cloudy 70°		
198	7-22-14	1623 Grant Ave NW	23	11	50	Myron Cottage	Sunny 74°		Northwest Rockford
199	7-22-14	2125 Grant Ave	6	8	40	Myron Cottage	cloudy 76°		
200	7-22-14	2315 Grant Ave.	6	11	50	Myron Cottage	cloudy 76°		

Treat Bi-Annually for EAB

EAB TREATMENTS - ~~SW~~ NW

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	PESTICIDE USED: TREE-AGE APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	ACTIVE INGREDIENT: IMMEMECTIN BENZOATE COMMENTS
201	7-22-14	2300 Huffman Blvd.	West Side	29	210	Myron Cattaye	Cloudy 83°		
202	7-23-14	2300 Huffman Blvd.	West Side	16	75	Myron Cattaye	Sunny 64°		
203	7-23-14	1807 Huffman Blvd.	4	17	85	Myron Cattaye	Sunny 67°		
204	7-23-14	1738 Hancock	7	9	40	Myron Cattaye	Sunny 69°		
205	7-23-14	2208 Oxford St	4	17	85	Myron Cattaye	Sunny 75°		
206	7-23-14	2016 Cumberland St.	2	9	40	Myron Cattaye	Sunny 75°		
207	7-24-14	707 Cottage Grove Ave	4	28	195	Myron Cattaye	Sunny 58°		
208	7-24-14	518 Ellis Ave.	6	12	50	Myron Cattaye	Sunny 58°		
209	7-24-14	1935 Cumberland St.	2	12	50	Myron Cattaye	Sunny 63°		
210	7-24-14	6595 E-State St.	19			Myron Cattaye	Sunny 73°		SE Rockford
211	7-24-14	6595 E-State St.	20			Myron Cattaye	[redacted]	BYPass	Vascular Stress
212	7-24-14	6595 E-State St.	21	14	70	Myron Cattaye	Sunny 73°		
213	7-24-14	6595 E-State St.	23	13	70	Myron Cattaye	Sunny 73°		
214	7-24-14	3139 N. Trainer Rd	6	14	70	Myron Cattaye	Sunny 78°		NE Rockford
215	7-25-14	3178 N. Trainer Rd	4	13	70	Myron Cattaye	Cloudy 59°		
216	~~7-25-14~~	~~3238 N. Trainer Rd~~	5						BYPass (Large Storm Damage Wound)
217	7-25-14	3238 N. Trainer Rd	1	13	70	Myron Cattaye	Cloudy 59°		
218	7-25-14	3261 N. Trainer Rd	7	13	70	Myron Cattaye	Light Rain 60°		
219	7-25-14	3261 N. Trainer Rd	4	14	70	Myron Cattaye	Light Rain 60°		
220	7-25-14	3289 N Trainer Rd.	3	13	70	Myron Cattaye	Cloudy 60°		

EAB TREATMENTS - ~~SW~~ NE

						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
221	7-25-14	3296 N. Trainer Rd	7	12	50	Myron Cottage	Cloudy 62°		
222	7-25-14	3296 N. Trainer Rd	4	12	50	Myron Cottage	Cloudy 62°		
223	7-25-14	3296 N. Trainer Rd	1	8	40	Myron Cottage	Cloudy 62°		
224	7-25-14	3353 N. Trainer Rd	7	13	70	Myron Cottage	Cloudy 70°		
225	7-28-14	2841 English Lane.	11	9	40	Myron Cottage	Sunny 57° (No dieback)		Present S-Shaped tunnels & bark lifted (Looks Very Healthy)
226	7-28-14	2944 Hedge Cliff Dr.	2	9	40	Myron Cottage	Sunny 60° (No dieback)		Present S-Shaped tunnels & bark lifted (Looks Very Healthy)
227	7-28-14	3354 WindSong	1	15	70	Myron Cottage	Sunny 62°		Poor Condition trunk base slow uptake
228	7-28-14	3354 WingSong	4	17	85	Myron Cottage	Sunny 62°		
229	~~7-28-14~~	~~3354 Windsong~~	7						BT Pass Weak Crown Structure
230	~~7-29-14~~	6618 Chartwell	12						BT Pass trunk base Rot (Punky) Marked Later
231	7-29-14	6618 Chartwell	7	13	70	Myron Cottage	Sunny 56°		
232	7-29-14	2617 Beaumont Pl.	2	32	255	Myron Cottage	Cloudy 61°		
233									
234									
235									
236									
237									
238									
239									
240									

EAB TREATMENTS - SE

PESTICIDE USED: TREE-AGE

ACTIVE INGREDIENT: IMMEMECTIN BENZOATE

#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
81	8-1-14	4811 Manhattan Dr.	1	14	70	Myron Cottage	Sunny 65°		up take (very) Slow (Surface Roots)
82	"	" "	6	17	85	Myron Cottage	Sunny 65°		(Surface Roots)
83	"	4793 " "	3	16	75	Myron Cottage	Sunny 66°		uptake Slow (Surface Roots)
84	"	" "	6	15	70	Myron Cottage	Sunny 66°		Uptake Slow (Surface Roots)
85	"	4833 " "	6	14	70	Myron Cottage	Sunny 79°		Uptake very Slow (Surface Roots)
86	"8-4-14	" "	1	14	70	Myron Cottage	Clouds 76°		Uptake Slow (Surface Roots)
87		4773 " "	6	16	75	Myron Cottage	Sunny 82°		uptake Slow (Surface Roots)
88	8-4-14	4751 " "	2	15	70	Myron Cottage	Cloudy 65°		uptake Slow (Surface Roots)
89	"	" "	6	16	75	Myron Cottage	Cloudy 65°		uptake Slow (Surface Roots)
90	"	4857 " "	2	[redacted]					By Pass Orange Dot Present
91	"	" "	6	14	70	Myron Cottage			uptake Slow (Surface Roots)
92	"	4873 " "	2	14	70	Myron Cottage			uptake Slow (Surface Roots)
93	"	" "	6	14	70	Myron Cottage			uptake Slow (Surface Roots)
94		NET * Spring Creek Clover Leaf							
95	8-5-14	Southeast Leaf Petal		9	40	Myron Cottage	Cloudy 72°		
96	"	" "	"	10	50	Myron Cottage	Cloudy 72°		
97	"	" "	"	11	50	Myron Cottage	Cloudy 72°		
98	"	Southeast Leaf Petal	"	8	40	Myron Cottage	Cloudy 73°		
99	"	" "	"	8	40	Myron Cottage	Cloudy 73°		
100									

EAB TREATMENTS - ~~SE~~ NE						PESTICIDE USED TREE-AGE			ACTIVE INGREDIENT IMMEMECTIN BENZOATE
#	DATE	ADDRESS	CELL #	DBH "	QUANTITY INJECTED (M/LITERS)	APPLICATOR NAME	WEATHER CONDITIONS	HANSEN REQUEST #	COMMENTS
101		* NE+ Spring Creek Clover Leaf							
102	8-6-14	Northeast Leaf Petal		9	40	Myron Cottage	Cloudy 77°		
103	"	" "	"	9	40	Myron Cottage	Cloudy 77°		
104	"	" "	"	9	40	Myron Cottage	Cloudy 77°		
105	"	" "	"	9	40	Myron Cottage	Cloudy 77°		
106	"	" "	"	9	40	Myron Cottage	Cloudy 77°		
107									
108	~~8-7-14~~	~~NW+ Northwest Leaf Petal~~							BYPass No Ashes Present
109									
110									
111									
112									
113									
114									
115									
116									
117									
118									
119									
120									

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
95083	6/29/11	2505	REVELATION	6/29/11	FMISC-EAB	Cell 1, 13", 45ML, Jacobi, Cloudy/65, No problems	Completed by Jacobi, 6/23/11
95085	6/29/11	2505	REVELATION	6/29/11	FMISC-EAB	Cell 6, 10", 30ML, Jacobi, Cloudy/65, No problems	Completed by Jacobi, 6/23/11
95087	6/29/11	2523	REVELATION	6/29/11	FMISC-EAB	Cell 7, 13", 45ML x 2, Jacobi, Cloudy/65, Blowout 1st application, 2nd applicaiton - No problems	Completed by Jacobi, 6/23/11
95098	6/29/11	2551	REVELATION	6/29/11	FMISC-EAB	Cell 7, 15", 60ML, Jacobi, Cloudy/65, No problems	Completed by Jacobi, 6/23/11
95099	6/29/11	2563	REVELATION	6/29/11	FMISC-EAB	Cell 7, 17", 75ML, Jacobi, Cloudy/60, No problems	Complete by Jacobi 6/24/11
95100	6/29/11	2565	REVELATION	6/29/11	FMISC-EAB	Cell 1, 15", 60ML, Jacobi, Cloudy/60, No problems	Complete by Jacobi 6/24/11
95101	6/29/11	2617	REVELATION	6/29/11	FMISC-EAB	Cell 7, 17", 75ML, Jacobi, Cloudy/60, No problems	Complete by Jacobi 6/24/11
95102	6/29/11	2629	REVELATION	6/29/11	FMISC-EAB	Cell 7, 16", 55ML, Jacobi, P Cloudy/60, No problems	Complete by Jacobi 6/24/11
95104	6/29/11	2657	REVELATION	6/29/11	FMISC-EAB	Cell 7, 20", 110ML, Jacobi, P Cloudy/60, No problems	Complete by Jacobi 6/24/11
95108	6/29/11	3717	MAYWOOD	6/29/11	FMISC-EAB	Cell 6, 7", 20ML, Jacobi,Cloudy/65, No problems	Complete by Jacobi 6/24/11
95106	6/29/11	3904	LOOKOUT	6/29/11	FMISC-EAB	Cell 12, 7", 20ML, Jacobi,Cloudy/65, No problems	Complete by Jacobi 6/24/11
95107	6/29/11	3904	LOOKOUT	6/29/11	FMISC-EAB	Cell 13, 7", 20ML, Jacobi,Cloudy/65, No problems	Complete by Jacobi 6/24/11
95105	6/29/11	5087	VALLEY PINES	6/29/11	FMISC-EAB	Cell 1, 13", 45ML, Jacobi, P Cloudy/60, No problems	Complete by Jacobi 6/24/11
95110	6/29/11	5181	HOUSTON	6/29/11	FMISC-EAB	Cell 4, 17", 75ML, Jacobi,Cloudy/65, No problems	Complete by Jacobi 6/24/11
95112	6/29/11	3122	BREEZEWAY	6/29/11	FMISC-EAB	Cell 5, 17", 75ML, Jacobi,Cloudy/69, No problems	complete by Jacobi 6/27/11
95114	6/29/11	3475	HOLIDAY	6/29/11	FMISC-EAB	Cell 6, 7", 20ML, Jacobi,Sunny/71, No problems	complete by Jacobi 6/27/11
95115	6/29/11	4608	TREVOR	6/29/11	FMISC-EAB	Cell 5, 17", 75ML, Jacobi,Sunny/78, No problems	complete by Jacobi 6/27/11
95111	6/29/11	4826	ANTIOCH	6/29/11	FMISC-EAB	Cell 5, 11", 40ML, Jacobi,Cloudy/69, No problems	complete by Jacobi 6/27/11
95116	6/29/11	1212	ASCHE	6/29/11	FMISC-EAB	Cell 19A, 8", 25ML, Jacobi,;Sunny/65, No problems	Complete by Jacobi, 6/28/11
95117	6/29/11	1212	ASCHE	6/29/11	FMISC-EAB	Cell 19B, 8", 25ML, Jacobi,Sunny/65, No problems	Complete by Jacobi, 6/28/11

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
95457	7/6/11	1212	ASCHE	7/6/11	FMISC-EAB	6/28/11, cell 20A, 6", 20ML, Jacobi, 65/Sunny, Good cond.	Jacobi completed 6/28/11
95458	7/6/11	1212	ASCHE	7/6/11	FMISC-EAB	6/28/11, cell 20B, 7", 20ML, Jacobi, 65/Sunny, Good cond.	Jacobi completed 6/28/11
95459	7/6/11	1212	ASCHE	7/6/11	FMISC-EAB	6/28/11, cell 21B, 6", 20ML, Jacobi, 67/Sunny, Good cond.	Jacobi completed 6/28/11
95460	7/6/11	1212	ASCHE	7/6/11	FMISC-EAB	6/28/11, cell 23A, 8", 25ML, Jacobi, 67/Sunny, Good cond.	Jacobi completed 6/28/11
95461	7/6/11	1212	ASCHE	7/6/11	FMISC-EAB	6/28/11, cell 24A, 8", 25ML, Jacobi, 37/Sunny, Good cond.	Jacobi completed 6/28/11
95467	7/6/11	3230	PYRAMID	7/6/11	FMISC-EAB	6/29/11, cell 20, 14", 50ML, Jacobi, 73/Sunny, Good cond.	complete. Jacobi 6/29/11
95468	7/6/11	3230	PYRAMID	7/6/11	FMISC-EAB	6/29/11, cell 22, 13", 45ML, Jacobi, 73/Sunny, Good cond.	complete. Jacobi 6/29/11
95470	7/6/11	3230	PYRAMID	7/6/11	FMISC-EAB	6/29/11, cell 24, 15", 60ML, Jacobi, 73/Sunny, X2 - Blowout.	complete. Jacobi 6/29/11
95464	7/6/11	3469	PRECISION	7/6/11	FMISC-EAB	6/29/11, cell 3, 16", 65ML, Jacobi, 67/Sunny, Good cond.	complete. Jacobi 6/29/11
95465	7/6/11	3469	PRECISION	7/6/11	FMISC-EAB	6/29/11, cell 4, 15", 60ML, Jacobi, 67/Sunny, Good cond.	complete. Jacobi 6/29/11
95466	7/6/11	3469	PRECISION	7/6/11	FMISC-EAB	6/29/11, cell 6, 13", 45ML, Jacobi, 67/Sunny, Good cond.	complete. Jacobi 6/29/11
95473	7/6/11	4217	OCONNELL	7/6/11	FMISC-EAB	6/30/11, cell 3, 15", 60ML, Jacobi, 72/Sunny, Good Cond	complete. Jacobi, 6/30/11
95474	7/6/11	4308	MAYFLOWER	7/6/11	FMISC-EAB	6/30/11, cell 1, 18", 80ML, Jacobi, 77/Sunny, Good Cond	complete. Jacobi, 6/30/11
95475	7/6/11	4309	RED COAT	7/6/11	FMISC-EAB	6/30/11, cell 3, 29", 210ML, Jacobi, 79/Sunny, Good Cond	complete. Jacobi, 6/30/11
95471	7/6/11	5060	27TH	7/6/11	FMISC-EAB	6/30/11, cell 1, 18", 80ML, Jacobi, 66/Sunny, Good Cond	complete. Jacobi, 6/30/11
95481	7/6/11	3310	JACQUELINE	7/6/11	FMISC-EAB	7/1/11, cell 8, 7", 20ML, Jacobi, 80/Cloudy, Good Cond	complete. Jacobi 7/1/11
95478	7/6/11	3351	TANNENBAUM	7/6/11	FMISC-EAB	7/1/11, cell 5, 15", 60ML, Jacobi, 79/Cloudy, Good Cond	complete. Jacobi 7/1/11
95479	7/6/11	3404	JACQUELINE	7/6/11	FMISC-EAB	7/1/11, cell 2, 14", 50ML, Jacobi, 79/Cloudy, Good Cond	complete. Jacobi 7/1/11
95480	7/6/11	3404	JACQUELINE	7/6/11	FMISC-EAB	7/1/11, cell 4, 14", 50ML, Jacobi, 79/Cloudy, Good Cond	complete. Jacobi 7/1/11
95477	7/6/11	4329	MAJESTY	7/6/11	FMISC-EAB	7/1/11, cell 2, 21", 120ML, Jacobi, 77/Sunny, Good Cond	complete. Jacobi 7/1/11
99302	8/10/11	3003	GREENDALE	8/26/11	FMISC-EAB	TREAT FOR EAB	JACOBI TREATED 1 UNIT

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
99302	8/10/11	3003	GREENDALE	8/26/11	FMISC-EAB	TREAT FOR EAB	DUP OF 100087
99304	8/10/11	2810	NORTHMOOR	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	JACOBI TREATED 1 TREE
99304	8/10/11	2810	NORTHMOOR	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	DUP OF 100088
99308	8/10/11	2920	NORTHMOOR	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	JACOBI TREATED 1 TREE
99308	8/10/11	2920	NORTHMOOR	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	DUP OF 100091
99310	8/10/11	2722	COLORADO	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	JACOBI TREATED 1 TREE
99310	8/10/11	2722	COLORADO	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	DUP OF 100093
99321	8/11/11	2617	BEAUMONT	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	FOR EAB
99321	8/11/11	2617	BEAUMONT	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	DUP OF 100094
99322	8/11/11	2706	OHIO	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	FOR EAB
99322	8/11/11	2706	OHIO	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	DUP OF 100097
99325	8/11/11	5020	UPLAND	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	FOR EAB
99325	8/11/11	5020	UPLAND	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	DUP OF 100100
99323	8/11/11	5112	UPLAND	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	FOR EAB
99323	8/11/11	5112	UPLAND	8/26/11	FMISC-EAB	TREAT TREE FOR EAB	DUP OF 100098
99883	8/15/11	4503	UPLAND	9/1/11	FMISC-EAB	EAB TREATMENT - 1 TREE	FOR EAB
99883	8/15/11	4503	UPLAND	9/1/11	FMISC-EAB	EAB TREATMENT - 1 TREE	DUP OF 100101
99884	8/15/11	4511	UPLAND	9/1/11	FMISC-EAB	EAB TREATMENT - 1 TREE	FOR EAB
99884	8/15/11	4511	UPLAND	9/1/11	FMISC-EAB	EAB TREATMENT - 1 TREE	DUP OF 100103
99886	8/15/11	2315	HOLMES	9/1/11	FMISC-EAB	EAB TREATMENT - 1 TREE	FOR EAB
99886	8/15/11	2315	HOLMES	9/1/11	FMISC-EAB	EAB TREATMENT - 1 TREE	DUP OF 100104
99885	8/15/11	4612	UPLAND	9/1/11	FMISC-EAB	EAB TREATMENT - 1 TREE	FOR EAB
99885	8/15/11	4612	UPLAND	9/1/11	FMISC-EAB	EAB TREATMENT - 1 TREE	DUP OF 100106
99944	8/15/11	2200	HOLMES	9/2/11	FMISC-EAB	TREAT ASH TREE FOR EAB	FOR EAB
99944	8/15/11	2200	HOLMES	9/2/11	FMISC-EAB	TREAT ASH TREE FOR EAB	Not a dupe, but closed as dupe - should have never been entered, need all data on specific tree, can't pinpoint 1 tree on this address.
100109	9/6/11	2303	WINNETKA	9/6/11	FMISC-EAB	cell 5, 15", 60 ML, Jacobi, 65/sunny, good cond	complete. Jacobi
100104	9/6/11	2315	HOLMES	9/6/11	FMISC-EAB	cell 2, 21", 120 ML, Jacobi, 68/sunny, good cond	complete. Jacobi
100079	9/6/11	2606	COLORADO	9/6/11	FMISC-EAB	cell 3, 15", 60ML, Jacobi, 71/sunny, good cond	complete. Jacobi

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100085	9/6/11	2615	BUCKNELL	9/6/11	FMISC-EAB	cell 1, 22", 135ML, Jacobi, 73/Coudy good cond	complete. Jacobi
100094	9/6/11	2617	BEAUMONT	9/6/11	FMISC-EAB	cell 3, 31", 240ML, Jacobi, 55/sunny, good cond	complete. Jacobi
100097	9/6/11	2706	OHIO	9/6/11	FMISC-EAB	cell 10, 29", 210 ML, Jacobi, 65/sunny, good cond	complete. Jacobi
100093	9/6/11	2722	COLORADO	9/6/11	FMISC-EAB	cell 5, 15", 60ML, Jacobi, 71/sunny, good cond	complete. Jacobi
100075	9/6/11	2801	EDELWEISS	9/6/11	FMISC-EAB	cell 6, 20", 110ML, Jacobi, 82/sunny, good cond	complete. Jacobi
100077	9/6/11	2804	EDELWEISS	9/6/11	FMISC-EAB	cell 4, 17", 75ML, Jacobi, 82/sunny, good cond	complete. Jacobi
100088	9/6/11	2810	NORTHMOOR	9/6/11	FMISC-EAB	cell 2, 20", 110 ML, Jacobi, 63/sunny, good cond	complete. Jacobi
100081	9/6/11	2906	CONCORDIA	9/6/11	FMISC-EAB	cell 4, 27", 180 ML, Jacobi, 71/cloudy, good cond	complete. Jacobi
100091	9/6/11	2920	NORTHMOOR	9/6/11	FMISC-EAB	cell 1, 15", 60 ML, Jacobi, 71/sunny, good cond	complete. Jacobi
100087	9/6/11	3003	GREENDALE	9/6/11	FMISC-EAB	cell 4, 17", 75ML, Jacobi, 59/Sunny, good cond	complete. Jacobi
100078	9/6/11	3009	FOLIAGE	9/6/11	FMISC-EAB	cell 3, 14", 50ML, Jacobi, 71/Sunny, Good cond	complete. Jacobi
100083	9/6/11	3223	NEW ENGLAND	9/6/11	FMISC-EAB	cell 3, 29", 210 ML, Jacobi, 66/Cloudy, Good cond	complete. Jacobi
100073	9/6/11	3306	JACQUELINE	9/6/11	FMISC-EAB	Cell 4, 9", 30ML, Jacobi, 66/Sunny, Good Cond	complete. Jacobi
100071	9/6/11	3310	JACQUELINE	9/6/11	FMISC-EAB	Cell 10, 13", 45ml, Jacobi, 80/Cloudy, Good Cond Cell 12, 7", 20ml, Jacobi, 80/Cloudy, Good Cond	complete. Jacobi
100074	9/6/11	3315	JACQUELINE	9/6/11	FMISC-EAB	Cell 2, 18", 80ML, Jacobi, 78/Sunny, Good Cond	complete. Jacobi
100101	9/6/11	4503	UPLAND	9/6/11	FMISC-EAB	cell 7, 14", 50ML, Jacobi, 56/sunny, good cond	complete. Jacobi
100103	9/6/11	4511	UPLAND	9/6/11	FMISC-EAB	cell 5, 17", 75ML, Jacobi, 56/Sunny, Good cond	complete. Jacobi
100106	9/6/11	4612	UPLAND	9/6/11	FMISC-EAB	cell 10, 18", 80ML, Jacobi, 60/sunny, good cond	complete. Jacobi
100110	9/6/11	4628	CLEVELAND	9/6/11	FMISC-EAB	cell 1, 19", 90ML, 70/sunny, good cond	complete. Jacobi
100108	9/6/11	4804	UPLAND	9/6/11	FMISC-EAB	cell 24, 17", 75ML, Jacobi, 60/Sunny, good cond	complete. Jacobi

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100100	9/6/11	5020	UPLAND	9/6/11	FMISC-EAB	cell 3, 16", 65ML, Jacobi, 74/sunny, good cond	complete. Jacobi
100098	9/6/11	5112	UPLAND	9/6/11	FMISC-EAB	cell 4, 11", 40ML, Jacobi, 73/sunny, good cond	complete. Jacobi
100132	9/6/11	1517	KERSTIN	9/6/11	FMISC-EAB	cell 2, 21", 120ML, Jacobi, 55/sunny, good cond	complete. Jacobi
100131	9/6/11	1520	KERSTIN	9/6/11	FMISC-EAB	cell 3, 19", 90ML, Jacobi, 55/Sunny, good cond	complete. Jacobi
100127	9/6/11	1522	POWDERHORN	9/6/11	FMISC-EAB	cell 4, 18", 80ML Jacobi, 60/sunny, good cond cell 21, 16", 65ML, Jacobi, 60/sunny, good cond	complete. Jacobi
100133	9/6/11	1532	KERSTIN	9/6/11	FMISC-EAB	cell 4, 21", 120ML, Jacobi, 69/sunny, good cond	complete. Jacobi
100117	9/6/11	1601	HIGHRIDGE	9/6/11	FMISC-EAB	cell 1, 13", 45ML, Jacobi, 72/sunny, good cond	complete. Jacobi
100124	9/6/11	1619	ARNOLD	9/6/11	FMISC-EAB	cell 12, 16", 65ML, Jacobi, 70/sunny, good cond	complete. Jacobi
100122	9/6/11	1669	TELEMARK	9/6/11	FMISC-EAB	cell 4, 19", 90ML, Jacobi, 61/sunny, good cond cell 6, 17", 75ML, Jacobi, 61/sunny, good cond	complete. Jacobi
100121	9/6/11	1720	TELEMARK	9/6/11	FMISC-EAB	cell 4, 24", 155ML, Jacobi, 80/sunny, good cond	complete. Jacobi
100115	9/6/11	1806	HIGHRIDGE	9/6/11	FMISC-EAB	cell 1, 13", 45ML, Jacobi, 68/sunny, good cond cell 6, 12", 40ML, Jacobi, 68/sunny, good cond	complete. Jacobi
100134	9/6/11	1817	ARNOLD	9/6/11	FMISC-EAB	cell 4, 15", 60ML, Jacobi, 73/sunny, did not take full dose	complete. Jacobi
100118	9/6/11	1904	HIGHRIDGE	9/6/11	FMISC-EAB	cell 1, 12", 40ML, Jacobi, 77/sunny, good cond cell 5, 12", 40ML, Jacobi, 77/sunny, good cond	complete. Jacobi
100120	9/6/11	1999	SANTA MONICA	9/6/11	FMISC-EAB	cell 1, 19", 90ML, Jacobi, 75/sunny, good cond	complete. Jacobi
100112	9/6/11	2516	SKOKIE	9/6/11	FMISC-EAB	cell 4, 12", 40ML, 73/sunny, good cond	complete. Jacobi
100113	9/6/11	2528	SKOKIE	9/6/11	FMISC-EAB	cell 4, 20", 110 ML, 77/sunny, good cond	complete. Jacobi
100128	9/6/11	5321	CYBELE	9/6/11	FMISC-EAB	cell 4, 15", 60ML, Jacobi, 63/sunny, good cond	complete. Jacobi
100129	9/6/11	5326	CYBELE	9/6/11	FMISC-EAB	cell 5, 17", 75ML, Jacobi, 63/sunny, Did not take full dose	complete. Jacobi

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
100114	9/6/11	5334	DIERKS	9/6/11	FMISC-EAB	5334 Dierks - cell 19, 11", 40ML, Jacobi, 64/sunny, good cond 5362 Dierks - cell 13, 12", 40ML, Jacobi, 64/sunny, good cond 5345 Dierks - cell 5, 10", 30ML, Jacobi, 66/sunny, good cond 5386 Dierks - cell 2, 11", 40ML, Jacobi, 70/sunny, good cond	complete. Jacobi
100126	9/6/11	5340	FOREST VIEW	9/6/11	FMISC-EAB	cell 6, 16", 65ML, Jacobi, 70/sunny, good cond	complete. Jacobi
100119	9/6/11	6677	GRASSRIDGE	9/6/11	FMISC-EAB	cell 2, 16", 65ML, Jacobi, 69/cloudy, good cond cell 4, 17", 75ML, Jacobi, 69/Cloudy, good cond	complete. Jacobi
100141	9/6/11	1836	APPLE TREE	9/6/11	FMISC-EAB	cell 4, 14", 50ML, Jacobi, 69/cloudy, good cond	complete. Jacobi
100138	9/6/11	4603	LONGMEADOW	9/6/11	FMISC-EAB	cell 5, 20", 110ML, Jacobi, 59/cloudy, good cond	complete. Jacobi
100140	9/6/11	4607	NEWCASTLE	9/6/11	FMISC-EAB	cell 4, 14", 50ML, Jacobi, 69/cloudy, good cond	complete. Jacobi
100137	9/6/11	4628	LONGMEADOW	9/6/11	FMISC-EAB	cell 5, 12", 40ML, Jacobi, 75/sunny, good cond	complete. Jacobi
100142	9/6/11	4635	NEWCASTLE	9/6/11	FMISC-EAB	cell 5, 20", 110ML, Jacobi, 69/cloudy, good cond	complete. Jacobi
110573	3/21/12	533	HILTON	3/21/12	FMISC-EAB	Property Owner paid Tree Care to treat 25" Green Ash in cell 1 with soil drench.	RFS for documentation purposes only
112510	4/23/12	1372	BOILVIN	4/23/12	FMISC-EAB	Treat ash in cell 5	[illegible] (OOPS)
112513	4/23/12	2120	HARLEM	4/23/12	FMISC-EAB	38" Green Ash, cell 3. Tree Care treated at property owner's expense. RFS Created for tracking purposes only.	No action taken, RFS was only to document Tree Care's treatment of the tree.
115764	5/21/12	1303	HILLCREST	6/5/12	FMISC-EAB	Cell 5, 22" DBH, 135ml, JAcobi, Sunny, 55'	Jacobi
116014	5/21/12	875	STONEFIELD	6/7/12	FMISC-EAB	Cell 3, 9" DBH, 30ml, Jacobi, Sunny/66'	Jacobi, Route 1
115770	5/22/12	1214	MONDALE	6/5/12	FMISC-EAB	Cell 4, 25", 160ml, Jacobi, Sunny/65'	Jacobi
115781	5/22/12	1218	ARNOLD	6/5/12	FMISC-EAB	Cell 2, 16" DBH, 65ml, Jacobi, Sunny/60'	Jacobi
115782	5/22/12	1218	ARNOLD	6/5/12	FMISC-EAB	Cell 4, 17" DBH, 75ml, Jacobi, Sunny/60'	Jacobi
115769	5/22/12	4830	ORCHARD	6/5/12	FMISC-EAB	[illegible] Route 1	Jacobi
115774	5/22/12	5123	DAVID	6/5/12	FMISC-EAB	Cell 4, 18" DBH, 80ml, Jacobi, Sunny/70'	Jacobi

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
115768	5/22/12	721	WOODRIDGE	6/5/12	FMISC-EAB	cell 12, 20" DBH, 110ml, Jacobi, Sunny/63'	Jacobi
115778	5/23/12	1115	CHARLOTTE	6/5/12	FMISC-EAB	Call 3, 19" DBH, 90ml, Jacobi, Sunny/64'	Jacobi
115776	5/23/12	4909	CARLA	6/5/12	FMISC-EAB	Cell 21, 19" DBH, 90ml, Jacobi, Sunny/60'	Jacobi
115775	5/23/12	5005	CAROL	6/5/12	FMISC-EAB	Cell 2, 18" DBH, 80ml, Jacobi, Sunny/57'	Jacobi
115786	5/24/12	1190	REVERE RIDGE	6/5/12	FMISC-EAB	Cell 1, 11" DBH, 40ml, JACOBI, Sunny/75'	Jacobi
115785	5/24/12	1252	ANEE	6/5/12	FMISC-EAB	Cell 1, 15" DBH, 60ml, Jacobi, Sunny/75'	Jacobi
115914	5/24/12	1308	REVERE RIDGE	6/7/12	FMISC-EAB	Cell 7, 18", 80ml, Jacobi, Sunny/75'	Jacobi
115913	5/24/12	1309	REVERE RIDGE	6/7/12	FMISC-EAB	Cell 5, 16" DBH, 65ml, Jacobi, Sunny/75'	Jacobi
115915	5/24/12	1364	REVERE RIDGE	6/7/12	FMISC-EAB	Cell 4, 14" DBH, 50ml, Jacobi, Sunny/84'	Jacobi
115916	5/24/12	1377	REVERE RIDGE	6/7/12	FMISC-EAB	Cell 24, 11" DBH, 40ml, Jacobi, Sunny/84'	Jacobi
115784	5/24/12	415	MULFORD	6/5/12	FMISC-EAB	Cell 3, DBH 15, Qty Injected (ml) 60, Applicator JACOBI, Weather Cond Sunny/68', 6, 15, 60, JACOBI, Sunny/68', 20, 18, 80, JACOBI, Sunny/80', 21, 9, 30, JACOBI, Sunny/79', 23,16, 65, JACOBI, Sunny/79'	Jacobi
115783	5/24/12	5614	ELAINE	6/5/12	FMISC-EAB	Cell 5, 17" DBH, 75ml, Jacobi, Sunny/72'	Jacobi
115917	5/25/12	6652	TIMBERLINE	6/7/12	FMISC-EAB	Cell 6, 12" DBH, 40ml, Jacobi, Sunny/86'	Jacobi
115922	5/25/12	6655	TIMBERLINE	6/7/12	FMISC-EAB	Cell 7, 11" DBH, 40ml, Jacobi, Sunny/86'	Jacobi
116001	5/29/12	1205	WOODCREEK	6/7/12	FMISC-EAB	Cell 10, 7" DBH, 20ml, Jacobi, Sunny/77'	Jacobi
116002	5/29/12	1205	WOODCREEK	6/7/12	FMISC-EAB	Cell 12, 7" DBH, 20ml, Jacobi, Sunny/77'	Jacobi
115942	5/29/12	1338	BRANDYWINE	6/7/12	FMISC-EAB	Call 6, 13" BDH, 45ml, Jacobi, Sunny/69'	Jacobi
115940	5/29/12	6643	SANDALWOOD	6/7/12	FMISC-EAB	Cell 6, 9" DBH, 30ml, Jacobi, Sunny/60'	Jacobi

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
115938	5/29/12	6648	SANDALWOOD	6/7/12	FMISC-EAB	Cell 1, 15" DBH, 60ml, Jacobi, Sunny/60'	Jacobi
115935	5/29/12	6683	SANDALWOOD	6/7/12	FMISC-EAB	Cell 3, 15" DBH, 60ml, Jacobi, Sunny/60'	Jacobi
115937	5/29/12	6683	SANDALWOOD	6/7/12	FMISC-EAB	Cell 21, 14" DBH, 50ml, Jacobi, Sunny/60'	Jacobi
116008	5/29/12	894	TRAINER	6/7/12	FMISC-EAB	cell 4, 8" DBH, 25ml, Jacobi, Sunny/79'	Jacobi
116006	5/30/12	1009	TRAINER	6/7/12	FMISC-EAB	Cell 7, 11" DBH, 40ml, Jacobi, Sunny/61'	Jacobi
116007	5/30/12	943	TRAINER	6/7/12	FMISC-EAB	Cell 2, 7" DBH, 20ml, Jacobi, Sunny/61'	Jacobi
116004	6/1/12	6364	SPRING HILL	6/7/12	FMISC-EAB	Cell 19, 13" DBH, 45ml, Jacobi, Sunny/59'	Jacobi
116005	6/1/12	6364	SPRING HILL	6/7/12	FMISC-EAB	Cell 20, 16" DBH, 65ml, Jacobi, Sunny/75'	Jacobi
116011	6/1/12	6673	SOUTHFIELD	6/7/12	FMISC-EAB	Cell 3, 11" DBH, 40ml, Jacobi, P Cloudy	Jacobi, Route 1
116013	6/1/12	895	ANEE	6/7/12	FMISC-EAB	Cell 5, 11" DBH, 40ml, Jacobi, Sunny/48'	Jacobi, Route 1
116010	6/1/12	913	CANDLEFORD	6/7/12	FMISC-EAB	Cell 5, 18" DBH, 80ml, Jacobi, Sunny/51'	Jacobi, Route 1
116009	6/1/12	949	BRITTANIA	6/7/12	FMISC-EAB	Cell 4, 9" DBH, 30ml, Jacobi, Sunny/53'	Jacobi, Route 1
116012	6/1/12	954	ANEE	6/7/12	FMISC-EAB	Cell 2, 13" DBH, 45ml, Jacobi, Sunny/48'	Jacobi, Route 1
117479	6/11/12	1150	FOX CHASE	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 6 8" DBH 25ml Sunny/70	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage

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117476	6/11/12	1213	NORTH CREST	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 5 9" DBH 30ml Sunny/60	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117475	6/11/12	1254	NORTH CREST	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 1 11" DBH 40ml Sunny/67	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117465	6/11/12	1340	LIVINGSTON	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 5 10" 30mlSunny/60	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117470	6/11/12	1357	SANDHURST	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 2 8" DBH 25ml Sunny/65	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
112509	6/11/12	1372	BOILVIN	4/23/12	FMISC-EAB	Treat Ash in cell 5	Closed as dup of 112509. (OOPS)
112509	6/11/12	1372	BOILVIN	4/23/12	FMISC-EAB	Treat Ash in cell 5	OOPS - Cattage went to address - property owner paid Tree Care to treat the tree.
117466	6/11/12	1404	LIVINGSTON	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 11" DBH 40ml Sunny/60	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117469	6/11/12	1431	SANDHURST	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 3 12" DBH 40ml Sunny/65	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117467	6/11/12	1434	LIVINGSTON	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 11" DBH 40ml Sunny/60	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
117468	6/11/12	1460	LIVINGSTON	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 7" DBH 20ml Sunny/65	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117464	6/11/12	1463	RAMSEY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 3 21" DBH 120ml Sunny/73	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117456	6/11/12	1552	OAKFOREST	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 6 11" DBH 40ml Sunny/63	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117502	6/11/12	1585	MARSHFIELD	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 3 16" DBH 65ml Cloudy/77 Treated Ash with TREE-AGE CELL 7 17" DBH 75ml Cloudy/77	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117458	6/11/12	1608	OAKFOREST	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 11" DBH 40ml Sunny/62	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117480	6/11/12	1617	ALBANY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 9" DBH 30ml Sunny/73	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117481	6/11/12	1640	ALBANY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 9" DBH 30ml Sunny/73	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
117463	6/11/12	1648	ROWNTREE	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 7 11" DBH 40ml Sunny/60	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117494	6/11/12	2042	WEMBLEY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 2 15" DBH 60ml Sunny/73 Treated Ash with TREE-AGE CELL 5 15" DBH 60ml Sunny/73	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117493	6/11/12	2082	WEMBLEY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 5 16" DBH 65ml Sunny/68	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117492	6/11/12	2130	WEMBLEY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 7 14" DBH 50ml Sunny/67	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117495	6/11/12	2141	CARRINGTON	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 14" DBH 50ml Sunny/78	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117490	6/11/12	2172	WEMBLEY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 2 13" DBH 45ml Sunny/65	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117496	6/11/12	2187	CARRINGTON	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 15" DBH 60ml Sunny/78	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
117488	6/11/12	2209	WEMBLEY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 20 13" DBH 45ml Sunny/75	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117489	6/11/12	2210	WEMBLEY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 3 13" DBH 45ml Sunny/55	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117487	6/11/12	6244	FEATHERSTONE	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 2 10" DHB 30ml Sunny/74	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117500	6/11/12	6333	BRIGANTINE	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 5 13" DBH 45ml Sunny/72	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117498	6/11/12	6358	BRIGANTINE	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 2 11" DBH 40ml Sunny/72	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117486	6/11/12	6459	SHILOH	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 2 10" DBH 30ml Sunny/71	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117483	6/11/12	6758	ACADEMY	6/28/12	FMISC-EAB	CELL 2 16" DBH 65ml Sunny/55 Treated Ash with TREE-AGE	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117482	6/11/12	6835	CODY	6/28/12	FMISC-EAB	Ash with TREE-AGE CELL 4 21" DBH 120ml Sunny/55	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
117484	6/11/12	6951	ACADEMY	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 2 11" DBH 40ml Sunny/55	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
111683	6/11/12	707	COTTAGE GROVE	4/5/12	FMISC-EAB	Treat for EAB	Treated. .26" DBH, 170ml. Cattage
117462	6/11/12	7085	SENTINEL	6/28/12	FMISC-EAB	CELL 3 14" DBH 50ml Sunny/72 Treated Ash with TREE-AGE	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117461	6/11/12	7090	SENTINEL	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 13" DBH 45ml Sunny/72	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117477	6/11/12	7112	WEATHERED OAK	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 6 9" DBH 30ml Sunny/52	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117478	6/11/12	7150	WEATHERED OAK	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 7 8" DBH 25ml Sunny/52	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117474	6/11/12	7217	CENTENNIAL	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 6 9" DBH 30ml Sunny/52	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117460	6/11/12	7218	SENTINEL	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 5 12" DBH 40ml Sunny/71	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
117459	6/11/12	7236	SENTINEL	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 4 14" DBH 50ml Sunny/71	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117473	6/11/12	7353	FAIRMONT	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 12 10" DBH 30ml Sunny/75	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117472	6/11/12	7380	FAIRMONT	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 3 10" DBH 30ml Sunny/65	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
117471	6/11/12	7412	FAIRMONT	6/28/12	FMISC-EAB	Treated Ash with TREE-AGE CELL 6 10" DBH 30ml Sunny/65	EAB Treatment of Route 13 completed 6/11/12 by Jacobi/Cattage
110292	6/12/12	1915	23RD	3/16/12	FMISC-EAB	P/B LARSON inspection - treat ash trees in ROW @ address for EAB.	CCR Request form Ald Johnson again. Homeowners think one of the trees looks bad. BRandon will call Adl Johnson.
110292	6/12/12	1915	23RD	3/16/12	FMISC-EAB	P/B LARSON inspection - treat ash trees in ROW @ address for EAB.	Cell 19, 90ml, cell 23 - 150ml.
118118	6/12/12	6483	MUIRFIELD	7/11/12	FMISC-EAB	Treated 1 tree. 3 15" B Jacobi Sunny/61	complete.
118117	6/12/12	6658	OLD HUNTERS	7/11/12	FMISC-EAB	Treated 1 tree. 5 17" 75 B Jacobi Sunny/75	Complete.
111770	6/12/12	809	HIGHVIEW	4/9/12	FMISC-EAB	Treat Ash Tree	Cattage/Loudermilk
116172	6/13/12	1738	HANCOCK	6/11/12	FMISC-EAB	Green Ash, cell 8", No Wires. Treat for EAB	30mol. Cattage.

RFS #	Date Completed	Address/Block	Street	Date Added	Problem Code	Comments	Logs/Comments
116174	6/13/12	1935	CUMBERLAND	6/11/12	FMISC-EAB	Green Ash, 10" DBH, cell 2, wires (telecom - OK). Treat for EAB	30ml. Cattage.
116175	6/13/12	2016	CUMBERLAND	6/11/12	FMISC-EAB	EAB	25ml. Cattage
116184	6/13/12	2125	GRANT	6/11/12	FMISC-EAB	GREEN ASH, 7" DBH, CELL 7, NO WIRES. TREAT FOR EAB.	20ml. Cattage
116179	6/13/12	2205	HANCOCK	6/11/12	FMISC-EAB	GREEN ASH, 16" DBH, CELL 6, NO WIRES, TREAT FOR EAB	65ml. Cattage
116177	6/13/12	2208	OXFORD	6/11/12	FMISC-EAB	Green Ash, 16" DBH, CELL 4, NO WIRES. TREAT FOR EAB	65ml. Cattage
116183	6/13/12	2315	GRANT	6/11/12	FMISC-EAB	GREEN ASH, 10" dbh, CELL 7, NO WIRES. TREAT FOR EAB.	30ml. Cattage
116181	6/14/12	518	ELLIS	6/11/12	FMISC-EAB	GREEN ASH, 9" DBH, CELL 6, NO WIRES. TREAT FOR EAB.	Cell 11. 40ml. Cattage
121466	6/22/12	5553	TASSELBURY	8/29/12	FMISC-EAB	Cell # 10 DBH - 15" Qty Injected (ml) 60 Applicator Name - CATTAGE Weather Conditions -Sunny/76	Cattage completed.
117136	6/28/12	1623	GRANT	6/25/12	FMISC-EAB	Autumn P. Ash. 9" DBH, cell 23, wires. Treat for EAB. Mark Stockman	Complete. Cattage. Cell 23, 9" DBH, 30ml, Sunny/80'
117193	6/28/12	1807	HUFFMAN	6/25/12	FMISC-EAB	Treat 17" Ash in cell 5 for EAB.	Complete Cattage. Cell 5, 17", 75ml, sunny/80'
116910	6/28/12	3227	ORLEANS	6/20/12	FMISC-EAB	treat for EAB	Completed. Cattage. Cell 4, 14" DBH, 50ml, Sunny/86'
117385	7/2/12	2300	HUFFMAN	6/27/12	FMISC-EAB	Treat 2 Green Ash trees for EAB. 16" DBH in cell 2N; 24" DBH in cell 4S.	treated 2 Ash trees 86'/Sunny Cattage/Loudermilk Cell 4S 155ml
118293	7/13/12	1122	WINNEBAGO	7/12/12	FMISC-EAB	Treat 45" DBH White Ash in cell 1.	EAB treatment. White Ash, cell 1, 45" DBH, 450ml - TreeaAge. Sunny/63'. Jacobi.
121413	8/23/12	812	WOOD	8/29/12	FMISC-EAB	Property owner hired True Green to treat the ash tree in front of his house. Wants it inspected and to know that it won't be taken down.	Inspected by Brandon Larson. OK to stay. 8" DBH, cell 1, no wires.

D-7

Illicit Discharge Detection and Elimination Program

THE CITY OF ROCKFORD ILLINOIS, USA

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

STANDARD OPERATING PROCEDURES

June 2015

1.0 General

The purpose of this standard operating procedure for Illicit Discharge Detection and Elimination program is to comply with Part II, A.7 of the City of Rockford's NPDES Stormwater Permit (ILS000001). This document outlines how to detect and investigate a potential illicit discharge.

Additional guidance can be found in: *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments* by the Center for Watershed Protection.

2.0 Legal Authority

The City has the authority to investigate all reports of illicit connections or illegal dumping within its City limits. Legal authority for the City's Illicit Discharge Detection and Elimination Program can be found in the City of Rockford's Code of Ordinances in Chapter 109, Article 12.

3.0 Definition of Illicit Discharges

An illicit discharge is defined as any discharge that enters the MS4 (municipal separate storm sewer system) that is not composed entirely of stormwater, except discharges pursuant to a National Pollutant Discharge Elimination System (NPDES) permit.

3.1 Allowable Non-stormwater discharges

Illicit discharges are considered "illicit" because storm sewer systems, unlike sanitary sewer systems, are not designed to accept, treat, or discharge non-stormwater wastes. Unless identified by the City of Rockford or Illinois EPA as significant sources of pollutants to waters of the state, Table 1 indicates non-stormwater discharges that shall not be prohibited from entering the MS4 though they should be investigated to confirm they are the only source:

Table 1. Allowable Non Stormwater Discharges	
Waterline Flushing	Foundation drains
Landscape Irrigation	Air conditioning condensate
Diverted stream flows	Irrigation water
Rising ground waters	Springs
Uncontaminated pumped groundwater	Water from crawl space pumps
Discharges from potable water sources	Footing drains
Individual residential car washing	Lawn Watering
Dechlorinated swimming pool discharges	Street wash waters
Flows from riparian habitats and wetlands	Discharges or flows from emergency firefighting activities
Uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(b)(20)) to separate storm sewers	

3.2 Categories of Illicit discharges

1) TRANSIENT – Short in duration, lasting only a short time and then disappearing.
    a. Examples of potential Direct transient illicit discharges include:
        i. Intermittent discharges of wash water or process water to the storm sewer through a straight pipe connection from an industrial facility
        ii. Discharges of non-stormwater to a floor drain that is connected to the storm sewer.
        iii. Discharges of contaminated stormwater including discharges from industrial facilities that have, but are not in compliance with, a stormwater NDPES permit.

    b. Examples of potential Indirect transient illicit discharges include:
        i. Materials that have been dumped into a storm drain inlet or catch basin (Figure 1),
        ii. An old or damaged sanitary sewer line that is leaking fluids into groundwater that then seeps into a storm sewer line or drainage way, and
        iii. A failing septic system that is leaking into a cracked storm sewer line.

2) CONTINUOUS – Continuing without changing, stopping, or being interrupted. Examples include:
    a. Sanitary wastewater piping that is cross-connected from a building or sanitary sewer line to the storm sewer,
    b. A broken sanitary line resulting in discharge of sanitary waste into the storm sewer system(Figure 2), and
    c. A discharge of process wastewater or other non-stormwater from an industrial facility to the storm sewer system.

3.3 Illicit Discharge Indicators

The following are indicators of potential illicit discharges/connections. An investigation shall be initiated should any of the following be observed:

- Flowing water when there has been 3 days without precipitation
- Discolored water (cloudy, sheen on water, etc.)
- Sediment laden water
- Foul smelling water (i.e. fats, oil, grease from restaurants, sewage)
- Dead fish or animals near water bodies
- Blockages in storm system
- Sanitary sewer overflows
- Basement back-ups
- Floatables
- Staining indicating flows (oily, rust, etc.)

4.0 Staffing

The primary staff from the Stormwater Environmental Team (SWET) responsible for performing illicit discharge investigations shall be the following positions: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and a designated project manager and Engineering Techs.

The following staff from the following City of Rockford departments shall receive annual training for detecting and initiating illicit discharge investigations:

- Community and Economic Development – Inspectors, Enforcement Specialists
- Public Works Streets & Engineering Division, (Engineers, Managers, Technicians, Street Maintenance & supervisors)

When a potential illicit discharge has been observed the bubble chart in Appendix A shall be followed through the investigation process. Staff from the Department of Public Works Stormwater Environmental Team (SWET) shall be responsible for performing outfall inspections and review of illicit discharge complaints and/or observations. Each team member shall be familiar with this document and be trained to recognize potential illicit discharges and the process to initiate an investigation. Project Managers and Senior Engineering Techs can perform inspections provided they are current in their training and are approved to perform inspections by the Engineering Operations Manager and the Stormwater Program Manager(s).

Equipment to perform the investigation can include but not limited to: the field observation or appropriate inspection form, map of the storm system, camera, sample bottles, sampling equipment and personal protection equipment.

Under no circumstances should anyone perform an investigation that could cause bodily harm to themselves or others. In those cases the proper authorities. (i.e. the Fire Department) should be contacted for direction and assistance.

4.1 Safety Procedures

The field activities described in this guide could include sampling of potentially contaminated water and, as such, have some associated risk. As with any field procedures, appropriate precautions should be taken to ensure the safety of field crews. General and specific suggested safety procedures are provided below.

General suggestions:

- While performing field work activities, use appropriate caution, make an effort to recognize potentially dangerous situations while performing field work, and take the proper steps to avoid or minimize them.
- Field work activities should not be performed alone.
- A list of team member and emergency contact numbers should be kept with each field team.
- Long pants and close-toed shoes are required.
- Carry adequate water, sunscreen, and bug repellent if needed.

- Employees should use their judgment to ensure their safety while working during inclement weather. It may be necessary to suspend and/or reschedule field work if the weather will not permit safe and effective completion of the activities. Recommended precautions include:

    - Severe heat or cold: Dress appropriately, take breaks as needed to warm up or cool down, and stay hydrated.
    - Thunderstorms: Stop working, get out of the water, if applicable, and take shelter if there is a threat of lightning strikes.
    - Snowstorms, flooding, tornadoes, and other dangerous weather: Field work should be stopped or canceled if dangerous weather arises or is predicted.

- Each field work team should have a functioning mobile phone and a fully-stocked first aid kit.

Public roadways

- Whenever work will be performed in or near a public roadway, wear a high-visibility safety vest.

Manholes and similar structures

If a manhole cover or similar structure must be removed (in order to determine sewer line configuration, for example):

- Safety-toe footwear (steel-toed shoes) should be worn.
- Lifting manhole covers should be done with the proper tools and technique so as to avoid injury.
- The open cover should only remain open as long as necessary to gather the required information, and should never be left unattended.
- Due to the potential dangers of confined spaces, do not enter a manhole or put your head below the rim of the opening without the proper training.

Stream walks and illicit discharges

- Properly fitting waders with high-traction soles should be worn when walking in a stream.
- Rubber gloves should be worn if contact with polluted water is expected.
- Skin contact with suspected illicit discharges should be avoided.
- Hand sanitizer and/or careful hand washing should be employed after potential contact with polluted water.
- High-visibility orange or yellow vests should be worn.
- Wear safety goggles when performing any chemical tests.
- Reagents and other chemicals should be used and disposed of properly by following the guidance on the MSDS safety sheets.

5.0 Identification of Illicit Discharges

5.1 NPDES Permitted Facilities

During the process of performing industrial and construction inspections these sites will also be checked for illicit discharges and connections pursuant to the Standard Operating Procedures governing the City's Industrial High Risk Runoff Facility Inspection Program and its Erosion & Sediment Control Plan Review and Regulatory Inspections. The Illinois Environmental Protection Agency (IEPA) issues NPDES permits to construction sites and industrial facilities and maintains limited information on permitted sites on their website. This website shall be reviewed as detailed in those standard operating procedures to ensure all NPDES permitted sites identified have obtained the proper City of Rockford approvals.

5.2 Non-Routine Inspections

If an employee observes evidence of an illicit discharge during an informal or non-routine inspection, he/she shall complete the Field Observation Form (Appendix B) and provide it to a supervisor who shall inform a member of SWET by the end of the business day for further follow-up. SWET shall initiate an investigation within 3 business days. While it may not be reasonable to expect all City employees to have copies of the forms at all times, there are other ways to collect the information:

- The person observing the discharge can provide the information verbally to dispatch, the supervisor, or a member of SWET who can then complete the field observation form.
- The person can log information onto the form upon returning to the office based on their recollection and any field notes; or
- A member of SWET dedicated to inspecting and tracing illicit discharges can be sent to the location as soon as possible where the potential illicit discharge was observed to collect the necessary information directly on the form.

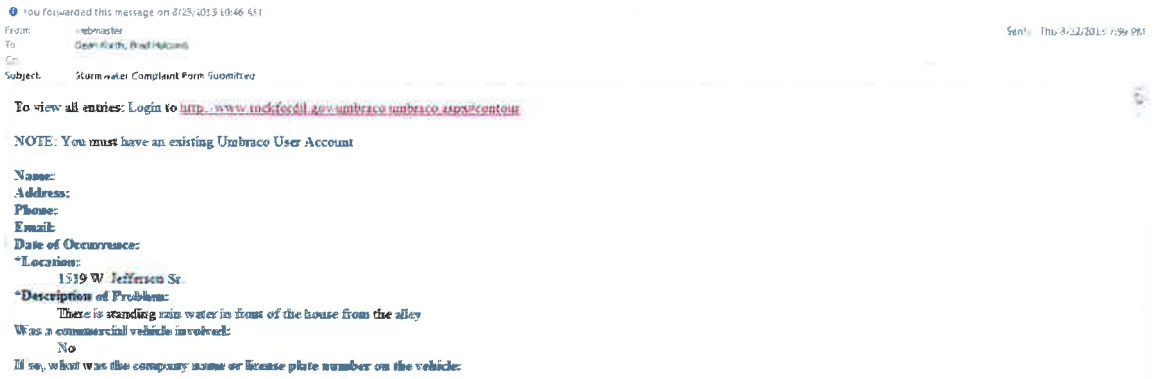
It is important to collect as much information as possible at the time of initial observation because of the likelihood that a discharge may be transitory or intermittent. Initial identification of the likely or potential sources of the discharge is also very important.

5.3 Submitted Complaints (i.e. citizens, staff, etc.)

Citizen complaints are a high priority for the City of Rockford. The City has an existing compliance program under which citizens can either call a hotline (779-348-7300) or report an illicit discharge/connection online (www.rockfordil.gov). All complaints from the public will be followed-up with the field inspection by City staff within 3 business days.

Reports to the hotline during normal business hours shall be forwarded directly to a member of SWET. Reports after hours shall be sent to Ocean Remote, a 24 hour service which will have instructions to notify the on-call supervisor. The supervisor shall send a crew to investigate and a field observation form (Appendix B) shall be filled out and provided to a member of the Storm Water & Environmental Team for further investigation.

Complaints submitted online shall be emailed directly to SWET who shall initiate an investigation within 3 business days. See sample below.



You forwarded this message on 8/23/2013 10:46 AM

From: webmaster
To: Dean Roth, Brad Holcomb
Cc:
Subject: Stormwater Complaint Form Submitted

Sent: Thu 8/22/2013 7:59 PM

To view all entries: Login to http://www.rockfordil.gov/umbraco/umbraco.aspx#contour

NOTE: You must have an existing Umbraco User Account

Name:
Address:
Phone:
Email:
Date of Occurrence:
***Location:**
1519 W. Jefferson St.
***Description of Problem:**
There is standing rain water in front of the house from the alley
Was a commercial vehicle involved:
No
If so, what was the company name or license plate number on the vehicle:

5.4 Dry Weather Screening of Outfalls

Screening of stormwater outfalls is conducted during dry weather to identify potential illicit discharges (i.e., flowing outfalls, staining or other evidence of illicit discharge) and is followed by indicator monitoring to characterize flow types to aid in finding sources. The field screening can also be used to develop a systematic outfall inventory and map of the MS4 (Table 2). Regular inspections of outfalls are a primary part of an effective IDDE program.

Table 2. Outfalls to Include in the Screening

Outfalls to Screen	Features Not to Screen
• Both large and small diameter pipes that are, or appear to be part of the storm drain infrastructure. • Outfalls that appear to be piped headwater streams. • Field connections to culverts. • Submerged or partially submerged culverts • Outfalls blocked with debris or sediment • Pipes that appear to be outfalls from stormwater treatment practices • Small ductile iron pipes • Pipes that appear to only drain roof downspouts but are subsurface to prevent definitive confirmation.	• Drop inlets from roads in culverts (unless evidence of illegal dumping) • Cross-drainage culverts in transportation right-of-way (i.e. can see daylight at other end) • Weep holes • Flexible HDPE pipes that are known to serve as slope drains • Pipes that are clearly connected to roof downspouts via above ground connections

The inspections shall primarily rely on visual observations and the use of portable instrumentation during dry weather to complete a thorough inspection of the City's outfalls. See Table 1 on the Monitoring Standard Operating Procedures for a list of common indicator parameters used to detect illicit discharges. The protocol is applicable to most typical storm sewer systems; however, modifications to materials and methods may be required to address situations such as open channels, piped stream networks, systems impacted by sanitary sewer overflows, or situations where groundwater or backwater conditions preclude or confound adequate inspection. The primary focus of the protocol is sanitary waste, however, toxic and nuisance discharges may also be identified.

5.4.1 When to conduct an outfall survey?

- To maintain a regular schedule of long-term inspections for outfalls the City shall inspect all known outfalls every even year. The outfall database shall be updated following the even year inspections. Newly located outfalls shall be inspected in the years the City became aware of them.
- Late Fall/Early Spring- outfalls are easiest to spot during leaf-off conditions; however, it may require field work outside of the leaf-off time frame.
- After a dry period of at least 72 hours (trace rainfall activity may be acceptable depending on the size of the watershed).
- Early Morning/Late Afternoon- though not always possible, checking outfalls when people are home may increase the chances of catching an illicit connection.
- Avoid conditions during snow melt and/or if salt has been applied to the road system draining to the outfalls. Also note that some field tests (e.g. ammonia, chlorine) are affected by cold temperatures or confounded by the presence of salt (detergents).

5.4.2 Mapping

The first step to successful field work is to have a map with the necessary information. Data that shall be considered for inclusion on mapping for either outfall screenings or illicit discharge investigation is detailed in Table 3. Which data layers shall be dependent on the scale of the map and the type of illicit discharge reported. See appendix F for a sample map.

Table 3. Map Preparation

Desired Data layers Outfall Screenings	Desired Data layers Illicit Discharge Investigation
Roads	Roads
Streams	Streams
Outfall Locations	Outfall Locations
City Boundaries	Jurisdictional Boundaries
Aerial Photography	Aerial Photography
	Industrial facilities
	Storm System (inlets, manholes, pipes)
	Water mains
	Sanitary mains

5.4.3 Outfall screening procedures

The primary field screening tool shall be the Stormwater Inspection Outfall form (Appendix C). The basic procedure at each outfall is to take a picture of the outfall and, if the outfall is not already in the City's mapping system, mark the location on the printed map (record location on ArcGIS once back in the office). Next, a Stormwater Inspection Outfall form is completed, which includes recording a description of the outfall (e.g., pipe material, diameter), a description of physical indicators of potential illicit discharges for both flowing and non-flowing outfalls.

If the outfall has dry weather flow, an illicit discharge investigation shall be implemented.

6.0 Illicit Discharge Investigations.

An illicit discharge investigation shall be initiated when one of the identification measures indicates a potential illicit discharge or connection and the source has not been identified.

An illicit discharge source investigation is conducted to isolate the source of the pollution. There are two types of source investigations: Drainage Area Investigations and Storm Drain Investigations. An illicit discharge that is determined to be likely transient in frequency, entering the storm drain system directly through dumping or spills from the landscape shall follow the procedure for a Drainage Area Investigation. A continuous or intermittent discharge that likely occurs from direct or indirect entry into the storm drain system from the interaction of pipes underground shall follow the procedure for a Storm Drain Investigation. Either investigation should be conducted during dry weather. Regardless of the type of investigation the Illicit Discharge Investigation form (Appendix D) shall be utilized.

A rapid windshield survey of the drainage area may be used to find the potential discharger or generating sites if the discharge observed at an outfall has distinct or unique characteristics that allow crews to quickly ascertain the probable operation or business that is generating it. Discharges with a unique color, smell, or off-the-chart indicator sample reading may point to a specific industrial or commercial source.

A rapid windshield survey works well in small drainage areas, particularly if field crews are already familiar with its business operations. Field crews can match the characteristics of the discharge to the most likely type of generating site, and then inspect all of the sites of the same type within the drainage area until the source is found. For example, if fuel is observed at an outfall, crews might quickly check every business operation in the catchment that stores or dispenses fuel.

In larger or more complex drainage areas, GIS data can be analyzed to pinpoint the source of a discharge. If only general land use data exist, maps can at least highlight suspected industrial areas. If more detailed Standard Industrial Classification (SIC) code data are available digitally, GIS may be used to pull up specific hotspot operations or generating sites that could be potential dischargers.

In a Storm Drain Investigation, field crews strategically inspect manholes within the storm drain network system to observe flows or measure chemical or physical indicators that can isolate discharges to a specific segment of the network. Once the pipe segment has been identified, on-site investigations are used to find the specific discharge or improper connection. This method involves progressive screening at select manholes in the storm drain network to narrow the discharge to an isolated pipe segment between two manholes. Field crews need to make two key decisions when conducting a storm drain network investigation—where to start screening in the network and what indicators will be used to determine whether a manhole is considered clean or dirty.

6.1 Illicit Discharge Investigation Procedures

The field crew can sample the pipe network in one of three ways:

- Crews can work progressively up the trunk from the outfall and test manholes along the way.
- Crews can split the trunk into equal segments and test manholes at strategic junctions in the storm drain system.
- Crews can work progressively down from the upper parts of the storm drain network toward the problem outfall.

During a manhole inspection, manholes are opened and inspected for visual evidence of contamination. Where flow is observed, and determined to be contaminated through visual indicators or field monitoring, the upstream tributary storm sewer system is isolated for investigation (e.g. further flow inspection, dye testing, CCTV). No additional downstream manhole inspections are performed unless the observed flow is determined to be uncontaminated or until all upstream illicit connections are identified and removed. Where flow is not observed but an intermittent discharge is suspected in a junction manhole, select inlets to the structure are partially dammed for the next 48 hours when no precipitation is forecasted. Inlets are dammed by blocking a minimal percentage of the pipe diameter at the invert using sandbags, caulking, weirs/plates, or other temporary barriers. The manholes are thereafter re-inspected (prior to any precipitation or snow melt) for the capture of periodic or intermittent flows behind any of the inlet dams. The same visual observations and field testing is completed on any captured flow, and where contamination is identified, abatement is completed prior to inspecting downstream manholes. In addition to documenting investigative efforts in written and photographic form, it is recommended that information and observations regarding the construction, condition, and operation of the structures also be compiled.

Where flow is observed and does not demonstrate obvious indicators of contamination, samples are collected and analyzed and then compared with established benchmark values to determine the likely prominent source of the flow. This information facilitates the investigation of the upstream storm sewer system. Benchmark values may be refined over the course of investigations when compared with the actual incidences of observed flow sources. In those manholes where periodic or intermittent flow is captured through damming inlets, additional laboratory testing (e.g. toxicity, metals, etc.) should be considered where an industrial discharge is suspected. See Monitoring Standard Operating Procedures for guidance on how to collect and analyze samples.

Adequate storm and sanitary sewer mapping is a prerequisite to properly execute a storm drain investigation. As necessary and to the extent possible, infrastructure mapping should be verified in the field and corrected prior to investigations. This effort affords an opportunity to collect additional information such as latitude and longitude coordinates using a global position system (GPS) unit if so desired. To facilitate subsequent investigations, tributary area delineations should be confirmed and junction manholes should be identified during this process.

To facilitate investigations, storm drain infrastructure should be evaluated for the need to be cleaned to remove debris or blockages that could compromise investigations. Such

material should be removed to the extent possible prior to investigations, however, some cleaning may occur concurrently as problems manifest themselves.

Where field monitoring has identified storm sewer systems to be influenced by sanitary flows or washwaters, the tributary area is isolated for implementation of more detailed investigations. Additional manholes along the tributary are inspected to refine the longitudinal location of potential contamination sources (e.g. individual or blocks of homes). Targeted internal plumbing inspections, dye testing, smoke testing or CCTV inspections are then employed to more efficiently confirm discrete flow sources. Consulting services shall be utilized to perform these tests.

6.2 Eliminating Illicit Discharges

Once the source of an illicit discharge has been identified, steps should be taken to eliminate the discharge. Four questions should be answered for each individual illicit discharge to determine how to proceed; the answers will usually vary depending on the source of the discharge.

1) Who is responsible?
2) What methods will be used to repair?
3) How long will the repair take?
4) How will removal be confirmed?

Financial responsibility for source removal will typically fall on property owners, the City, or a combination of the two. Methods for removing illicit discharges usually involve a combination of education and enforcement. A process for addressing illicit discharges that focuses on identifying the responsible party and enforcement procedures is presented in Figure 1, while Table 4 presents potential sources of illicit discharges. Additional guidance can be found in Chapter 14 of the Illicit Discharge Detection and Elimination Guidance Manual.

Investigators should use judgment in exercising the right mix of compliance assistance and enforcement with approval of the Stormwater Administrator. Voluntary compliance should be used for first-time, minor offenders. Often, property owners are not even aware of a problem, and are willing to eliminate it when educated. More serious violations or continued non-compliance may warrant a more aggressive, enforcement oriented approach provided it is consistent with Chapter 109 and the City of Rockford Stormwater Division Enforcement Response Plan.

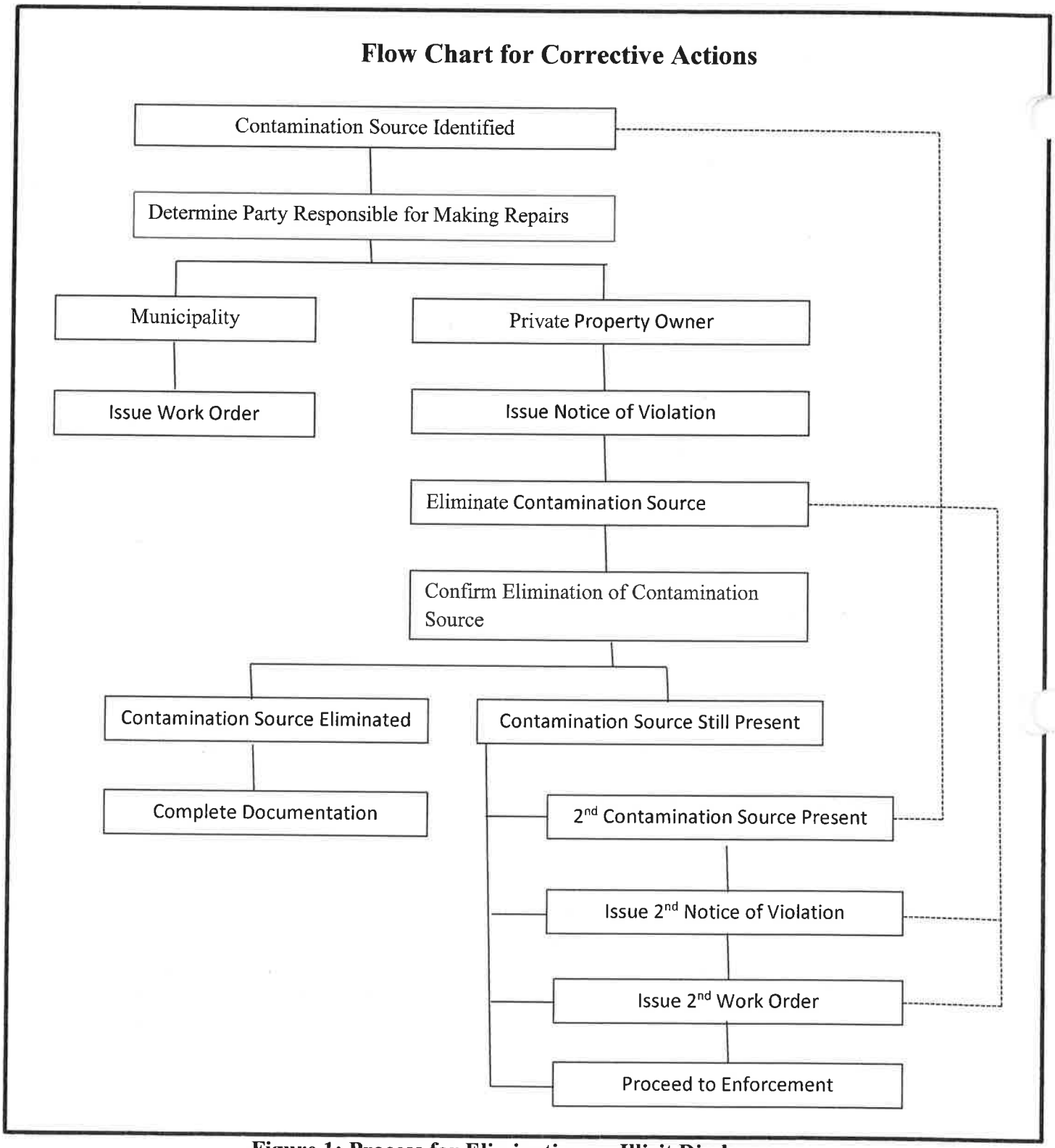


Figure 1: Process for Eliminating an Illicit Discharge

Table 4: Sources of Illicit Discharges	
Type of Discharge	**Source**
Sewage	Break in right-of-way
	Commercial or industrial direct connection
	Residential direct connection
	Infrequent discharge (e.g., RV dumping)
	Straight pipes/septic
Wash Water	Commercial or industrial direct connection
	Residential direct connection
	Power wash/car wash (commercial)
	Commercial wash down
	Residential car wash or household maintenance related activities
Liquid Wastes	Professional oil change/car maintenance
	Heating oil/solvent dumping
	Homeowner oil change and other liquid waste disposal (e.g., paint)
	Spill (trucking)
	Other industrial wastes

6.3 Post-Removal Confirmation

As the sources of illicit discharges are confirmed, measures to correct them must be taken, working with the property owner or other responsible party. The exact type of repair needed will depend on the type of discharge and mode of transmission.

After completing the removal of illicit discharges from a subdrainage area, it is re-inspected to verify corrections and documented as detailed in in Section 9.0. Depending on the extent and timing of corrections, verification monitoring can be done at the initial junction manhole or the closest downstream manhole to each correction. Verification is accomplished by using the same visual inspection, field monitoring, and damming techniques as described above.

7.0 Illinois Environmental Protection Agency (IEPA) Notifications

IEPA shall be notified within 24 hours should an illicit discharge meet the requirements of the Illinois Emergency Management Agency Emergency Release Notifications (Appendix E). A member of SWET shall perform this notification.

8.0 Enforcement

Enforcement measures will be in accordance with Chapter 109, Article 13 and the City of Rockford Storm Water Division Enforcement Response Plan for corrective actions not remedied within the required timeframe.

9.0 Documentation and Record Management

All outfalls and illicit discharge complaints shall be mapped on the City's GIS system and be hyperlinked to their specific files. This will aid in tracking potential illicit discharges and also allow us to determine problem areas where we may consider focusing education efforts.

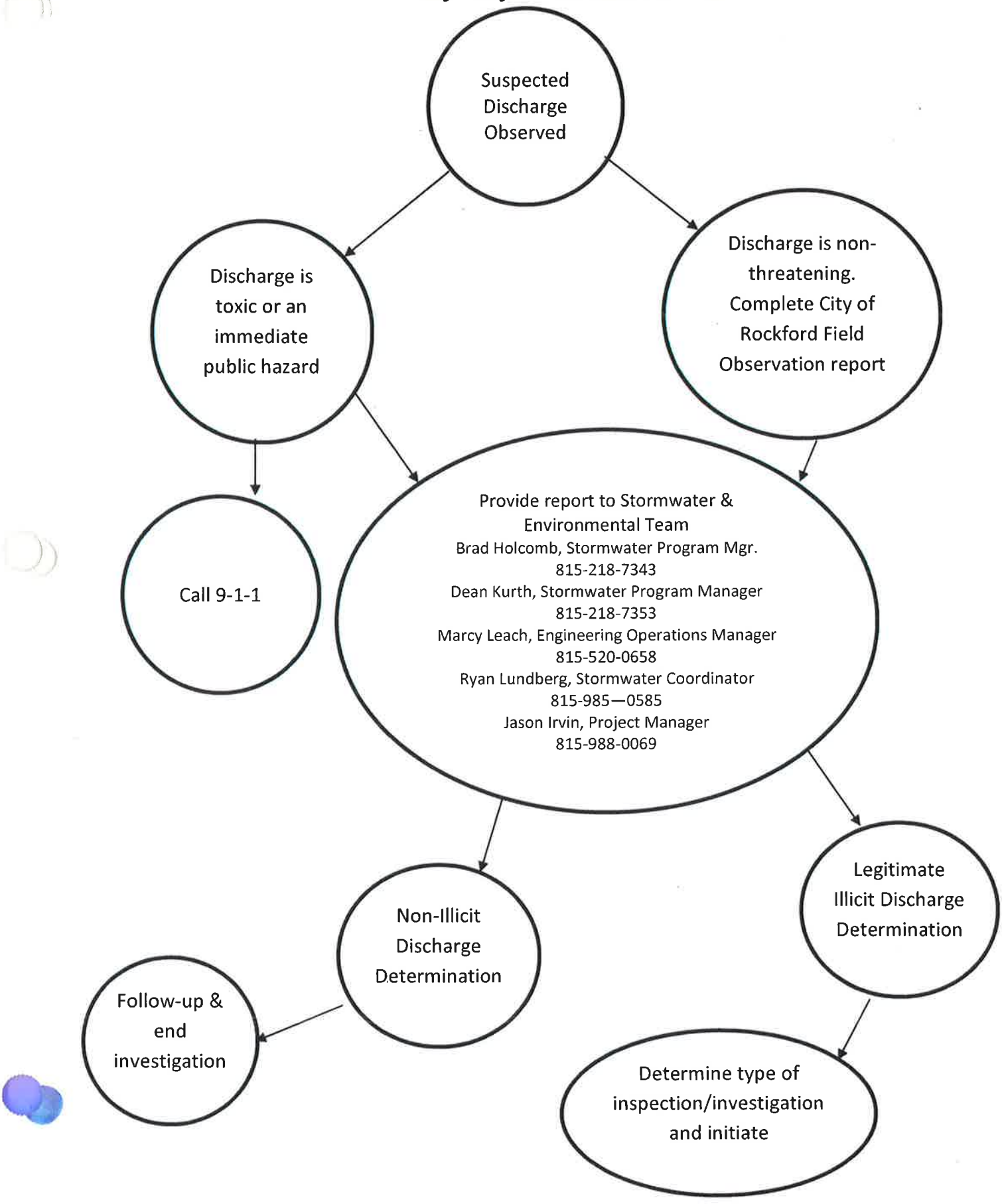
All illicit discharge complaints/investigations (inspection reports and letters) will be filed by address to help track repeat offenders. In addition, digitized copies will also be saved in the Storm Water Drive on the City of Rockford computer system. Digitized information can include: initial observation report, investigation report, photos, correspondence and any other pertinent information. These files will be saved as follows:

1) Open the Storm Water Drive (note: this drive has limited access for people who perform duties directly related to the City's storm water program),
2) Open the IDDE folder,
3) Open the folder for the current year,
4) Create a folder with the address and save all data in that folder.

An excel spreadsheet for all investigations has also been created. This inspection and sampling log is saved by year. All complaints/ investigations for that year are saved on this spreadsheet for easy tracking. Data includes: date, location, type of discharge, source (if determined), nature of follow-up and whether corrective actions have been addressed (if applicable). Notes about the investigation can also be included.

Appendix A

ILLICIT DISCHARGE REPORTING AND RESPONSE
By City of Rockford Staff



Appendix B

City of Rockford Field Observation

1. Person Making Observation: _____ Date: _____

2. Type of Observation (check all that apply):

_____ Drainageway	_____ Creek
_____ Citizen Complaint	_____ Industrial/Commercial Site
_____ Detention Basin	_____ Outfall Monitoring
_____ Construction Site	_____ Illicit Discharge (If the Illicit Discharge is active contact Brad Holcomb, Dean Kurth or Ryan Lundberg immediately)
_____ Inlet	_____ Other _____

3. Location/Project Name: _____

4. Is this a post rain event observation? _____ Yes _____ No

5. If yes: Date of Rainfall _____ Rainfall amount (inches) _____

6. Is a follow-up inspection required? _____ Yes _____ No

7. Is maintenance needed? _____ Yes _____ No

8. Comments (please be detailed and supply photos if necessary): _____

_____

_____

_____

_____

_____

Signature: _____ Date: _____

Provide Copies to one of the following:

Brad Holcomb, Stormwater Program Manager – Cell # 815-218-7343, brad.holcomb@ockfordil.gov,
Dean Kurth, Stormwater Program Manager – Cell # 815-218-7353, dean.kurth@rockfordil.gov
Ryan Lundberg, Stormwater Coordinator - Cell # 815-985-0585, ryan.lundberg@rockfordil.gov
Marcy Leach, Operations Manager – Cell – 815-520-0658, marcy.leach@rockfordil.gov
Jason Irvin, Project Manager – Cell – 815-988-0069, Jason.irvin@rockfordil.gov

Appendix C

ROCKFORD

S.W.E.T.

Stormwater & Environmental Team

Stormwater Outfall

Tributary/Watershed:		Date:	Assessed By:
Site ID #:	Time: AM/PM	Photo ID #:	
Location:		GPS ID:	

Bank: ☐ LT ☐ RT ☐ Head

Flow: ☐ None ☐ Trickle ☐ Moderate ☐ Substantial ☐ Other: _____

Type: Material: Shape:

Submerged:

☐ Closed Pipe ☐ Concrete ☐ Metal ☐ PVC/Plastic ☐ Brick ☐ Other: _____

☐ Circular ☐ Double ☐ Elliptical ☐ Triple ☐ Other: _____

Diameter: ____(in)

☐ No ☐ Partially ☐ Fully

☐ Open Channel ☐ Concrete ☐ Earthen ☐ Other: _____

☐ Trapezoid ☐ Parabolic ☐ Other: _____

Depth: ____(in)
Width (Top): ____(in)
Width (Bot): ____(in)

Condition: ☐ None ☐ Chip/Cracked ☐ Peeling Paint ☐ Corrosion ☐ Other: _____

Odor: ☐ No ☐ Gas ☐ Sewage ☐ Rancid/Sour ☐ Sulfide ☐ Other: _____

Deposits/Stains ☐ None ☐ Oily ☐ Flow Line ☐ Paint ☐ Other: _____

Veggie Density: ☐ None ☐ Normal ☐ Inhibited ☐ Excessive ☐ Other: _____

Pipe Benthic Growth: ☐ None ☐ Brown ☐ Orange ☐ Green ☐ Other: _____

Pool Quality: ☐ No Pool ☐ Good ☐ Odors ☐ Colors ☐ Oils ☐ Suds ☐ Algae ☐ Floatables ☐ Other: _____

For Flowing Only

Color: ☐ Clear ☐ Brown ☐ Grey ☐ Yellow ☐ Green ☐ Orange ☐ Red ☐ Other: _____

Turbidity: ☐ None ☐ Slight Cloudiness ☐ Cloudy ☐ Opaque

Floatables: ☐ None ☐ Sewage (toilet paper, etc.) ☐ Petroleum (oil sheen) ☐ Other: _____

Other Concerns:

☐ Excess Trash (paper/plastic bags) ☐ Dumping (bulk) ☐ Excessive Sedimentation ☐ Needs Regular Maintenance ☐ Bank Erosion ☐ Other: _____

Notes / Sketch:

Revision: October 2013

Signature: _____ Date: _____

Appendix D

Illicit Discharge Investigation Form

Responder Information *(for hotline incidents only)*	
Call taken by:	Call date:
Reporter Information	
Incident time:	Incident date:
	Precipitation (inches) in past 24-48 hrs:
Caller contact information *(optional)*:	
Incident Location *(complete one or more below)*	
Latitude & 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		
☐ 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.):

Data Collection	
Sample collected for testing? ☐ Yes ☐ No	
Sample collected from? ☐ Flow ☐ Pool ☐ Other	
Sample result indicated: ☐ No Pollutants ☐ Presence of pollutants	
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:	
Notification and Enforcement Actions (if any):	
Date case closed:	
Notes:	

Investigator: (sign & print name)_____

Date of Investigation: _____

Appendix E

IEMA
Illinois Emergency Management Agency

Jonathon E. Monken, Director

EMERGENCY RELEASE NOTIFICATION FACT SHEET

A. Immediate telephone notification shall be given by the owner or operator of a facility when a release equal to or exceeding the reportable quantity of an extremely hazardous substance[1] or a CERCLA hazardous substance[2] occurs at the facility.

In such incidents, notifications are to be made to the following:

1. **Illinois Emergency Management Agency (IEMA) State Emergency Response Commission (SERC)** at **1-800-782-7860** (within state) or **(217) 782-7860** (when calling from out-of-state).
2. **Local Emergency Planning Committee (LEPC)** that is likely to be affected by the release. The telephone number(s) can be obtained from IEMA.
3. **National Response Center (NRC)** at **1-800-424-8802** (if the substance is a CERCLA hazardous substance)

Please Note: ***Transportation-related incidents only require 9-1-1 notification.***

B. Immediate telephone notification is also required if an incident or accident involving a hazardous material[3] occurs which results in:

1) a member of the general public is killed;
2) a member of the general public receives injuries requiring hospitalization;
3) an authorized official of an emergency agency recommends an evacuation of an area by the general public;
4) a motor vehicle has overturned on a public highway;
5) Fire, breakage, release or suspected contamination occurs involving an etiologic agent;
6) Any release of petroleum (or oil) that produces a sheen on nearby surface water[4] and or threatens navigable waters;
7) Any spill or overfill of petroleum that results in a release to the environment that exceeds 25 gallons.[4]

In such incidents, notification shall be made as noted in Paragraph A, above, except no notification is required to the NRC, except items 6 and 7 (oil that impacts water and overfills).

At a minimum, notification shall include:

1) the chemical name or identity of any substance involved in the release;
2) an indication of whether the substance is an extremely hazardous substance;
3) an estimate of the quantity in pounds of any such substance that was released into the environment;
4) the time and duration of the release;
5) the specific location of the release;
6) the medium or media (air, land, water) into which the release occurred;
7) any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals;
8) proper precautions to take as a result of the release, including evacuations;
9) the name and telephone number of the person or persons to be contacted for further information.

WRITTEN FOLLOW-UP NOTICE IS REQUIRED WITH RESPECT TO INCIDENTS AS DESCRIBED IN PARAGRAPH A, ABOVE. As soon as practicable after such release (within 30 days), the owner or operator shall provide a written follow-up emergency notice (or notices, as more information becomes available) to the SERC and the LEPC, updating the information provided in the immediate notification and including additional information with respect to:

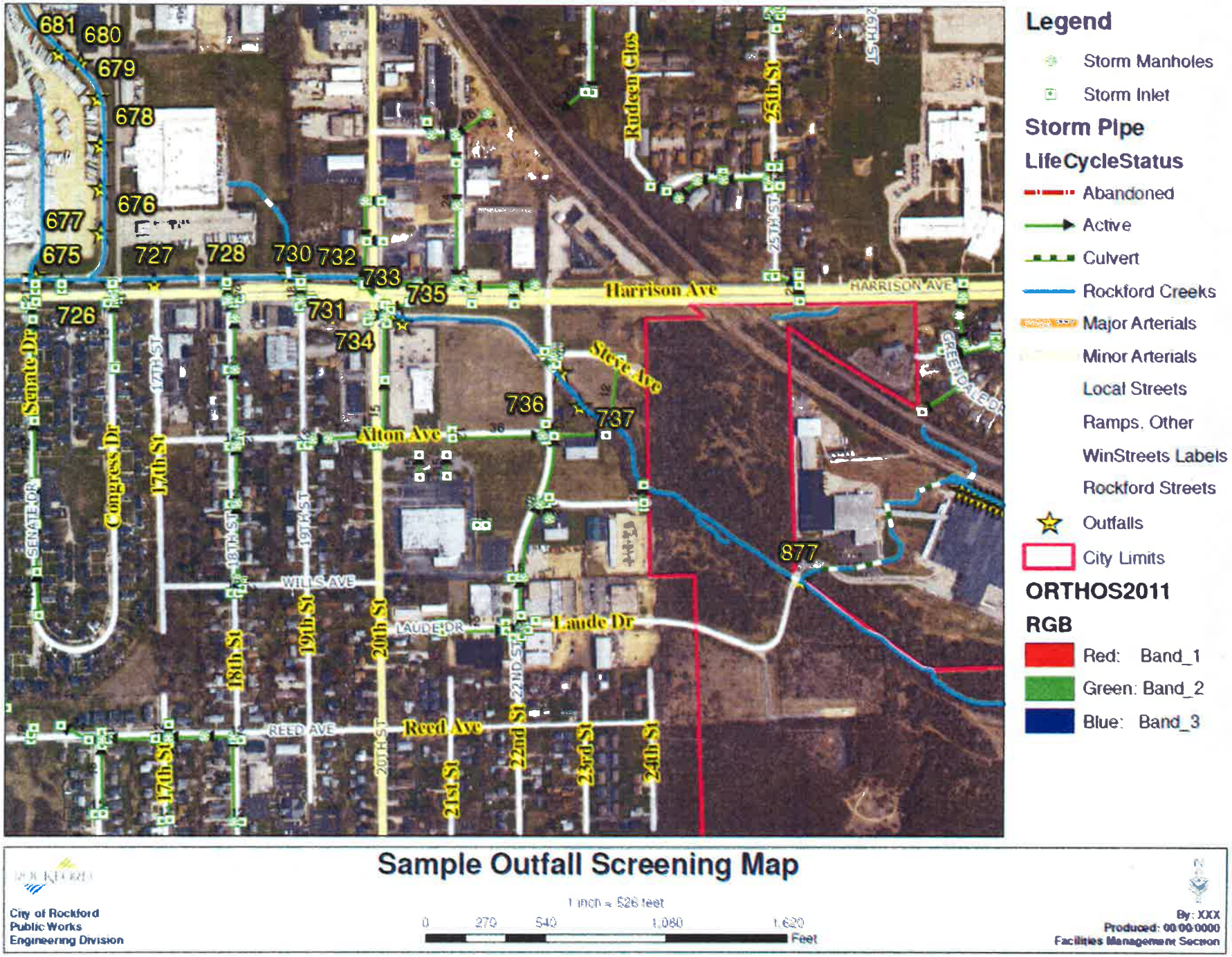
1) Actions taken to respond to and contain the release,
2) Any known or anticipated acute or chronic health risks associated with the release,
3) Where appropriate, advice regarding medical attention necessary for exposed individuals.

[1] See 40 CFR 355 for a listing of extremely hazardous substances (EHS).
[2] See 40 CFR 302.4 for a listing of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) hazardous substances.
[3] See 49 CFR 172.101 for a list of hazardous materials.
[4] See 41 IAC 176.340 Reporting and Cleanup of Spills and Overfills.

(These rules are compiled in 29 IAC 430 and 29 IAC 620)

Last Updated 2/2011

Appendix F



Sample Outfall Screening Map

City of Rockford
Public Works
Engineering Division

1 inch = 526 feet

0 270 540 1,080 1,620 Feet

By: XXX
Produced: 00/00/0000
Facilities Management Section

Timothy Hanson
Director
Public Works Department

June 28, 2013

(Insert address)

Rockford, IL

Notice of Ordinance Violation

Address where violation occurred: , Rockford, IL

It has been brought to the attention of the City of Rockford that automotive waste has been dumped into the City's sewer system by the occupier of the above address. The following ordinance was found to be in violation:

Sec. 26-11.1 Non-Storm Water and Industrial Storm Water Discharge

Non-storm water and industrial storm water discharge is prohibited to the City right-of-way and waters of the State, creeks, streams and rivers except as:

a) Authorized and in compliance with a separate NPDES permit.
b) Authorized and in compliance with the City's MS4 NPDES permit.
c) As permitted and in compliance with the City's Storm Water Ordinance.

Any persons or property found in violation of this section shall be subject to a fine as set forth by the City Council and shall perform remediation to eliminate the discharge.

Sec. 26-11.2. - Depositing refuse in streets and sidewalks

No person shall discharge or dispose of used motor vehicle fluids (including, but not limited to, oil and antifreeze), tires, hazard materials (including, but not limited to, paint, solvents, pesticides and herbicides), refuse or garbage, grass clippings, leaf litter, dirt and animal wastes in or upon any street, alley, sidewalk, storm sewer or other public place except as provided in this Code. Any persons or property found in violation of this section shall be subject to a fine as set forth by city council and shall immediately remove the refuse.

Sec. 109-23 Discharge Prohibitions

a) **Prohibition of illegal discharges**. No person shall discharge or cause to be discharged into the Storm Drain System or water course any materials including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water.

Timothy Hanson
Director
Public Works Department

The area in question must be cleaned up within seven (7) days of the date of this letter and automotive fluids must be properly disposed of. Failure for clean up the site in the required timeframe or any future violations will result in fines and site clean-up.

If you have any questions regarding this violation, please contact our Storm Water and Environmental Program Manager, Brad Holcomb at 815-967-7061 or by email at Brad.Holcomb@rockfordil.gov .

Sincerely,

Matthew Vitner
City Engineer

Timothy Hanson
Director
Public Works Department

Notice of Ordinance Violation, (insert address)

Photo #1

Picture description

Photo #2

Picture description

Photo #3

Picture description

Note: the attached photos indicate examples of corrective actions observed on this construction site. When performing maintenance as indicated in the photos, check the entire site for other areas with similar maintenance needs.

D-8

Hazardous Materials (Spill Prevention and Response)

HAZARDOUS MATERIALS

I. PURPOSE

A. This Annex provides general guidelines and an assignment of responsibility for response and cleanup of hazardous materials incidents within the City of Rockford. Due to the inherent risks related to the production, transport, and storage of hazardous materials, contingency plans addressing containment and response to hazardous materials incidents have been developed to minimize and mitigate the effects of an event.

B. Therefore, this Annex addresses the operational concepts, organization, and support systems required to implement the plan, including:

1. The responsibilities assigned to authorities and responding agencies which are required to minimize potential, threatened, or existing damage to human health, natural systems, and property, including the joint effort required to aid in the mitigation of a hazard;
2. Establishing an operational structure that has the ability to function at a hazardous materials incident anywhere within the City of Rockford;
3. Utilizing individuals who have been trained to handle hazardous materials incidents;
4. Establishing lines of authority and management for hazardous materials incidents;
5. Establishing and providing an overall response plan that adheres to and addresses the provisions of the Superfund Amendments and Reauthorization Act (SARA) Title III (OSHA), Title 29CFR 1910.120, which affects the operations and functions of the fire service and hazardous materials response teams who will or might be engaged in various activities at the scene of a hazardous materials incident.

C. This Annex was developed in compliance with the State Emergency Response Commission (SERC), which promotes chemical emergency preparedness and prevention throughout the State of Illinois. SERC, in support of Local Emergency Planning Committees (LEPCs), assists in chemical emergency planning by providing public access to chemical data, raising public awareness of chemical risks, and encouraging public participation in local chemical safety issues.

II. SITUATION

The City of Rockford requires Extremely Hazardous Substances (EHS) and Hazardous Materials transportation routes. These are identified on maps located in the resource

manual located at the 911 Communications Center and at the Emergency Operations Center (EOC). The manual also includes names and contact numbers for rail, pipeline, and airports.

A. **Roadways**

Within the City of Rockford, there are three different types of roadways used for the transport of EHS: Interstate Highways, US Highways, and State Routes. Industrial areas within the city are usually served by truck traffic routes along major streets within the city. Quantities of EHS can range from small shipments to large tractor trailers. Any Hazardous Materials/EHS could be shipped to a facility within the city limits. Typical accidents include ruptured fuel tanks, low overhead clearance accidents, and collisions. Major accidents often include street closures and traffic control which have the potential to disrupt local traffic patterns. In addition, an accidental release of Hazardous Materials could result in protective action for the vicinity. Emergency response may include activating the area's MABAS system. Street closures may involve local police departments and emergency management agencies.

B. **Railroads**

The City of Rockford is served by four railroads: Union Pacific, Canadian Pacific, Burlington Northern, and Illinois Central (Chicago Central & Pacific). Shipments can range from small to 200,000 gallon tank cars. It is possible that any Hazardous Materials/EHS could be shipped through the region. Possible accident types include ruptured fuel tanks, train derailments, collisions, and low overhead clearance accidents. Major accidents often include highway closures and traffic control. This can cause a large disruption in traffic patterns and has the potential for creating a substantial short-term economic impact. In addition, an accidental release of a Hazardous Material could result in the need for protective action for the vicinity. Emergency response may include activating the area's mutual aid box alarm system (MABAS) and coordinating highway closures with the Illinois State Police and Department of Transportation. A list of phone numbers for these railroads can be found in Attachment 2 of this Annex; a map of these railroads can be found in Attachment 3 of this Annex.

C. **Pipelines**

There are several transmission pipelines that run through the City of Rockford. These include:

- Natural gas pipelines, both supplying and traversing the city, and
- Petroleum products pipelines traversing the city (See Attachment 4).

Pipelines generally do not contain EHS, but they do contain Hazardous Materials and are included here as a facility that could contribute to additional risk. The 911 Communications Center maintains a list of Pipeline Emergency contacts. All maps are currently available in Rockford's CAMEO system.

III. ASSUMPTIONS

A. According to the Illinois Emergency Planning and Community Right to Know Act (IEPCRA) 430 ILCS 100; 29 Ill. Adm. Code 620, any facility that has present onsite

1. a **hazardous chemical** for which OSHA requires a material safety data sheet (MSDS); and
2. the chemical is **present in certain threshold quantities**

must report such substances to IEMA and contain such information in the LEPC Hazardous Materials Plan.

B. For the purposes of IEPCRA, a "**hazardous chemical**" is defined as any chemical that causes a physical or health hazard (Occupational Safety and Health Act of 1970). The number of such chemicals has been estimated at 500,000, though no comprehensive list has been made available. It is acceptable to assume that any chemical for which the Material Safety Data Sheet (MSDS) lists any type of hazard is covered by IEPCRA.

C. This plan is for use in the case of any hazardous materials incident associated with any mode of transportation in any industrial process, storage or storage sites, waste disposal procedures, manufacturing, usage, abandonment, and illegal usage and disposal.

D. The hazardous material itself may include but is not limited to explosives, flammables, combustibles, compressed gases, cryogenics, poisons, toxins, reactive and oxidizing agents, radioactive materials, corrosives, carcinogens, etiological agents, hazardous wastes, or any combination thereof, or any material that may pose a hazard to health or the environment in the opinion of the response crew.

E. In the event of a hazardous materials release, many different agencies may be called upon to respond for the mitigation of the incident.

IV. CONCEPT OF OPERATIONS

A. This plan is directed to those hazardous materials incidents which occur within the City of Rockford. These hazards shall include actual or threatened fires, spills, leaks, ruptures, container failures, contamination, and any threat to life, safety, property, or the environment involving hazardous materials.

B. All State Emergency Response Commission (SERC) approved LEPC chemical emergency response plans are maintained by the HazMat team. Plans are stored in mobile emergency response kits and will be transported to the EOC during an emergency response event.

C. In the event of an accidental chemical release, the owner or operator of a facility or the transporter of chemicals will be required to properly notify federal, state, and local agencies. Notification is required when the chemical released exceeds the reportable quantity of an extremely hazardous substance, hazardous material, or the

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and is defined as a hazardous substance.

D. Failure to follow these notification requirements may cause the LEPC to refer the matter to IEMA for enforcement.

E. **Notification**

1. **When to Notify:** Immediate notification is necessary if a release occurs and
   a. A member of the general public is injured
   b. An authorized official of an emergency agency recommends an evacuation for the general public
   c. Fire, breakage, release, or suspected contamination occurs involving an etiologic agent
   d. A release of oil produces sheen of water and/or threatens navigable waters
   e. Or any time responders are unsure whether they should notify or not.
2. **Who to Notify:** (in order of notification)
   a. 911
   b. Illinois Emergency Management Agency (IEMA) 800-782-7860
   c. National Response Center (NRC) 800-424-8802
   d. Winnebago County ESDA 815-319-6215
   e. Winnebago County Local Emergency Planning Committee (LEPC) 815-319-6215

   Note* Transporters involved in an accidental chemical release over the Reportable Quantities (RQs) must call the NRC and 911.

   National Response Center (800) 424-8802 or use the On-Line Reporting Tool at:

   www.nrc.uscg.mil/
3. **What to Include in Notification:**

   Initial notification should include the following:
   a. Specific location of release;
   b. Name and telephone number of the person to contact at the site;
   c. The chemical name of substance that is released and whether or not it is hazardous;
   d. Quantity of substance released;
   e. Time and duration of release;
   f. Medium (air, land, and water) where release occurred;

g. Proper precautions that need to be put in place as a result of the release, including evacuation; and

h. Health risks associated with the release of this chemical. Advice regarding the treatment of people who may be exposed.

4. **Follow-up Notification:** A written follow-up notification should be done after the initial notification. The owner or operator of the facility/carrier should send the follow-up report to both SERC and the LEPC. The follow-up report should include the following:

   a. Actions taken to respond to and contain the release;

   b. Any known or anticipated health risks associated with the release;

   c. Appropriate advice regarding medical attention for exposed individuals;

   d. Any changed or updated information from the initial notification; and

   e. Additional follow-up notices, which will be made as conditions and information change.

F. **Community Notification Procedures**

Incident Commander or the PIO will be responsible for communicating notification of an EHS/HM release. The circumstances requiring public notification will depend on site-specific or incident-specific factors and may vary depending on public safety issues.

G. **Determining the Occurrence of a Release**

One of the duties of the LEPC is to determine the likelihood of a release and estimate the consequences of the release. A Tier II Map for the City of Rockford can be found in Attachment 5 of this Annex. This map was created after performing a hazard analysis of the city. The following procedures describe the methods and techniques used to perform a hazard analysis:

1. Review Tier II Reports and Identity Hazardous Materials and EHS Facilities;
2. Request additional information from Hazardous Materials and EHS Facilities;
3. Enter data and map data in CAMEO;
4. Perform screenings and scenarios for each facility; and
5. Prepare and Review Hazard Analysis for each facility.

H. **Review Tier II Reports and Identify Hazardous Materials and EHS Facilities**

The Illinois Emergency Management Agency (IEMA) and the LEPC receive Tier II reports from regulated facilities. IEMA will perform Tier II data entry for the LEPC and provide the database information to the LEPC. The LEPC will review reports generated from Tier II data and will identify Hazardous Materials and EHS Facilities.

I. **Request additional information from Hazardous Materials and EHS Facilities**

The LEPC may send a letter asking the Hazardous Materials and EHS facilities for additional information. This additional information may be required on a case-by-case basis.

J. **Entering Data and Map Data in CAMEO**

In 2005, the US Environmental Protection Agency (US EPA) released a new version of the CAMEO emergency planning software. CAMEO stands for "Computer-Aided Management of Emergency Operations" and is freely available to LEPCs and emergency responders nationwide. CAMEO is a database program optimized for chemical emergency planning. It works with other free programs from the US EPA, such as MARPLOT, ALOHA, and LandView. Together these four programs are commonly referred to as the CAMEO Suite. Once inventory information is entered into CAMEO and MARPLOT, a Screening and Scenario can be conducted to determine the number of people and the area which may be impacted by major chemical releases. It is a goal and objective of the Winnebago County LEPC to enter and map data into the CAMEO Suite.

K. **Perform Screenings and Scenarios for each Hazardous Materials and EHS Facility**

Winnebago County LEPC will perform CAMEO screenings and scenarios for each Hazardous Materials and EHS facility.

L. **Prepare and Review Hazard Analysis for each Hazardous Materials and EHS Facility**

Winnebago County LEPC will prepare and review CAMEO hazard analysis for each Hazardous Materials and EHS facility.

V. ANNEX MAINTENANCE, REVIEW, AND UPDATING

Responsibility for the maintenance of this Functional Annex is assigned to the City of Rockford ESDA Coordinator. Emergency plan maintenance includes an annual review and periodic updating of the plan. Additionally, the City of Rockford Emergency Disaster Agency shall be responsible for document control. This includes the distribution of the plan and its updated sections as required. Each agency head is responsible for the updating of their agency's section. **Updates to each section should be brought to the attention of the ESDA Coordinator prior to distribution of the update.**

VI. HAZARDOUS MATERIALS INCIDENT CLASSIFICATION LEVELS

There are three (3) levels of hazardous materials incident classification. The criteria used for the establishment of the concept of classifying hazardous material incidents into levels are:

1. Level of technical expertise required to abate the incident;
2. Extent of local, state, and federal government, and private industry involvement required to assist in abating the hazard;
3. Extent of evacuation of civilians;
4. Extent of injuries and/or deaths related to the hazardous materials incident; and

5. Extent and involvement of decontamination procedures.

A. **LEVEL I INCIDENT**

Level I incidents include spills, leaks, ruptures and/or fires involving hazardous materials which can be contained, extinguished, and/or abated utilizing equipment, supplies, and resources immediately available to the first responders of the fire department or industry having jurisdiction. Additionally, Level I incidents can be properly handled by personnel whose qualifications are limited to and do not exceed the scope of their training.

B. **LEVEL II INCIDENT**

A hazardous materials incident which can only be identified, tested, sampled, contained, extinguished, and/or abated utilizing the expertise and resources of a hazardous materials response team.

A hazardous materials incident which requires the use of any kind of specialized protective gear, tools, equipment or knowledge beyond the scope and capabilities of the first responding engine company.

A hazardous materials incident which requires the evacuation of civilians within the area of the fire department having jurisdiction; and/or fires involving hazardous materials that are permitted to burn for a controlled period of time, or are allowed to consume themselves; and/or the incident can only be properly handled by fire department personnel whose qualifications meet or exceed the scope of training explained in Superfund Amendments and Reauthorization Act (SARA) Title III, Title 25 CFR 1910.120 within the Hazardous Materials Specialist realm.

C. **LEVEL III INCIDENT**

Actual spills or threat of spills, leaks, or ruptures which can or must be contained and/or abated only by utilizing the highly specialized equipment and supplies available to environmental and industrial response personnel. Such equipment, techniques, and qualified personnel are in excess of or are in addition to those available from the on-scene hazardous materials response team and/or:

1. Fires involving hazardous materials that are allowed to burn due to the ineffectiveness or dangers of the use of any kind of extinguishing agent, or the unavailability of the proper extinguishing agent;
2. There is a real threat of large container failure and/or explosion, detonation, Boiling Liquid Expanding Vapor Explosion (BLEVE), or container failure has already occurred;
3. Hazardous materials incidents which require evacuation of civilians from a large geographical area or evacuation has extended across jurisdictional boundaries;
4. There are serious civilian injuries and/or deaths as a result of the hazardous materials incident;

5. Decontamination of equipment, civilians, or personnel is required;
6. The hazardous materials incident has become a multi-agency involvement; and/or
7. The incident can only be properly handled by personnel whose qualifications exceed Hazardous Materials Specialist level.

VII. INCIDENT COMMAND AND SCENE MANAGEMENT

Incident Command (IC) shall be responsible for all operations directed toward the containment and mitigation of the hazards at the scene of a hazardous materials incident. Upon arrival on the scene, IC shall secure and maintain control until the situation has been corrected or abated.

The Rockford Fire Department shall accept and provide the position of IC for the scene of all hazardous materials incidents within the City of Rockford.

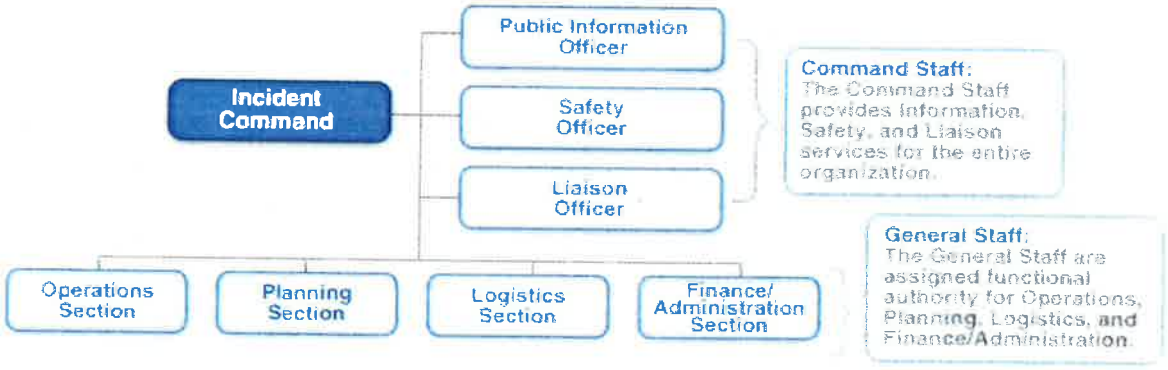


Figure 1 Incident Command Structure

A. FREEWAYS AND STATE ROADS

For all hazardous materials incidents that occur on any freeway or any state road, the Scene Manager shall be the Illinois State Police in accordance with the Illinois Revised Statutes. However, the IC of the department having jurisdiction shall provide direct control and authority over all fire department related activities at the scene of any hazardous materials incident. For hazardous materials incidents that occur on streets and public roads within the City of Rockford, the agency with jurisdiction shall function as the Scene Manager.

The City of Rockford Fire Department Hazardous Material Response Team is available to respond anywhere within the corporate limits of the city and anywhere a mutual aid agreement is in force.

B. BASIC INCIDENT DISCIPLINE

When appropriate, it shall be the responsibility of the initial responders to initiate and place into position the following actions at all hazardous materials incidents:

1. Upon arrival, identify themselves;
2. Isolate the affected area;
3. Immediately arrange for a briefing with key response personnel from other agencies;
4. Establish and function within an Incident Command System;
5. Establish the boundaries of the hot, warm, and cold zones as soon as possible;
6. Determine the level of the response; and
7. Notify additional agencies (if and when appropriate).

C. **FIRST ON SCENE**

The first responders on the scene shall determine if hazardous materials are involved in the incident. If confirmed, personnel must, in a safe manner and within the scope of their training, attempt to identify:

1. Type of Material Involved;
2. Quantity of Material Involved;
3. Possibility of Contamination;
4. Immediate Exposure Problem;
5. Threat to Life/Safety; and
6. Threat to property and the environment.

This information must be relayed to the 911 Communication Center immediately. If the department on the scene determines that a Level I incident exists, they shall inform 911 if they have the capability to handle the situation. If a Level II or III incident is determined, the responders shall notify 911, isolate the area, formulate a plan, and immediately begin actions that will eventually bring the incident under control.

When another agency is on the scene prior to the arrival of the fire department (generally law enforcement), the first on-scene fire department official shall establish contact with the agency first on the scene. The fire department official shall then proceed to gather as much information as possible about the incident to relay and pass on to other responding units.

VIII. RESPONSIBILITIES OF AGENCIES

A. ***Illinois Emergency Management Agency (IEMA)****:* This is the lead agency in Illinois for hazardous materials response. IEMA acts to coordinate the activities of all other responding agencies at a hazardous materials emergency.

B. ***Jurisdictional Fire Department****:* Responsible for providing routine fire and rescue support services at all incidents. In most cases, the Fire Department having jurisdiction will assume the position of Incident Command at the scene of a hazardous materials incident. The Fire Department having jurisdiction shall coordinate and effect

appropriate rescue efforts, evacuation, first aid, containment, and immediate hazard reduction activities within the scope of their training, as well as the implementation of all other normal fire department related activities and responsibilities.

C. ***Illinois State Police Hazardous Materials Section:*** Established in 1979, this entity enforces the Federal Hazardous Materials Regulations as adopted by the Illinois Department of Transportation. Each officer in the HazMat section receives specialized training in the areas of enforcing regulations, radiological monitoring, and emergency response. Each Illinois State Police HazMat Officer carries equipment for hazardous materials emergency response in addition to the equipment normally carried by an Illinois State Police Officer. These items include binoculars, combustible gas indicators, radiological monitoring equipment, and reference books.

D. ***Illinois State Police (ISP):*** ISP troopers also provide routine traffic control on all state and federal roads and on public roads in unincorporated areas. They also provide traffic control, traffic re-routing, road closure, and prevention of unauthorized entry into restricted areas when requested to do so. They may function as Incident Command for traffic and hazardous materials incidents occurring within their response jurisdiction. The ISP has the authority to enforce all Illinois criminal statutes as well as the authority to investigate criminal activities as related to hazardous materials incidents.

E. ***Illinois Environmental Protection Agency:*** This agency has the responsibility to assure protection of the environment from all types of contamination. They may elect to respond depending on the seriousness of the threat of contamination. When they do respond, they are a source of additional on-scene technical advice. The EPA representative is responsible for assisting in identifying HazMat contaminants present in the environment as well as identifying violations. On very large scale incidents or operations involving long, drawn out clean-up within their jurisdictions, they have the authority to become the On-Scene Commander in accordance with the National Contingency Plan. *The EPA must be notified of any hazardous material incident that is confirmed to have caused ground or water contamination.*

F. ***Illinois Department of Transportation:*** IDOTs primary duty in response to hazardous material incidents is in the area of regulation and administration. IDOT can be called on to respond to transportation emergencies with personnel, equipment, and supplies. A number of supply depots have been established that are stocked with foam, diking materials, and other supplies to aid in the mitigation of hazardous material spills.

G. ***Chemtrec:*** Chemtrec is responsible for providing immediate emergency action information for spills, leak exposure, or fire control. They can assist with identification of hazardous materials, especially if the manufacturer is known or the shipping papers are present. Chemtrec can immediately notify manufacturers or shippers through their emergency contacts. They can notify other federal agencies as is necessary or as required, depending on the circumstances at the scene. For those incidents that require notification of the National Response Center regarding spills of a Reportable Quantity chemical, Chemtrec will pass on notification to the proper authorities.

Contact numbers for all of the above agencies are on file with the 911 Communication Center.

IX. LINE OF SUCCESSION

In order to provide for continuous leadership and control in emergency situations, each emergency response organization is responsible for identifying at least three (3) levels of succession. The line of succession for Hazardous Material Response is:

1. City of Rockford Fire Department
2. The City of Rockford Fire Department HazMat Team
3. MABAS Division 8

X. TASKS AND RESPONSIBILITIES FOR PRIMNARY AND SUPPORT AGENCIES

HAZARDOUS MATERIALS	
PRIMARY AGENCY	
FIRE	1. Coordinate with representatives from regulated facilities and vulnerable facilities to maintain a list of hazardous materials. 2. Initiate containment and communicate with PIO and Police concerning safety measures that need to be communicated to the public. 3. Determine a safe route into the incident site. 4. Establish HazMat incident functional areas (Hot Zone, Warm Zone, Cold Zone, Staging Area). 5. Initiate appropriate SOPs to control and eliminate the hazard. 6. Advise organization/facility where contamination occurred in choosing a clean-up company (of their choosing). 7. Provide medical treatment for casualties.
SUPPORT AGENCIES	
POLICE	1. For incidents where transportation infrastructure or routes are contaminated by hazardous materials, help to identify safe evacuation and ingress routes. 2. Maintain a supervisor at IC until released by Incident Commander. 3. Evacuate citizens when requested by IC. Request assistance from the Fire Department, as necessary. 4. Control access to the immediate incident site for safety, limiting entry to authorized personnel only. 5. Perform traffic control in and around the incident site and along evacuation routes. 6. To prevent looting, provide access control to evacuated areas.
PUBLIC WORKS	1. Provide barricades, sand, and equipment to isolate the incident site. 2. Assess the nature and extent of contamination. 3. Provide heavy equipment and materials for spill containment. 4. Cooperate with law enforcement to detour traffic around the incident site. 5. If a HazMat incident impacts water or sewer systems, check systems for damage and restore service.
STATE, FEDERAL, IEPA	1. Conduct actions to detect and assess the nature and extent of hazardous materials releases. 2. Take appropriate actions to stabilize the release and prevent the spread of contamination, conduct environmental clean-up actions and decontaminate buildings and structures, and manage wastes. 3. When required, serve as the primary agency for response.

	4. Provide technical coordination and administrative support for personnel, facilities, and communications in support of response, recovery, and mitigation. 5. Coordinate, integrate, and provide investigative support, intelligence analysis, and legal expertise on environmental statutes related to hazardous materials incidents, including criminal cases.
RMTD	1. Provide transportation for evacuation, as needed.
PIO	1. Serve as liaison between responding agencies, including EPA and DHS, in order to communicate with the media/public on tactical operations and matters affecting public health and safety, particularly during the early stages of the emergency response.
WINNEBAGO CTY. HEALTH DEPT.	1. When notified of an incident which may impact water or sewer systems, take precautionary actions to control contamination and prevent damage to those systems.

XI. ATTACHMENTS

1. Hazardous Materials Assistance – Local
2. Contacts for Railroads Which Traverse the City of Rockford
3. Map of Railroads Which Traverse the City of Rockford
4. Major Pipelines Traversing the City of Rockford
5. Tier II Map for the City of Rockford

ATTACHMENT 1 - HAZARDOUS MATERIALS ASSISTANCE - LOCAL

Name	Address	Telephone #	Comments
Rockford Fire Department Hazardous Materials Unit		815-987-5555	9-1-1 1-815-987-5649
Trans-Environmental	8184 Starwood Dr., Loves Park	815-885-4840	24 Hours
William Charles Environmental Services	5290 Nimtz Rd 5450 Wansford Way, Rkfd	815-636-5560 815-654-4726	24 Hours 24 hours
Byron Fire Department	232 W 2nd St Byron, IL	815-234-2341 815-234-4911	Emergency # For Radioactive Materials
Rockford Memorial Hospital	2400 N. Rockton Av	815-971-5000	Radioactive Assistance Only
ESDA **Winn. County Sheriff Emerg. Response Team (SERT)**	420 W State St	815-319-6215	Or Page Through 9-1-1 Center

ATTACHMENT 2 - CONTACTS FOR RAILROADS WHICH TRAVERSE THE CITY OF ROCKFORD

Name	Comments	Telephone #
Canadian Pacific (Formerly Soo Line)		800-716-9132 800-766-4357
Union Pacific Railroad Police	24 Hour Fast Emergency Service	708-649-5301
Canadian National Illinois Central Railroad		800-716-9132 800-465-9239
Illinois Central – Aka – (I.C.E. & D.M.E.) Chicago Central & Pacific	Monday-Friday 0800-1700 Dispatcher 24 Hours	605-782-1421 800-658-3551
Iowa Chicago Eastern Railroad		800-321-3891
Tel-Csx Railroad		800-232-0144
Union Pacific Railroad	Belvidere Business Hours 0700-1700	888-877-7267

Railroad Information

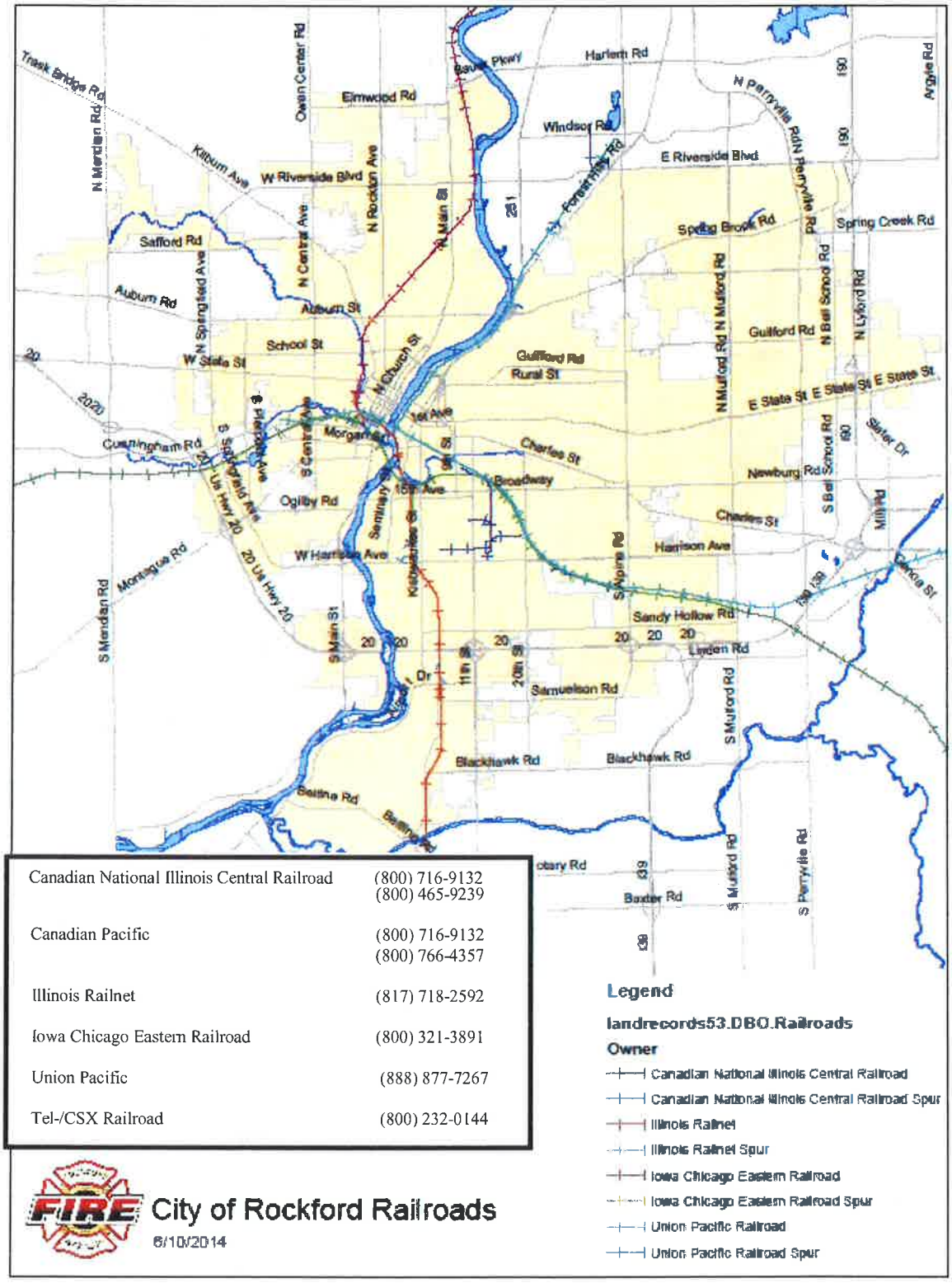
Canadian Pacific, Burlington-Northern (BNSF), Union Pacific...

... Is responsible for anything that happens on or with their tracks. They are the direct contact for any problem or emergency associated with all of their railways (regardless of the freight owner).

Illinois Central (I.C.E.)

Il Railnet is the night user and owner of tracks. During the day the tracks in Winnebago County are leased out to I.C.E., also known as Illinois Central (D.M.E.). IL Railnet does not claim responsibility nor liability for IL Centrals' freight or trains. **Contact I.C.E. 1-800-658-3551 dispatch for daytime freight information.**

ATTACHMENT 3 – MAP OF RAILROADS WHICH TRAVERSE THE CITY OF ROCKFORD



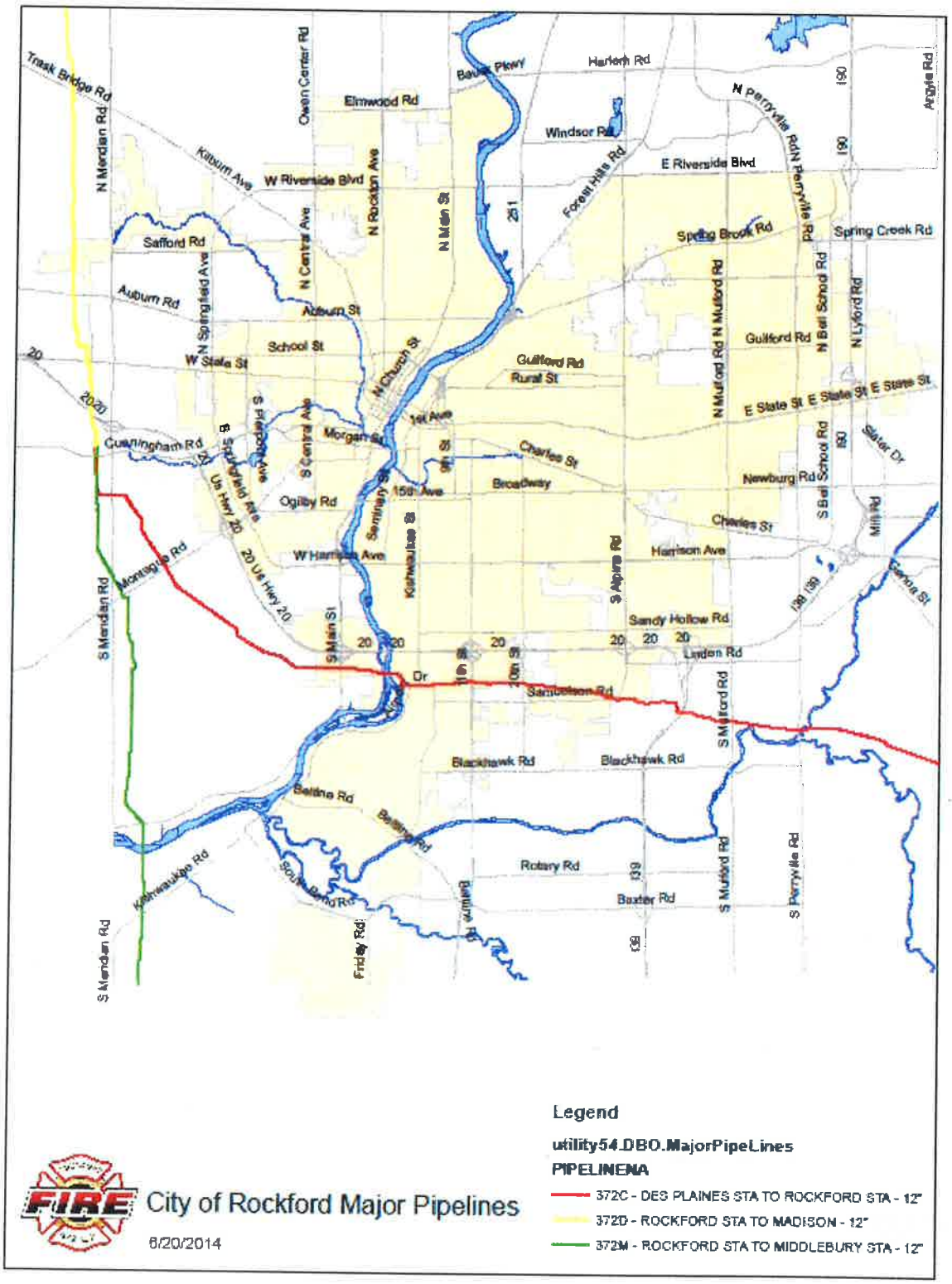
Canadian National Illinois Central Railroad	(800) 716-9132 (800) 465-9239
Canadian Pacific	(800) 716-9132 (800) 766-4357
Illinois Railnet	(817) 718-2592
Iowa Chicago Eastern Railroad	(800) 321-3891
Union Pacific	(888) 877-7267
Tel-/CSX Railroad	(800) 232-0144

FIRE

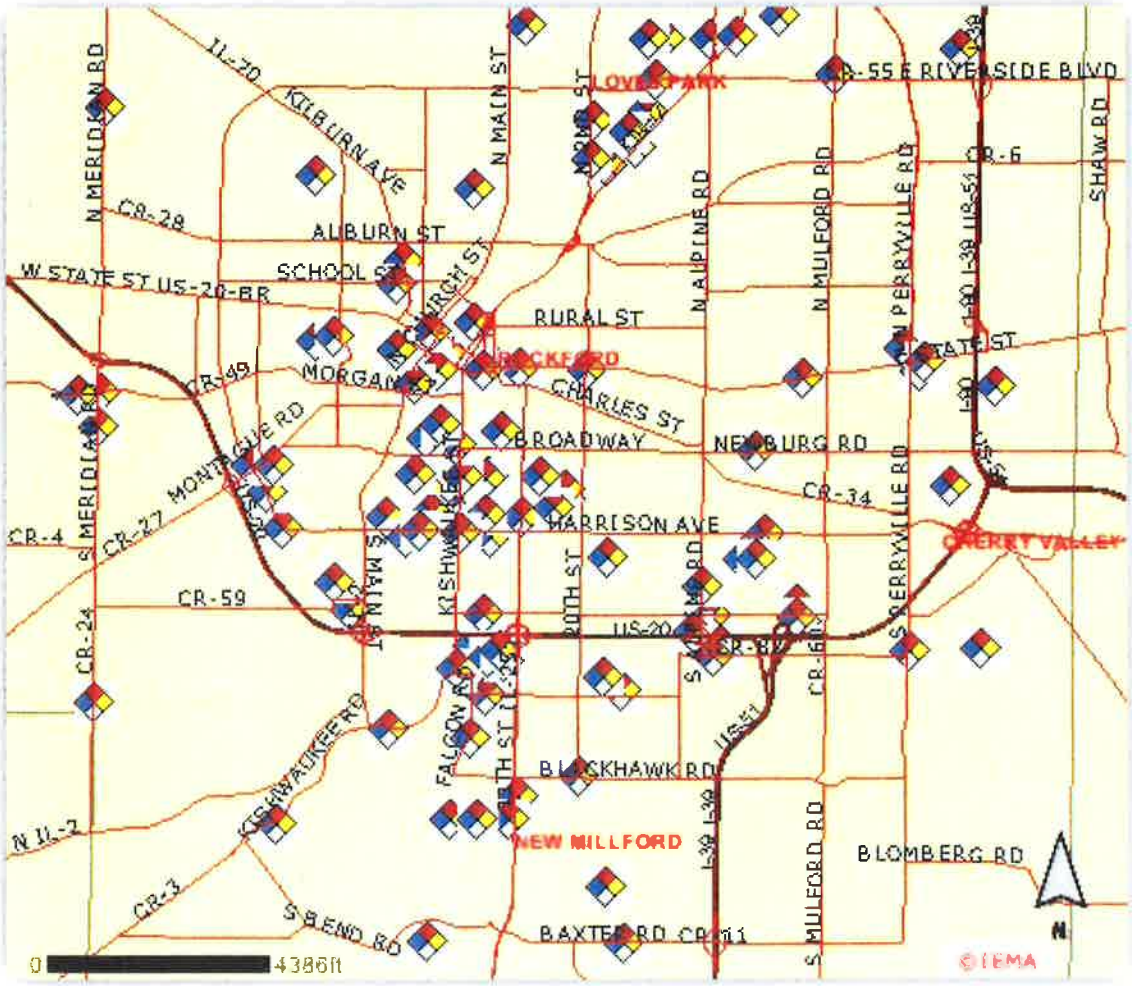
City of Rockford Railroads

6/10/2014

ATTACHMENT 4 – MAJOR PIPELINES TRAVERSING THE CITY OF ROCKFORD



ATTACHMENT 5 – TIER II MAP FOR CITY OF ROCKFORD



D-9

Industrial High Risk Runoff Facility Inspection Program

THE CITY OF ROCKFORD ILLINOIS, USA

INDUSTRIAL HIGH RISK RUNOFF FACILITY INSPECTION PROGRAM

STANDARD OPERATING PROCEDURES

June 2015

1.0 General

The goal of this standard operating procedure is to reduce the amount of polluted runoff from industrial and commercial facilities entering the City of Rockford's MS4. This industrial high risk runoff inspection program complies with Part II, A, 9 of the City of Rockford's NPDES Storm Water Permit (ILS000001). This document addresses how industrial facilities are identified for inspections and the procedures for performing them.

2.0 Legal Authority

Legal authority for the Industrial High Risk Runoff Inspection program is found in the City of Rockford's Code of Ordinances Chapter 109, Article 12. This Chapter of the City of Rockford Code provides City staff the authority to access properties for inspections.

3.0 Staffing

Staff from the Department of Public Works shall be responsible for performing inspections at industrial, commercial and other high risk facilities to ensure that these facilities are in compliance with the City of Rockford's Code of Ordinances Chapter 109, Article 12. Each team member shall be trained to perform the inspections as referenced in the ILR00 industrial stormwater permit and shall be familiar with this document. The primary public works staff trained to perform industrial inspections shall be the following positions: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Project Manager, Stormwater Coordinator and designated project Managers and Engineering Techs. Each shall be trained in performing industrial inspections from in-house and external training sources as approved by the Engineering Operations Manager and the Stormwater Program Manager(s). Project Managers and Engineering Technicians can perform inspections provided they have the above training and are approved to perform inspections by the Engineering Operations Manager and the Stormwater Program Manager(s).

All training shall be in accordance with the Standard Operating Procedures for Stormwater and Environmental Education.

The following equipment may be utilized when performing inspections: a copy of the SWPPP and SPCC for the site if available (if copies cannot be obtained beforehand they shall be reviewed onsite), clipboard, inspection form, camera, sampling supplies, personal protection equipment. Personal protection equipment shall include:

- Hard hats – as required by the industrial facility.
- Safety vests – as required by the industrial facility
- Work boots
- Safety glasses - as required by the industrial facility

Safety while doing any inspection is a top priority. Staff should always be aware of their surroundings as well as the location of equipment operating in the area.

4.0 Inspection Frequency and Priority

Inspections may be scheduled in advance or without prior notice. Inspections shall be prioritized based on the following:

Inspection Priority		Approx. # of Facilities	Priority Ranking
Citizen Complaints and Staff Observations			High
Flows recorded during outfall Inspections & tracked to an industrial facility & past compliance concerns within the past 3 years.			High
Municipal Facilities (see attachment B for list of municipally owned facilities and priority ranking)	List categories of high priority facilities (e.g., vehicle maintenance)	2	High
	List categories of medium priority facilities	2	Medium
	List categories of low priority facilities (e.g., municipal buildings)	80	Low
Facilities requiring an IEPA industrial Stormwater permit based on SIC and ILR00	Facilities with approved permit	57	Medium
	Unpermitted facilities - Food Manufacturing (SIC starting at 20)	17	Medium
	Unpermitted facilities - Textile & Apparel products & manufacturing (SIC starting at 22,23)	18	Low
	Unpermitted facilities – Wood & paper manufacturing facilities (SIC starting at 24, 25)	17	High
	Unpermitted facilities – Wood, paper & Printing facilities (SIC starting at 27)	52	Low
	Unpermitted facilities – Chemical & Petroleum related industries (SIC Starting at 28, 29)	32	High
	Unpermitted facilities – Rubber, leather & glass products. (SIC starting at 30, 31, 32)	32	Low
	Unpermitted facilities – Metal fabrication Industries (SIC starting at 33, 34, 35)	293	High
	Unpermitted facilities – Electronic & transportation equipment (SIC starting at 36, 37, 38)	46	Low
	Unpermitted facilities – Miscellaneous Manufacturing (SIC starting at 39)	27	Low
	Unpermitted facilities – Transportation and trucking services, USPS (SIC starting at 41, 42, 43)	153	Low
	Unpermitted facilities – Recycling Facilities (SIC starting at 5015, 5093	8	High
	Facilities with No Exposure Certifications	60	Low
Facilities that do not required an IEPA industrial Stormwater permit	Commercial Fueling Stations	66	Medium
	Laundry and dry cleaning facilities	20	Medium
	Car repair shops and car washes	159	Medium
	Retailers with lawn & garden centers	8	Medium
	Large & Small retailers	75	Low
	Landscapers	37	Low
	Restaurants	596	Low
	Other facilities as determined by the City	------	TBD

The City shall inspect 100% high priority facilities and 50% medium priority facilities once every permit term. The City shall continue to evaluate the database using desktop analysis to determine if a facility's Standard Industrial Classifications (SIC) are appropriate, if it is still operational and within City limits. Citizen complaint inspections will be in addition to the scheduled inspections. Low priority facilities shall not be inspected unless there is a complaint submitted or an issue referred by another public entity such as the County Health Department or the RRWRD. The facility inventory and prioritization will be evaluated annually and revised where appropriate based on inspection findings and desktop analysis. New facilities will be added when identified. Changes will be summarized each year in the Annual Report.

Once all high and medium priority facilities have been reviewed new inspections on the facilities shall commence.

Complaints from the public shall be recorded and investigated. The City has a citizen complaint program which includes a hotline (779-348-7300) for phone calls and the City's website (www.rockfordil.gov) to register a complaint. Calls to the hotline shall be forwarded to the Stormwater & Environmental Program Manager or the Stormwater Project Manager. The same positions are sent emails for online complaints.

Citizen complaints shall be followed up with a field inspection by City staff within 72 hours of the complaint being submitted. Citizen complaints may initially be investigated as an Illicit Discharge Investigation (see Illicit Discharge and Detection and Elimination Standard Operating Procedures. If an industrial inspection is warranted procedures in Section 6.0 shall be followed. Priority ranking and inspection frequency may be adjusted based on inspection results if necessary.

5.0 Identification of Industrial High Risk Runoff Facilities

The City utilizes the following resources to build and update their industrial facility database for performing inspections. Updated data shall be incorporated into the existing database and mapping. This database shall be updated annually and changes referenced in the annual report. Mapping of industrial facility locations shall be updated at the same time as the database. See Appendix A for contacts to the listed organizations

5.1 Rock River Water Reclamation District

The Rock River Water Reclamation District {RRWRD) requires that all significant industrial users that wish to connect to the Publicly-Owned Treatment Works (POTW} obtain a wastewater discharge permit prior to connecting or discharging to the POTW. This information is maintained by the RRWRD in their customer database.

5.2 NPDES Permitted Facilities

The Illinois Environmental Protection Agency (IEPA) issues NPDES permits to industrial facilities (based on SIC code) and maintains information on permitted sites on their website. The City will work with the local office of the Illinois Environmental Protection Agency to review its list of permitted sites or utilize the website below to make sure all NPDES permitted sites have obtained the proper City of Rockford approvals. This website shall be reviewed quarterly and the database updated as needed. (http://dataservices.epa.illinois.gov/NoticesofIntent/IndustrialQuickSearch.aspx)

Since IEPA does not list "No Exposure" certifications on their website the City shall request an updated list annually from IEPA.

5.3 Sara Title III and EPCRA Reporting (Toxic Release Inventory)

The City reviews the USEPA's Toxic Release Inventory (TRI), which requires facilities to submit data annually. This inventory shall be reviewed to determine what facilities within Rockford City limits have submitted reports and to add them to the database if necessary. (http://www.epa.gov/tri/index.htm).

5.4 City of Rockford Fire Department

The City of Rockford Fire Department maintains a database of industrial facilities with hazardous materials (Tier II reporting to Illinois Emergency Management Agency). An updated copy of this shall be requested annually and the database updated as needed.

5.5 City of Rockford Water Division

That City of Rockford Water Division shall provide a list of non-residential (more than one unit) users annually. This list can be used to determine existing facilities using water and further to identify any industrial activity not otherwise captured for prioritization. This list shall be updated annually.

5.6 Winnebago County Health Department

The Winnebago County Health Department maintains a list of permanent food establishments in Winnebago County. The City shall request an updated copy annually and update its database as needed.

5.7 Illinois Department of Agriculture – Motor Fuel Dispenser Information for Businesses

The City utilizes the Illinois Department of Agriculture's database to determine the locations of licensed fueling stations within City limits. This report is updated annually. (http://www.agr.state.il.us/programs/consumer/w&m/index.html)

5.8 City Owned Facilities

The database shall include City owned facilities which use or store pollutants or implement activities that may pose a threat to water quality. These facilities shall include, but are not limited to: city yards including vehicle storage and maintenance facilities, well houses, pesticide storage facilities, the compost facility, publicity owned parking lots, and City owned public buildings. While IEPA has confirmed that stormwater discharges from the city yards do not require authorization under a NPDES permit, the City shall develop a stormwater plan establishing best management practices for that site and shall evaluate that plan annually for potential improvements to best management practices and efficiencies to operations. Changes to the plan shall be summarized in the Annual Report. All other facilities shall maintain Stormwater Pollution Prevention Plans or Spill Prevention Control and Countermeasure plans if required through state or federal requirements.

Well houses are inspected daily by the Water Division for chemical leaks and other issues per Water EPA requirements. All other City owned facilities shall be inspected based on their priority rank. See Appendix B for a list of City owned facilities and their priority ranking.

6.0 Performing Industrial High Risk Runoff Inspections

The Industrial Survey Storm Water Compliance form (Appendix C) shall be completed during the inspection and any noticeable issues addressed with the facility supervisor during an exit interview. The inspector should review all areas of a facility that could impact water quality through stormwater runoff or illicit discharges. During the inspection, City inspectors shall complete the following steps:

1) For facilities requiring NPDES Industrial stormwater permitting, an appointment shall be made with the site representative. This is to ensure the appropriate person is onsite and available. For facilities that do not require an industrial stormwater permit unscheduled inspections are preferred.
2) If scheduling, obtain a copy of the facilities Stormwater Pollution Prevention Plan (SWPPP) for review in advance of the inspection. If it is not available the SWPPP shall be reviewed during the inspection.
    a. Review the facilities standard industrial classification (SIC) and confirm a SWPPP or No Exposure certification is required.
    b. If permitting is required confirm SWPPP is up to date and/or confirm the facility qualifies for the No Exposure certification.
    c. Review required inspection reports.
    d. If a facility does not have a permit/SWPPP as required discuss with site manager the permit requirements and determine a timeframe to develop a SWPPP. These facilities shall be referred to the IEPA in a timely manner.

3) Review the interior and/or exterior of the facility as needed utilizing the attached inspection report (Appendix C).
    a. Any items in the visual survey section of the inspection report marked "no" shall be reviewed with the site manager with possible corrective actions discussed.
    b. Photos may be taken if possible and not against the facility's policy.
    c. Review the facilities discharge point(s) as indicated on the SWPPP. If the discharge point is not indicated the inspector shall determine the discharge point (i.e. storm drain inlets, where the facilities storm sewer enters the City's right-of-way, an adjacent drainageway, property perimeter etc.). See Table 1 for common discharges produced at generating sites.
    d. Ensure floor drains are not connected to the stormsewer system.
4) Indicators of potential illicit discharges from a facility include:
    a. Odors (gas, sewer, rancid/sour, etc.)
    b. Deposit/stains (oily, flowline, paint, etc.)
    c. Pipe Benthic growth
    d. Dry weather discharges from the facility to the storm sewer system
    e. Other potential indicators can be found in the Illicit Discharge and Elimination standard operating procedures.
5) If an indicator of illicit discharges is present the City may:
    a. If sampling of the questionable discharge is required by the facility's NDPES permit, verify that sampling is being completed and request test results.
    b. If sampling is not required or being completed for the particular discharge in question, or the City questions the accuracy of the facility's test results, the City can request additional sampling to confirm tests. Inspectors shall observe sampling to verify location of sample taken.
    c. Utilize the City's field testing equipment and follow the monitoring standard operating procedures. Sample types shall be based on the type of facility.
        i. Sampling may need to be completed upstream of the site to verify the source of suspected illicit discharge.
        ii. If an illicit discharge is not from the facility, initiate an illicit discharge investigation as detailed in the Illicit Discharge Detection and Elimination standard operating procedures.
    d. If test results indicate presence of contaminants including exceedances of NDPES permit limits, contact IEPA and City legal department to discuss enforcement.
    e. Require facility to implement temporary and/or permanent best management practices based on their response plans and as approved by the City to control or eliminate the contaminant.
    f. Perform subsequent field test to confirm that discharge has been managed appropriately.
    g. All documents, sampling results and conversations shall be saved as indicated later in this document.
6) Letters shall be sent to all NPDES permitted facilities detailing inspection findings and timeframes for performing corrective actions (see sample letter in Appendix D). A copy of this letter shall also be emailed to the Illinois EPA Rockford office (see Appendix A for contact information). For facilities that do not require NPDES permitting, letters shall only be sent if there are corrective actions.

Table 1: Common Discharges Produced at Generating Sites	
Generating Site	**Activity Generating the Discharge**
Vehicle Operations (Maintenance, Repair, Fueling, Washing, Storage)	• Improper disposal of fluids down shop and storm drains • Spilled fuel, leaks and drips from wrecked vehicles • Hosing of outdoor work areas • Wash water from cleaning • Spills
Outdoor Materials (Loading/Unloading, Outdoor Storage)	• Liquid spills at loading areas • Hosing/washing of loading areas into shop storm drains • Leaks and spills of liquid stored outside
Waste Management (Spill prevention and response, Dumpster management	• Spills and leaks of liquids • Dumping into storm drains • Leaking dumpsters
Physical Plant Maintenance (Building repair, Remodeling and maintenance, Parking lot maintenance)	• Discharges from power washing steam cleaning • Rinse Water and wash water discharges during clean up • Runoff from degreasing and re-surfacing
Turf and Landscaping (Turf Management Landscaping/rounds care)	• Non-target irrigation • Improper rinsing of fertilizer/pesticide applicators
Unique Hotspot Operations (pools, Golf Courses, Marinas, Construction, restaurants, Hobby Farms)	• Discharge of chlorinated water from pools • Dumping of sewage and grease.

7.0 Enforcement

Enforcement measures shall be in accordance with Chapter 109, Article 13 and the City of Rockford Storm Water Division Enforcement Response Plan for corrective actions not remedied within the required timeframe.

8.0 Documentation and Record Management

Hard copies of site data (inspection reports and letters) will be filed by address in file folders. In addition, digitized copies will also be saved in the Stormwater Drive on the City of Rockford computer system. Digitized information may include: SWPPP, inspection reports/checklists, letters, photos, correspondence, etc. These files will be saved as follows:

1) Open the Stormwater Drive (note: this drive has limited access for people who perform duties directly related to the City's stormwater program),
2) Open the IHRRI folder,
3) Open the IHRI Inspections folder,
4) Open the inspection folder for the current year,
5) Inspections shall be saved by address and facility name.
6) If a folder for a site is already created open it and save the data. Inspection reports should be saved by date. If it is a new site create a new folder.

Any industrial facility site where inspections carry over to the next year shall have the entire digitized inspection folder copied and pasted to the next year. All hard copy inspections shall be saved in the same file.

An excel spreadsheet for all inspections has also been created. This spreadsheet can be found in the Stormwater Drive in the folder entitled ***Inspection and Sampling Logs***. All spreadsheets are saved by year for easy tracking. Data includes: date, facility name and address, SIC number, NPDES permit # (if applicable), type of follow-up needed, date of follow-up and whether corrective actions have been addressed. Notes about the inspection can also be included.

Appendix A

Database Contacts

Company	Name	Phone #	Email	Website
Rock River Water Reclamation District	Barb LeMoine	815-387-7636	BLeMoine@rrwrd.dst.il.us	
City of Rockford Fire Department	Ken Eitenmiller – Hazardous Materials Chief	779-348-7171	Ken.eitenmiller@rockfordil.gov	
	Matt Knott – Division Chief	779-500-6537	Matt.knott@rockfordil.gov	
City of Rockford Water Division	Tim Holdeman	779-348-7355	Tim.holdeman@rockfordil.gov	
Illinois EPA	Melissa Parrott (Springfield)	217-782-0610	Melissa.Parrott@Illinois.gov	http://dataservices.epa.illinois.gov/NoticesofIntent/IndustrialQuickSearch.aspx
	Thomas Williams (Rockford)	815-987-7760	Thomas.williams@Illinois.gov	
Winnebago County Health Department (may need to submit FOIA)	Lisa Sprecher	815-720-4117	lsprecher@wchd.org	
Sara Title III and EPCRA Reporting	List only			http://www.epa.gov/tri/index.htm
Illinois Department of Agriculture	List only			http://www.agr.state.il.us/programs/consumer/w&m/index.html

Appendix B

PROPERTIES OWNED BY CITY OF ROCKFORD, ILLINOIS

Name	Type	Address	Priority Ranking
Armory	Vacant Development Prop	613 N Main Street	Low
Shopstead	Leased Retail Space	1012 S Main Street	Low
City Yards Admin	City Operations Location	523 S Central Ave	Low
City Yards Shop	Mechanic Shop	523 S Central Ave	High
City Yards Traffic	City Operations Location	523 S Central Ave	High
Water Division	Water Operations Location	1111 Cedar Street	Medium
City Hall	City Operations Location	425 E State Street	Low
Fire Administration/911	City Operations Location	201 S 1ST Street	Low
Fire Station 1	Fire station	528 Woodlawn Avenue	Low
Fire Station 2	Fire station	1004 7th Street	Low
Fire Station 3	Fire station	1520 S. Main Street	Low
Fire Station 4	Fire station	2959 Shaw Woods	Low
Fire Station 5	Fire station	391 Trainer Road	Low
Fire Station 6	Fire station	3329 W State Street	Low
Fire Station 7	Fire station	4979 Falcon Road	Low
Fire Station 8	Fire station	505 Sherman	Low
Fire Station 9	Fire station	2416 Halstead	Low
Fire Station 10	Fire station	3407 Rural	Low
Fire Station 11	Fire station	2117 Calgary	Low
Coronado Theater	Theater	312-314 N Main Street	Low
Ingersoll	Vacant Development Prop	301 S Water Street	Low
Fire Repair Shop	Mechanic Shop	2323 Sawyer Road	Medium
Human Services	City Operations Location	625 N Church Street	Low
PSB Overnight Parking	Open Lot Vehicles	420 W State Street	Low
Concourse Overnight Parking	Open Lot Vehicles	322 S Church	Low
Yards Overnight Parking	Open Lot Vehicles	400 S Independence	Low
Plant		Stanley St. south of Preston	Low
Group 1	Group well-no bldg	Cedar & Tay St's	Low
Group 2	Group well-no bldg	Cedar & Stanley St's	Low
Group 5	Group well-no bldg	Preston & Tay St's	Low
Group 6	Group well-no bldg	Chestnut & Tay St's	Low
Well 3	Base Well	1404 Riverbluff Blvd.	Low
Well 4	Land to be sold	801 Marchesano Dr.	Low
Well 5 - 5A	Treatment plant	2526 Pelham Rd.	Low
Well 6	Base Well	2604 19th Ave.	Low
Well 9A	Secondary Well	2708 Crosby St.	Low
Well 10	Treatment plant	4316 Newburg Rd.	Low
Well 11	Land to be sold	1218 7th Ave.	Low
Well 12	Land to be sold	1022 Benton St.	Low
Well 13	Treatment plant	4625 Skyline Dr.	Low
Well 15	Zone Control Valve	3030 Chestnut St.	Low
Well 16	Land to be sold	4550 Harrison Ave.	Low
Well 17	Secondary Well	3700 Brookview Rd.	Low
Well 18	Base Well	1409 S. Johnston Ave.	Low
Well 19	Used for storage only	1220 Lockheed Lane	Low
Well 20	Land to be sold	2434 N Central Ave,	Low
Well 21	Base Well	703 Daisyfield Rd.	Low

Well 22	Base Well	5110 Auburn St.	Low
Well 23	Secondary Well	1206 Elmwood Rd.	Low
Well 24	Base Well	6475 Cessna Dr.	Low
Well 25	Secondary Well	5602 Springcreek Rd.	Low
Well 26	Secondary Well	5516 E State St.	Low
Well 27	Land to be sold	5834 Guilford Rd.	Low
Well 28	Secondary Well	5400 Kishwaukee Rd.	Low
Well 29	Treatment plant	4750 Pepper Dr.	Low
Well 30	Treatment plant	6544 Palo Verde	Low
Well 31	Treatment plant	1780 Bell School Rd.	Low
Well 33	Used for storage only	930 Arthur Ave.	Low
Well 34	Base Well	3945 Dawes Rd.	Low
Well 35	Secondary Well	2944 Bildahl St.	Low
Well 36	Treatment plant	4141 Samuelson Rd.	Low
Well 37	Base Well	2100 Huffman Blvd.	Low
Well 39	Secondary Well	7423 Springbrook Rd.	Low
Well 40	Treatment plant	788 Lyford Rd.	Low
Well 42	Treatment plant	6733 Newburg Rd.	Low
Well 43	Treatment plant	3447 Publishers Dr.	Low
Well 44	Base Well	5250 Owen Center Rd.	Low
Well 45	Base Well	1141 Cedar St.	Low
Tank T-02	Elevated Tank	2310 Wentworth Ave	Low
Tank T-05	Elevated Tank	Christopher Drive	Low
Zone Control Valve-01	Zone Control Valve	Spring Creek & Springdale	Low
Zone Control Valve-02	Zone Control Valve	5701 Strathmoor Dr	Low
ZCV-03	Zone Control Valve	N Mulford & Mulford Village Dr	Low
ZCV-04	Zone Control Valve	738 Lyford Rd	Low
ZCV-05	Zone Control Valve	Highcrest & Spring Creek	Low
ZCV-06	Zone Control Valve	Crosby St & Dawson Ave	Low
ZCV-07	Zone Control Valve	Harrison Ave & 22nd St	Low
ZCV-09	Zone Control Valve	3030 Chestnut St.	Low
	Inter-zone booster station	Guilford & Fairview	Low
	Inter-zone booster station	Alpine & E State	Low
	Inter-zone booster station	Broadway & Eastgate Pkwy	Low
	Inter-zone booster station	Sandy Hollow & 20th St	Low
	Inter-zone booster station	Elmwood Rd	Low
	Inter-zone booster station	Samuelson Rd	Low

Appendix C

Industrial Survey
Storm Water Compliance Form

COMPANY NAME			DATE
TELEPHONE		FAX	
ADDRESS		CITY, ZIP	
MAILING ADDRESS (if different from site address)		MAILING CITY, ZIP	
CONTACT		TITLE	EMAIL/PHONE NUMBER
FACILITY #	SIC CODE	Does the facility have a NPDES industrial storm water permit or a 'No Exposure' Exemption? (circle one) Yes No	
DAYS OF WEEK FACILITY CONDUCTS BUSINESS (CIRCLE): Sun Mon Tues Wed Thurs Fri Sat Hours of Operation: _____		Is the SWPPP available or review? Yes No NA	

Weather Conditions: ☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds ☐ Other:
Temperature:

Briefly describe the principal activities that occur on-site including all manufacturing and/or services provided.

Are any vehicles serviced or washed/cleaned at this facility? (circle one) Yes No
If yes, is this performed indoors or outdoors?

Does the waste drain to (circle one): Rockford sanitary sewer Dry well Storm sewer
100% recycled Collected for off-site disposal

Are any materials/products stored outdoors (i.e. chemicals, equipment, tanks, drums, barrels, etc.)? If Yes what is the material? _____, Where is it stored? _____
How is it stored? (pallets, undercover, etc.)

Do you use or store liquid chemicals in quantities of 25 pounds or more? (circle one) Yes No
If yes, is this indoor or outdoor storage? If outdoors, where and how? _____

If Yes what is the chemical? _____ Is there secondary containment? (circle one) Yes No

Proximity to water bodies, drainageways and inlets?

Do you use or store dry chemicals in quantities of 500 pounds or more? (circle one) Yes No
If yes, is this indoor or outdoor storage?

If Yes what is the chemical?

Does the facility generate *any* wastewater excluding domestic wastewater? (circle one) Yes No
If yes, please describe the wastewater. (circle all that apply)

Boiler blowdown Noncontact cooling water Process water Remediation water

Cooling tower blowdown Wash water (vehicle, equipment, etc.)

Other _____

Is this wastewater discharged to the Rockford sewer system? (circle one) Yes No Unknown

VISUAL SURVEY	YES	NO	N/A
GENERAL – Are regular housekeeping practices carried out? Are good housekeeping procedures and reminders posted in appropriate locations?			
SPILL CONTAINMENT - Are appropriate spill containment and cleanup materials kept on-site and in convenient locations and are staff familiar with these locations and use of the material?			
EQUIPMENT - Is exposed piping and process equipment regularly inspected and/or tested to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters?			
OUTSIDE AREAS (Free of staining & debris; exhibits good housekeeping; maintained in a manner to prevent runoff)			
CHEMICAL STORAGE – The outside storage area is kept to minimize the possibility of a release. Chemicals/materials are protected from precipitation/storm water runoff and the containers show no signs of leaking.			
DUMPSTERS – No liquids are leaking from the dumpster; surrounding area is free of trash. Distance from water bodies, inlet and drainageways. _____			
ABOVEGROUND STORAGE TANKS – No ground staining, no spillage observed and no discharge to storm drain. Tanks are maintained to minimize the possibility of a release (secondary containment).			
ONSITE STORM DRAIN – Protected from accidental discharge other than water.			
POWER WASH OR STEAM CLEAN - (discharge to sewer) Drains to oil/water separator connected to a sanitary sewer and not a septic system. Steam cleaning not discharged to parking lot, storm drain or soil.			
PARKING LOT/DRIVEWAY – Free of excess trash, chemical staining or liquids other than water.			
Indicators are not present to suspect an illicit discharges or connections? If answered "no" list indicators:			
MOP WATER TO SANITARY SEWER VIA CLARIFIER – Mop water is not dumped to the soil, parking lot, gutter, or other areas susceptible to storm water drainage.			
OTHER – Non-storm water discharge (i.e. non-hazardous process discharge)			
OVERALL EVALUATION/COMMENTS:			

Inspector Signature: _____ Date: _____

Form developed from the following sources: *Hazardous waste/Hazardous materials Facility Storm Water Compliance Survey* form for Riverside, CA, and *Industrial and Commercial Environmental Survey*, for Portland,

Appendix D

Timothy Hanson
Director
Public Works Department

July 8, 2013

(Insert name & address of
Permit holder contact)

RE: Industrial Inspection at (insert facility name) (ILR00 insert permit # if applicable)

Dear Mr. /Ms. ;

An industrial inspection for stormwater compliance was conducted on (insert date) by the City of Rockford. The purpose of the inspection was to determine if stormwater pollution prevention measures are adequate for the site and to determine if the site was in compliance with the City of Rockford's Code of Ordinances.

The inspection identified the following items needing corrections to comply with your IEPA Industrial Stormwater Permit and Chapter 109 of the City of Rockford Code of Ordinances:

1.
2.

I have included a copy of the IEPA industrial stormwater permit for your review and implementation. I have also included a link to the IEPA website which details the industrial permitting requirements as well as sample SWPPP's. (http://www.epa.state.il.us/water/permits/storm-water/industrial.html)

Please update the City via phone or email within 30 days to review your progress in completing the above items. Failure to contact the City shall result in enforcement measures as indicated in Chapter 109 and the City's Stormwater Division Enforcement Response Plan.

If you have any questions regarding this inspection please contact our Storm Water and Environmental Program Manager, Brad Holcomb, at (815) 967-7061 or email at brad.holcomb@rockfordil.gov.

Sincerely,

Matthew Vitner, P.E.
City Engineer

Timothy Hanson
Director
Public Works Department

Industrial Stormwater Inspection at (insert facility name) (ILR10 insert permit #)

Photo #1

Picture description

Photo #2

Picture description

Photo #3

Picture description

Note: Approval may be needed from the facility prior to taking photos.

Note: the attached photos indicate examples of corrective actions observed on this construction site. When performing maintenance as indicated in the photos, check the entire site for other areas with similar maintenance needs.

D-10

Stormwater and Environmental Education

THE CITY OF
ROCKFORD
ILLINOIS, USA

STORMWATER AND ENVIRONMENTAL EDUCATION

STANDARD OPERATING PROCEDURE

June 2015

1.0 General

The purpose of this standard operating procedure for the Stormwater & Environmental Education program is to comply with Part II, A.6.B AND Part II,A.10 of the City of Rockford's NPDES Stormwater Permit (ILS000001). The Engineering Operations Manager oversees the City's Stormwater Programs and the Stormwater and Environmental Program Manager manages the program. This document outlines how City staff and the public will be educated regarding the City's stormwater programs.

2.0 Staff Training

Within 90 days of their start date, all newly hired staff in the Public Works Engineering Division shall receive general training in the following areas regarding the stormwater program:

1) General overview of the stormwater program
2) Illicit Discharge Detection and Elimination
3) Erosion and Sediment Control Requirements
4) Job Site Safety

The Stormwater Program and Job Site Safety shall be provided by the Stormwater and Environmental Team.

All Public Works Engineering Division technical staff shall also attend additional training, both internally and externally, for any other stormwater related topics when necessary and as scheduling allows them to do so. Internal training may include supervisor meetings, contractor meetings, pre-construction meetings and informal reviews of stormwater program.

The City receives training notices from a variety of different sources. These include, but are not limited to: Illinois EPA, local soil and water conservation districts, USEPA (primarily webinars), Lorman, Illinois Association of Floodplain Managers and the American Public Works Association. Typically the Engineering Operation Manager or the Stormwater and Environmental Program Manager are notified of upcoming training who then forward the information to the Engineer Division staff. Other training opportunities will be reviewed as they become available.

Tracking: All training received by staff is recorded in the Stormwater Drive along with any certificates received (see section 4.0). All in-house training shall be saved in the same location. Sign –in sheets, instructor and topics discussed shall be included in the respective folders. Copies of certificates shall be given to the Engineering Operations Manager so they may be incorporated into the employees personnel file in the Human Resources Department.

In-depth in-house training shall be provided to designated staff in the City of Rockford Public Works Engineering Division for the following stormwater related topics:

2.1 Private Detention Basin Inspections (training every other year or prior to event inspections as described in the Standard Operating Procedures for Detention Basins – Section 4.2) – presented by the Stormwater Program Manager(s).

1. Public Works Engineering Division staff attendance shall include: Engineers, Managers, Technicians, and Coordinators.
2. Topics to include: review of Standard Operating Procedures Detention Basins and the detention basin maintenance guide, Identifying and locating detention basins, procedures for conducting inspections and recording and saving inspection reports and photos.

2.2 Public and Priority Private Detention Basin Inspections (annual training)

1. Public Works Engineering Division staff attendance shall include: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated Project Manager and Engineering Tech.
2. Topics to include: review of Standard Operating Procedures for public and high priority detention basins, list of basins, when to perform event inspections, procedures for conducting inspections and recording and saving inspection reports and photos.

2.3 Inlet & Storm Pipe Inspections (annual training)

1. Staff attendance shall include: Street Supervisors and designated street maintenance staff
2. Topics to include: Review of standard operating procedures, inspecting inlets and storm pipes, procedures for cleaning of inlets and disposal of material.

2.4 Creek Inspections (training to be held every other year)

1. Public Works Engineering Division staff attendance shall include: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated Project Manager.
2. Topics to include: Identify eroding stream channels, review of creek inspection form, reporting and documenting inspections.

2.5 Erosion and Sediment Control on City Construction Projects (annual training) – presented by the Stormwater Program Manager(s).

1. Public Works Engineering Division staff attendance shall include: Engineers, Managers, Technicians, and Coordinators.
2. Topics to include: ILR10 general construction permit requirements, common BMP's from Illinois Urban Manual and the IDOT Manual, requirements and procedures for conducting inspections, record keeping on City of Rockford projects.

2.6 Erosion and Sediment Control on Non-City Construction Projects (annual training) – presented by the Stormwater & Environmental Program Manager and the Environmental & Stormwater Project Manager.

1. Public Works Engineering Division staff attendance shall include: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated Project Manager and Engineering Tech.
2. Topics to include: ILR10 general construction permit requirements, common BMP's from Illinois Urban Manual and the IDOT Manual, requirements and procedures for conducting inspections, follow up and enforcement procedure and record keeping.

2.7 Street Sweeping (annual training) Presented by the Street Superintendent or their designee

1. Staff attendance shall include: Street Supervisors, designated street maintenance staff and designated contractor staff.
2. Topics for the training shall include but not be limited to: review of these standard operating procedures, disposing of street sweepings, review of contractor street sweeping procedures and locations of previous concerns and issues.

2.8 Flood Control and Floodplain Management (annual training) – presented by the City Floodplain Manager

1. Staff attendance shall include: Designated Managers, Coordinators & Technicians
2. Topics to include: floodplain regulations, review of areas where nuisance flooding occurs, IDNR/ACOE regulations.

2.9 Pesticide, Herbicide & Fertilizer Applications (annual training) – presented by Forestry Supervisor.

1. Staff attendance shall include: Designated street maintenance staff.
2. Topics to include: review of standard operating procedures and the IEPA General NPDES Permit for Pesticide Application Point Source Discharges (ILG870147), status of certifications and training required to maintain, reporting and documenting applications, spill plan.

2.10 Illicit Discharge Detection and Elimination Program (annual training) - presented by the Stormwater Program Manager(s).

1. Staff attendance shall include:
   a. Public Works Engineering Division: Engineers, Managers, Technicians, Coordinators and street supervisors.
   b. Community and Economic Development – inspectors, Enforcement Specialists

2. Topics to include: IDDE program – allowable discharges, indicators of potential illic discharges, process to report potential illicit discharges reporting and documenting observatio

2.11 Outfall Inspections (training to be held every other year)

1. Public Works Engineering Division staff attendance shall include: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated Project Manager and Engineering Tech.
2. Topics to include: Review of Standard Operating Procedures for IDDE, procedures/protocols for Monitoring (including outfall screening and sampling) and outfall inspection sheet, reporting and documenting inspections.

2.12 Industrial High Risk Runoff Program (annual training)

1. Public Works Engineering Division staff attendance shall include: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated Project Manager and Engineering Tech.
2. Topics to include: Review of Standard Operating Procedures for Industrial High Risk Runoff Program including procedures for conducting inspections, List of IHRRI facilities, reporting and documenting inspections.

2.13 Monitoring Program (annual training)

1. Public Works Engineering Division staff attendance shall include: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated Project Manager and Engineering Tech.
2. Topics to include: Review of Standard operating procedures for Monitoring Program and IDDE, reporting and documenting samples review on operating equipment.

3.0 Public Education

The City continues to review ways to increase public awareness on reducing contaminants in our stormwater to improve water quality. These activities adopted to date include:

3.1 Educational Brochures

Several brochures regarding a number of topics about improving our stormwater quality have been developed. These are all available for the public at City Hall and can also be found on the City's website at (http://rockfordil.gov/public-works/engineering-cip/stormwater.aspx). In addition, public works staff has placed brochures at locations throughout the City as an added effort to educate the public including but not limited to: Rockford Park District and Winnebago County Soil & Water Conservation District. Educational brochures and documents available include:

- Concrete Washout
- Erosion and Sediment Control
- Fertilizer and Pesticide Applications
- Hazardous Materials
- Illicit Discharge and Detection
- Pet Waste
- Water Friendly Landscaping
- Residential Deicing
- Recycling
- City's Stormwater Management Program
- Yard waste
- Citizens Guide to Pest Control & Pesticide Safety
- Rain Garden "How To" Manual
- Fats, Oil & Grease

The City will evaluate the need for additional education materials on an annual basis and will identify any new brochures or other materials in the City's annual reports.

3.2 Public Presentations/Meetings

When applicable, displays will be at public/private events. Presentations shall be made at neighborhood meetings, seminars, workshops as requested. A preliminary list of neighborhood meetings is included on the City of Rockford's SharePoint site under: Public Works, Engineering/Admin, Neighborhood Assoc. meetings. The City's annual reports will summarize the public presentations provided during the year.

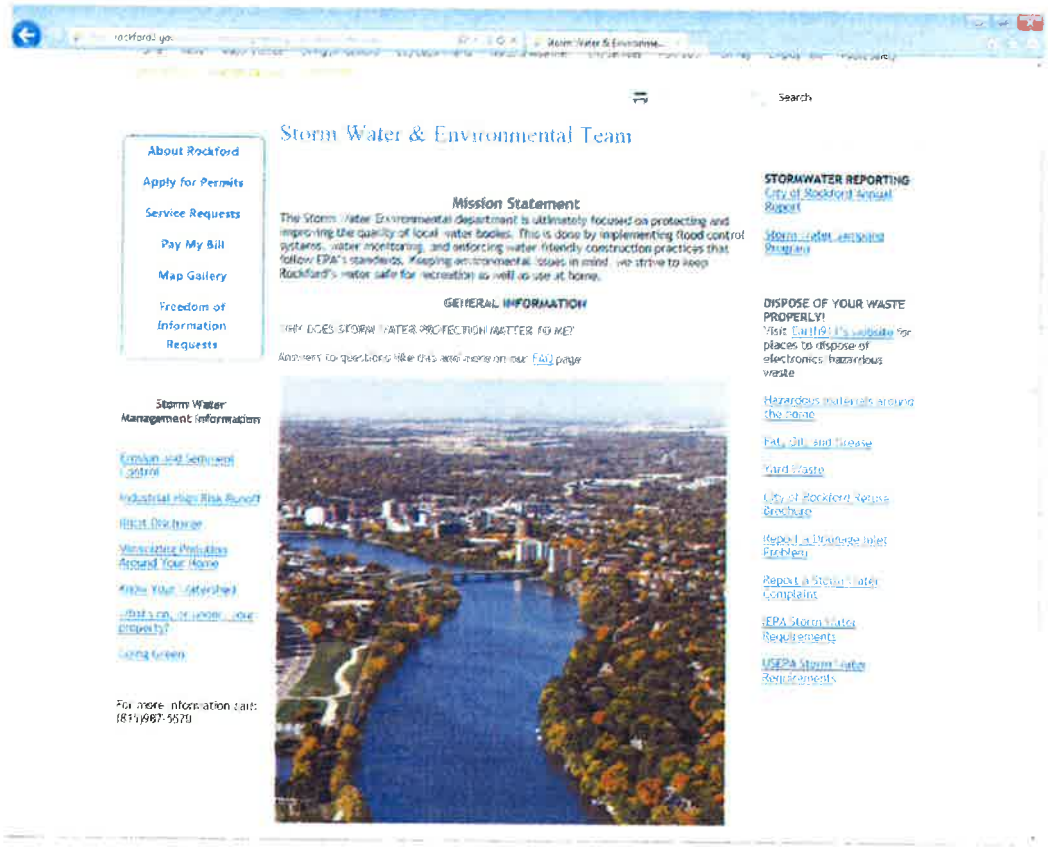
3.3 Erosion and Sediment Control Seminar

The City shall host or co-sponsor annual erosion and sediment control training for developers, development engineers, construction site operators and other interested parties. These seminars may cover a variety of topics regarding erosion and sediment control on construction sites. Certificates of attendance will be provided to attendees.

3.3 Public Reporting Tools

The public is encouraged to report any concerns about stormwater contaminants. The hotline (779-348-7300) and an online reporting tool (see web link in 3.4) are in place for the public to report a stormwater pollution concern.

A Stormwater link has been included on the City of Rockford's website (http://rockfordil.gov/public works/engineering-cip/stormwater.aspx). This link is designed to educate the public about our stormwater programs and other environmental topics and how they can help the City to improve the quality of water in the Rockford area.



4.0 Documentation and Record Management

All staff and public educations shall be saved in the Stormwater Drive.

These files shall be saved as follows:

1) Open the Stormwater Drive (note: this drive has limited access for people who perform duties directly related to the City's stormwater program),
2) Open the Education folder,
3) Open the folder for the current year,
4) Open folder for Community or staff education
5) Create a folder for the training, note: title of folder should show date and name of training (i.e. *2013.03.06 SWCD ESC Seminar*)
6) Data to be saved within folders may include: agenda, attendees (include certificate if received), correspondence

An excel spreadsheet for all inspections and education opportunities has also been created. This spreadsheet can be found in the Stormwater Drive in the folder entitled ***Inspection and Sampling Logs***. All spreadsheets saved by year for easy tracking. Data for education includes: date of event, type of public education/staff training, presenter/attendees, title of program, # in attendance and # and type of educational brochures handed out.

D-11

Monitoring and Sampling Program

THE CITY OF
ROCKFORD
ILLINOIS, USA

MONITORING AND SAMPLING PROGRAM

STANDARD OPERATING PROCEDURES

June 2015

1.0 General

The purpose of this standard operating procedure (SOP) for the Monitoring Program is to comply with Part II, A.7 & 9 and Part V, A & B of the City of Rockford's NPDES Storm Water Permit (ILS000001). This document addresses the procedures for the collection of water quality samples in varying conditions and locations for Representative Monitoring, Industrial High Risk Runoff and Illicit Discharge Detection & Elimination Monitoring. The City shall follow the NPDES Permit terms should there be any conflict or deviation with any portion of this SOP.

Additional guidance can be found in: *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments* by the Center for Watershed Protection.

2.0 Legal Authority

Legal authority for the Monitoring Program is found in the City of Rockford's Code of Ordinances Chapter 109, Article 12.

3.0 Staffing

Positions of the City of Rockford's Stormwater Environmental Team (SWET) include: Engineering Operations Manager, Stormwater Program Manager(s), Stormwater Coordinator and designated Project Managers and Engineering Techs.

Monitoring & sampling will be performed by the Public Works Engineering Division utilizing the following staff positions: Operations Manager(s), Program Manager(s), Project Manager(s), and Coordinator(s). These positions shall be trained to perform these functions according to the Standard Operating Procedures for Stormwater and Environmental Education and shall be familiar with this document.

Safety while completing any of these tasks is a top priority. Staff should always be aware of their surroundings and any potential hazards in the area.

4.0 Laboratory

The City shall use the Rock River Water Reclamation District (RRWRD) Laboratory (unless otherwise determined by the City) to analyze the samples collected. The laboratory hours are from 8:00 am – 4:30 pm on weekdays and are closed on weekends. Grab samples of fecal coliform are not accepted on Fridays or after 3:30 pm, Monday thru Thursday.

Field staff completing the sample collection should notify the lab contact or lab (typically by email) to inform them a delivery is forthcoming prior to the start of the sample collection operation.

Location
RRWRD Lab
3333 Kishwaukee Street
Rockford, Illinois 61109
(815) 387-7522
web_lab@rrwrd.dst.il.us

Lab Contact
Mary Johnson, Lab Supervisor
mjohnson@rrwrd.dst.il.us
(815) 387-7523

The field staff that collected the sample shall be the same person to deliver the sample to the lab. If this cannot be accomplished then it shall be documented when and to whom the sample was transferred to for delivery on the Sample Sheets. When delivering the sample the field staff must supply a City of Rockford employee identification card to the security guard at the entrance gate of the RRWRD complex. Staff will receive a gate opener to get to the laboratory and will return the opener and receive the identification back upon exiting the complex.

5.0 Representative Monitoring

The City's representative monitoring program includes in-stream sampling of tributaries to the Rock River and representative outfalls. Appendix A lists the Analytical Parameters to be sampled.

5.1 Tributary Monitoring

Tributary sites are analyzed for a suite of nutrient, heavy metal, and conventional water quality parameters, as noted in Appendix A.

5.1.1 Locations

Samples are collected at the following five (5) urban tributary locations:
(Refer to the site maps being Appendixes D-H for detailed locations)

Site ID	Locations
T1	North Kent Creek @ Fairgrounds Park
T2	South Kent Creek @ Tay & Corbin St.'s
T3	Keith Creek @ Tenth Avenue Park
T4	Keith Creek @ Dahlquist Park
T5	Spring Creek @ Starkweather Avenue

5.1.2 Frequency

Four dry weather samples will be collected on the second Monday in the months of February, May, August and November. A dry weather period is that which occurs at least 72 hours from a previously measurable (greater than 0.1 inch rainfall) storm event. The day of Monday was selected to complete these sample collections is based on an understanding with the RRWRD Lab and their workload. If weather conditions preclude collection of samples as scheduled, the sample collection shall be re-scheduled with the RRWRD Lab when and as conditions allow. Some conditions that may delay the collection of samples include but are not limited to: extreme temperatures, frozen flows, flooded conditions, high velocity flows and/or drought conditions.

5.1.3 Supplies and Equipment

The basic supplies and equipment needed to collect water quality samples from flowing tributaries includes:

- Safety vest
- Hip waders
- YSI 556 DO Meter
- Cooler (for storing and transporting samples)
- Ice (for preserving samples – obtained at the City Yards)
- Permanent marker (for labeling sample bottles)
- Tributary Sample Sheets, Appendix N
- Five (5) one-gallon plastic jugs (from the laboratory)
- Five (5) sterile six-ounce bottles (from the laboratory)
- Labels for the jugs and the sterile bottles (from the laboratory)

5.2 Representative Outfalls

The City of Rockford's NPDES Storm Water Permit No. ILS000001 (City's permit) details most of the criteria & requirements cited in this section. The City's permit identifies five representative outfall locations for monitoring.

5.2.1 Locations

Samples are collected at the following five (5) representative outfall locations:
(Refer to the site maps being Appendixes I-M for detailed locations

Source: Rockford Storm Water NPDES Permit No. ILS000001		
Outfall	**Location**	**Watershed Description**
Station R1	Paradise Boulevard	225 ac residential & open space
Station R2	Market St. & N. Water St.	50 ac commercial, offices & residential
Station R3	Fairview Blvd & Crosby St.	510 ac residential
Station R4	8th Street & Wills Avenue	780 ac industrial, commercial & residential
Station R5	Forest View Rd & 28th Ave	80 ac light industrial

These sites have been prepared for the installation of automatic samplers and tip-bucket rain gauges.

5.2.2 Frequency

Samples shall be collected in the spring and fall for a total of two sets of the required samples at each location (R1-R5) each year. Samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event.

5.2.3 Rain Event Data Collection

Data must be maintained for the following of each rain event:

- Date of event
- Duration of event (in hours)
- Rainfall measurements or estimates (in inches)
- Duration between event and end of previous event (in hours)
- Estimate of the total volume of the discharge sampled (in gallons)

The source of weather observation data to be used by Staff is from the National Weather Service website (http://w1.weather.gov/data/obhistory/KRFD.html) which reports the past 72 hours of weather data (including hourly rainfall data) from the Chicago Rockford International Airport. Copy and paste this data into the Rain Event data log spreadsheet found in the City's Storm Water directory.

5.2.4 Sampling Techniques for Representative Outfalls

The City's permit allows for grab samples and/or composite samples to be collected from the outfall sites. The use of automatic samplers is also allowed given proper programming of the unit. Appendix B denotes which technique to use, grab or composite, based on the type of sample to be collected.

5.2.4.1 Grab Sampling for Representative Outfall

Grab samples may be taken by hand or with the use of automatic samplers. Sampling consists of 3 grab samples; the first grab sample shall be taken within 2 hours after the commencement of the storm event. The second and third grab samples shall be taken at intervals of not less than 2 hours thereafter. Should the discharge cease before the 2nd and 3rd samples can be taken, Staff shall identify the approximate time that the discharge ceased.

5.2.4.2 Composite Sampling for Representative Outfall

Composite samples may be taken using automatic samplers that are triggered using either tipping-bucket rain gages programmed to initiate sampling after 0.1 inch of rain, or flow meters programmed to initiate sampling after 0.1 inches of runoff. Using automatic samplers to collect a composite sample is the preferred method.

5.2.4.3 Fecal Coliform Grab Sample for Representative Outfall

Staff will complete a grab sample to be tested for fecal coliform independent of the use of a composite or grab sampling technique. If possible, this grab sample will take place during the same storm event, but if this cannot be performed, these samples will be taken from separate events.

These samples should be collected directly from the discharge stream into the sterilized 6 oz Nalgene sample bottle with the sodium thiosulfate preservative. Do no overfill this bottle to ensure the proper amount of preservative remains with the sample.

5.2.5 Supplies and Equipment

The basic supplies and equipment needed to collect water quality samples from flowing tributaries includes:

- Safety vest
- Manhole hook
- YSI 556 DO Meter
- Cooler (for storing and transporting samples)
- Ice (for preserving samples – obtained at the City Yards)
- Permanent marker (for labeling sample bottles)
- Storm Sewer Sample Sheets, Appendix N
- Five (5) one-gallon plastic jugs (from the laboratory)
- Five (5) 1 liter glass sample bottle (from the laboratory)
- Five (5) sterilized, 6 oz. Nalgene sample bottle with sodium thiosulfate (Na2S2O3) preservative (from laboratory)
- Labels for the jugs and the sterile bottles (from the laboratory)
- ISCO automatic sampler (if necessary – pre-event setup required)
- Two-gallon polyethylene bottle (for use with automatic samplers).

Sample Bottles, Preservatives, and Maximum Holding Times
Field Technicians will deliver samples to the Laboratory within three hours of collection. Laboratory Analysts will split the sample needed for the analyses required and preserve accordingly.

5.3 Collection of Grab Samples

The laboratory will provide sample containers in accordance with Appendix B. The labeled uncapped bottle is submerged in the flow by hand, and allowed to fill without entraining surface or bottom debris. The sample is taken from a visibly flowing location that is deep enough to accommodate the sample container under these conditions. If there is no flow the samples should not be collected. Stagnant pools will not be sampled.

The filled containers are immediately placed in a cooler with water ice. The minimum information required on the label is the site identifier code, date and time, and sample designation (bottle type) as shown below. Laboratory issued stickers and/or tags may be used.

T-1 07-21-13 @ 1200 Fecal Coliform

5.4 Collection of Composite Samples

Composite samples are collected using the automatic samplers. Based on previous data, in order to collect the appropriate quantity for the required samples, the sampled rain event must produce 0.4 inches to 0.5 inches of total rainfall.

The samplers must be in-place prior to the start of a rain event. Installation and setup of the sampler is important for proper function. The following is a list of tasks to complete during this process:

- Install sampler before rain event
- Make sure battery for the sampler holds enough charge
- Verify the sampler is programmed properly (weather time or rain gauge weighted)
- Verify the intake tube is free of kinks and the line is clear of debris
- When using the tip bucket trigger, verify the connection is free of debris and moisture
- When using the tip bucket trigger, verify the tip bucket and screen is free of debris. A ladder will be required to complete this.
- Verify the program have been started before replacing the cover on the sampler

When staff returns for the collection of the sample, document the readout of the samplers display before completing other tasks. This data will provide rainfall totals registered by the sampler.

Pull the samplers internal bottle out and carefully fill the sample bottles provided by the laboratory. The filled containers are immediately placed in a cooler with water ice. The minimum information required on the label is the site identifier code, date and time, and sample designation (bottle type) as shown below. Laboratory issued stickers and/or tags may be used.

R-1
07-21-13 @ 1200
FOG

5.5 YSI 556 Meter – Field measurements

Field measurements of water quality (pH, DO, temperature, conductivity) are made in the same location following water sample collection. The meter must be properly calibrated according to the manufacturer's instructions for accurate measurements to be taken. Record this information on the Tributary or Storm Sewer Sample Sheet.

6.0 Illicit Discharge Detection and Elimination Indicator Monitoring

Illicit Discharge Detection & Elimination (IDDE) indicator monitoring is used to confirm illicit discharges, and provide clues about their source or origin when discovered though tributary, outfall monitoring or IDDE SOP. In addition, this monitoring can measure improvements in water quality during dry weather flow.

6.1 Where to Collect Samples

Indicator sampling normally occurs at three principle locations in the storm drain system to detect illicit discharges – at the outfall, in the stream, and within the storm drain pipe network.

Monitoring of dry weather flows from outfalls is the most common location for indicator sampling.

In-stream monitoring involves sample collection during dry weather flow conditions. Stream monitoring is less precise than outfall monitoring at detecting individual discharges. It can detect the most severe or high volume discharges, and measure progress over time in terms of changes in stream water quality.

In-pipe sampling is often needed to track down and isolate individual discharges once a potential discharge problem is encountered at an outfall.

6.2 When to Collect Samples

Indicator samples should be collected during dry weather periods to avoid flowing outfalls caused by storm water or groundwater infiltration. A dry weather period is that which occurs at least 72 hours from a previously measurable (greater than 0.1 inch rainfall) storm event. An exception to this is for response to reported active illicit discharges to which an investigation should occur immediately.

Time of day that sampling is conducted is particularly important when the suspected source is residential sewage. Peak water usage occurs in the morning and evening, therefore sampling in the early morning is recommended in these situations.

6.3 Supplies and Equipment

The basic supplies and equipment needed to collect water quality samples for IDDE includes:

- Safety vest
- Manhole hook
- YSI 556 DO Meter
- Hach DR 900 Colorimeter
- Hach 2100 Turbidity Meter
- Cooler (for storing and transporting samples)
- Ice (for preserving samples – obtained at the City Yards)
- Permanent marker (for labeling sample bottles)
- Storm Sewer or Tributary Sample Sheets
- One-gallon plastic jug per sample set (from the laboratory)
- One liter glass sample bottle per sample set (from the laboratory)
- Six oz. Nalgene sterilized sample bottle per sample set with sodium thiosulfate (Na2S2O3) preservative (from laboratory)
- Labels for the jugs and the sterile bottles (from the laboratory)
- ISCO automatic sampler (if necessary – pre-event setup required)
- Two-gallon polyethylene bottle (for use with automatic samplers).

Sample Bottles, Preservatives, and Maximum Holding Times
Field Technicians will deliver samples to the Laboratory within three hours of collection. Laboratory Analysts will split the sample needed for the analyses required and preserve accordingly.

6.4 Water Quality Indicators Used to Identify Illicit Discharges

Different water quality parameters can be used to confirm the presence or origin of an illicit discharge at a flowing storm drain outfall. These parameters, which are discussed in more detail in Appendix C, include:

- Ammonia
- Boron
- Chlorine
- Color
- Conductivity
- Detergents
- *E. Coli*, enterococci, or total coliform
- Fluoride
- Hardness
- pH
- Potassium
- Surfactants
- Turbidity

Table 1 summarizes these parameters, compares their ability to detect different flow types, and reviews some of the challenges that may be encountered when analyzing them in the lab or in the field.

Table 1: Water Quality Parameters Used to Identify Illicit Discharges

Parameter	Flow Types It Can Detect				Analytical Challenges
	Sewage	Wash Water	Tap Water	Industrial/ Commercial Waste	
Ammonia	●	◉	○	◉	Can change into other forms of nitrogen as flow travels to the outfall
Boron	◉	◉	○	N/A	
Chlorine	○	○	○	◉	High chlorine demand in natural systems limit usefulness to flow with very high chlorine concentrations
Color	◉	◉	○	◉	
Conductivity	◉	◉	○	◉	Not useful in natural systems with high salinities
Detergents	●	●	○	◉	Reagent is a hazardous waste
E. coli Enterococci Total coliform	◉	○	○	○	24-hour test procedure Need to modify standard analytical procedures to measure high bacteria concentrations
Fluoride*	○	○	●	◉	Regent is a hazardous waste
Hardness	◉	◉	◉	◉	
pH	○	◉	○	◉	
Potassium	◉	○	○	●	May need to use two separate analytical techniques, depending on the concentration
Surfactants	●	●	○	◉	Reagent is a hazardous waste
Turbidity	◉	◉	○	◉	

Key:
● Can almost always (i.e., > 80% of the time) distinguish this flow type from clean water (e.g., tap water, natural water). For tap water, can almost always distinguish tap water from natural water.
◉ Can sometimes (i.e., > 50% of the time) distinguish this flow type from clean water, depending on regional characteristics, or can be helpful when used with another parameter.
○ Poor indicator parameter. Cannot reliability distinguish an illicit discharge from clean water (e.g., tap water, natural water).
N/A Data are not available to assess the usefulness of this parameter in distinguishing this flow type from clean water (e.g., tap water, natural water).
* Fluoride is a poor indicator when used on its own. However, when it is used with other parameters, such as detergents, ammonia and potassium, it can almost always distinguish between sewage and wash water.

6.5 Selecting Indicator Parameters

As shown in Table 1, no single water quality parameter meets all of these criteria. However, in most cases, only a small subset of these parameters (e.g., three to five) is required to adequately confirm the presence of an illicit discharge. The CITY will use the parameters associated with the Flow Chart Method, as well as pH and chlorine, to confirm the presence of illicit discharges at flowing storm drain outfalls. Additional information about the Flow Chart Method is provided below.

6.6 Flow Chart Method

The primary data interpretation technique to be used to identify illicit discharges is the Flow Chart Method. The Flow Chart Method has been selected because it is a relatively simple interpretation technique that uses four basic water quality parameters to confirm the presence of an illicit discharge. The water quality parameters used in the Flow Chart Method can be used to distinguish amongst the four major flow types typically found in residential watersheds, including sewage and wash water, which are the most common types of illicit discharges found in urban communities.

The Flow Chart Method uses benchmark concentrations to identify and characterize illicit discharges. The benchmark concentrations were developed by CWP and Pitt (2004), Lalor (1994) and Pitt et al. (1993) from illicit discharge detection and elimination work conducted in Alabama and Maryland.

The basic decision points involved in the Flow Chart Method are shown in Figure 1 and described below.

6.6.1 Distinguish Clean Flow from Contaminated Flow Using Detergents

The first step in the Flow Chart Method is to determine whether the discharge is "clean" or is derived from either sewage or wash water, based on the presence of detergents. Surfactants and/or boron are used as the primary indicator of detergents, and values of surfactants or boron that exceed 0.25 mg/L or 0.35 mg/L, respectively, signal that the discharge is contaminated by either sewage or wash water.

6.6.2 Distinguish Wash Water from Sewage Using the Ammonia-to-Potassium Ratio

If the discharge contains detergents, the next step is to determine whether the discharge is derived from sewage or wash water, using the ammonia-to-potassium ratio. An ammonia-to-potassium ratio of greater than one suggests sewage contamination, while a ratio of less than one indicates wash water contamination.

6.6.3 Distinguish Tap Water from Natural Water

If the sample is free of detergents, the next step is to determine whether the flow is derived from natural sources (e.g., groundwater, springs) or from tap water. The indicator used in this analysis is fluoride, and values of fluoride that exceed 0.60 mg/L signal that tap water is the source. Fluoride concentrations of between 0.25 and 0.60 mg/L indicate that the source may be excess or non-target irrigation water. The purpose of determining the source of a relatively "clean" discharge is that it can identify water main breaks and identify where potable water is being used in a manner (e.g., non-target irrigation, vehicle rinsing, and building rinsing) that contributes polluted runoff to the storm drain system.

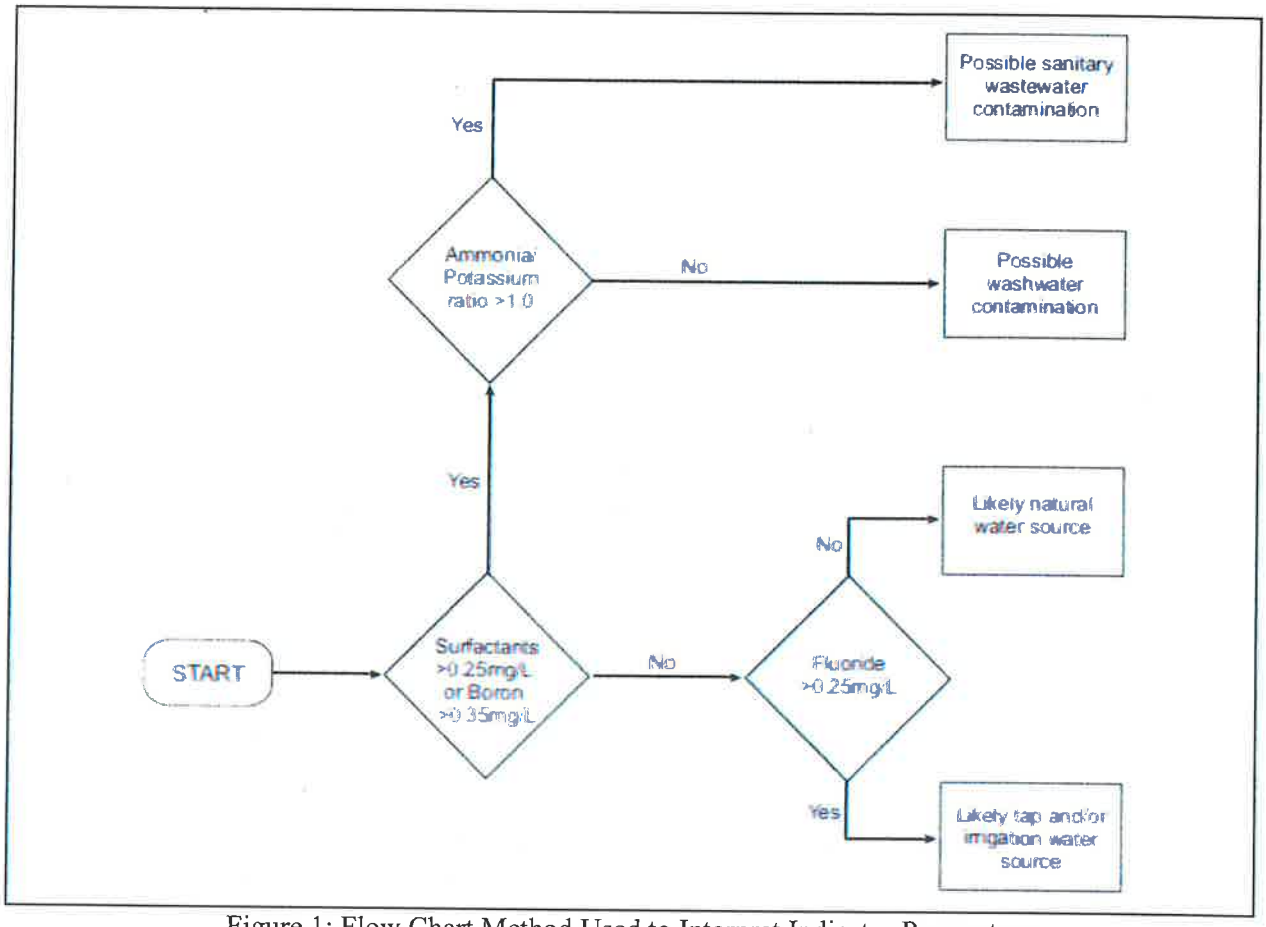


Figure 1: Flow Chart Method Used to Interpret Indicator Parameters

6.7 Interpreting Water Quality Data

This section provides information on three other techniques that the CITY may use to interpret water quality data with respect to illicit discharges. One or more of which the CITY may use to supplement the Flow Chart Method:

- Environmental Consultant – A consultant may be used when staff time is limited to analyze the test results or additional interpretation of the results is needed.
- Single Parameter Screening
- Industrial Flow Benchmarks

As with the Flow Chart Method, each of these techniques uses benchmark concentrations to identify and characterize illicit discharges. The benchmark concentrations were developed by CWP and Pitt (2004), Lalor (1994) and Pitt et al. (1993) from illicit discharge detection and elimination work conducted in Alabama and Maryland.

6.7.1 Single Parameter Screening

Research by Lalor (1994) suggests that a detergent is the best single parameter that can be used to detect the presence of the most common illicit discharges (i.e., sewage and wash water). However, ammonia is another parameter that has been used by some communities with widespread or severe sewage issues. While some communities have used a benchmark concentration as low as 0.30 mg/L, an ammonia concentration of greater than 1.0 mg/L is generally considered to be a positive indicator of sewage flow. Ammonia can be analyzed using a portable spectrophotometer, which provides fairly rapid results and allows investigators to begin tracking down and eliminating sources while they are still out in the field.

As a single indicator parameter, ammonia does have some limitations. First, ammonia, by itself, is not always capable of identifying sewage discharges, particularly if they have been diluted by "clean" flows. Second, while some wash waters and industrial wastes have relatively high ammonia concentrations, not all of them do. This increases the possibility of obtaining false negatives during outfall monitoring efforts. Third, other dry weather discharges, such as those caused by excess and non-target irrigation, can also have ammonia concentrations that exceed 1.0 mg/L. This may lead investigators to falsely assume that sewage is the source of a particular illicit discharge. Adding potassium as an indicator parameter and looking at the ammonia-to-potassium ratio is a simple adjustment to the single parameter approach that helps to more accurately and reliably characterize illicit discharges.

6.7.2 Industrial Flow Benchmarks

Commercial and industrial sites often produce illicit discharges that are not composed entirely of sewage or wash water (e.g., spills, discharges from floor drains). Consequently, if a particular sub-watershed or drainage area has a high density of industrial sites, additional water quality parameters may need to be used to identify and characterize illicit discharges.

The seven water quality parameters that are commonly used to identify the industrial-related illicit discharges and are not picked up by the Flow Chart Method include: ammonia, color, conductivity, hardness, pH, potassium and turbidity. Table 2 summarizes the benchmark concentrations that are commonly used to identify industrial-related illicit discharges.

Table 2: Parameters and Benchmark Concentrations Used to Identify Industrial-Related Illicit Discharges		
Parameter	**Benchmark Concentration**	**Notes**
Ammonia	≥ 50 mg/L	• Existing "Flow Chart" Parameter. • Concentrations higher than the benchmark typically can identify a few industrial-related illicit discharges
Color	≥ 500 units	• Supplemental parameter that identifies a few specific industrial illicit discharges. Should be refined with local data.
Conductivity	≥ 2,000 µS	• identifies a few specific industrial-related illicit discharges • May be useful in distinguishing between different industrial sources
Hardness	≤ 10 mg/L as $CaCO_3$ ≥ 2,000 mg/L as $CaCO_3$	• Identifies a few specific industrial illicit discharges • May be useful in distinguishing between industrial sources
pH	≤ 5	• Only captures a few industrial discharges • High pH values may also indicate an industrial discharge, but residential wash water may have high pH values as well
Potassium	≥ 20 mg/L	• Existing "Flow Chart" Parameter • Excellent indicator of a broad range of industrial discharges.
Turbidity	≥ 1,000 NTU	• Supplemental parameter identifies a few specific industrial discharges. Should be refined with local data.

As shown in Table 2, most industrial-related illicit discharges can consistently be identified by using potassium as an indicator parameter. Note that these discharges would be incorrectly classified as wash water if the Flow Chart Method was used on its own.

Table 3 illustrates how the industrial flow benchmarks can be used independently or to supplement the Flow Chart Method. The best industrial indicator parameters, which can almost always (i.e., > 80% of the time) distinguish industrial-related discharges from wash water and sewage, are identified with bold text. The industrial indicator parameters that can sometimes (i.e., > 50% of the time) distinguish industrial-related discharges from wash water and sewage are identified with italicized text.

By their very nature, industrial sites can produce a bewildering diversity of illicit discharges that are difficult to identify, let alone characterize. Consequently, the CITY may experience some initial difficulties in identifying industrial-related discharges. Over time, however, as its illicit discharge detection and elimination program matures, it will build a sampling database that it can use to identify and better characterize industrial-related illicit discharges.

Table 3: Usefulness of Various Parameters to Identify Industrial Discharges

Industrial Benchmark Concentrations	Detergents as Surfactants (mg/L)	Ammonia (mg/L)	Potassium (mg/L)	Initial "Flow Chart" Class	Color (Units)	Conductivity (:S/cm)1	Hardness (mg/L as $CaCO_3$)	pH	Turbidity (NTU)	Best Indicator Parameters to Identify This Flow Type	Additional Indicator Parameters to Identify This Flow Type
	--	≥50	≥20		≥500	≥2000	≤10 ≥2,000	≤5	≥1,000		
Concentrations in Industrial and Commercial Flow Types											
Automotive Manufacturer[1]	5	0.6	**66**	**Wash water**	15	220	30	6.7	118	Potassium	
Poultry Supplier[1]	5	4.2	**41**	**Wash water**	23	618	31	6.3	111	Potassium	
Roofing Product Manufacturer[1]	8	10.2	*27*	**Wash water**	*>100*[2]	242	32	7.1	229	None	Potassium Color
Uniform Manufacturer[1]	6	6.1	**64**	**Wash water**	*>100*[2]	798	35	10.4	*2,631*	Potassium	Color Turbidity
Radiator Flushing	15	(26.3)	**(2,801)**	**Wash water**	**(3,000)**	**(3,278)**	*(5.6)*	(7.0)	-	Potassium Conductivity Color	Hardness
Metal Plating Operation	7	**(65.7)**	**(1,009)**	**Wash water**	(104)	**(10,352)**	**(1,429)**	*(4.9)*	-	Ammonia Potassium Conductivity Hardness	pH
Commercial Car Wash	140	0.9; (0.2)	4; **(43)**	**Wash water**	>61; (222)	274; (485)	71; (157)	7.7; (6.7)	156		Potassium Turbidity
Commercial Laundry	(27)	(0.8)	3	**Wash water**	47	(563)	(36)	(9.1)	-		

Best indicator, shaded in pink, distinguish this source from residential wash water in 80% of samples in both Tuscaloosa and Birmingham, AL.

Supplemental indicator, shaded in yellow, distinguish this source from residential wash water in 50% of samples.

(Data in parentheses are mean values from Birmingham); Data not in parentheses are from Tuscaloosa

[1] Fewer than three samples for these industrial-related flows.

[2] The color analytical technique used had a maximum value of 100, which was exceeded in all samples. Color may be a good indicator of these industrial discharges and the benchmark concentration may need adjustment downward for the City of Rockford.

Source: Illicit Discharge Detection and Elimination, A Guidance Manual – Center for Watershed Protection October 2004.
(Please refer to this document for further guidance.)

Appendix A

Analytical Parameters

List of Water Quality Analyses	
Storm Water Analysis	**Tributary Site Analyses**
	Dissolved oxygen
5-day biochemical oxygen demand (BOD)	5-day biochemical oxygen demand (BOD)
Chemical oxygen demand (COD)	Chemical oxygen demand (COD)
Total Kjeldahl Nitrogen Ammonia Nitrogen Nitrate+nitrite Nitrogen	 Ammonia Nitrogen Nitrate+nitrite Nitrogen
Total Phosphorus	Total Phosphorus
Fats, Oils and grease	
Cadmium (total) Copper (total) Lead (total) Zinc (total)	Cadmium (total) Chromium (total) Copper (total) Lead (total) Nickel (total) Zinc (total)
pH	pH
Hardness	Hardness
Fecal coliform bacteria E. coli (occasionally, as laboratory capacity allows)	Fecal coliform bacteria E. coli (occasionally, as laboratory capacity allows)
Total suspended solids Total dissolved solids	Total suspended solids Total dissolved solids

Appendix B

Sample Bottles, Preservatives, and Maximum Holding Times

City Staff will deliver samples to the Laboratory within three hours of collection. Laboratory Analysts will split the sample needed for the analyses required and preserve accordingly.

Parameter	Type	Container & Preservation
Fecal Coliform (and E. coli)	Grab	Sterilized, 6 oz. Nalgene sample bottle **with sodium thiosulfate ($Na_2S_2O_3$) preservative**, chill with ice.
Fats, Oils & Grease	Grab	1 liter glass sample bottle, chill with ice.
All other parameters	Composite or Grab	1 gallon plastic sample bottle, chill with ice.

Bottles used in the automatic samplers are two-gallon polyethylene.

Laboratory analysts will preserve samples, as necessary immediately upon delivery to the laboratory. In cases when analysts begin the analysis immediately upon sample delivery, they may omit sample preservation. With the exception of metals, all samples are stored in a 4°C refrigerator.

Parameter	Preservative	Hold Time
DO (field)	NA	NA
Temperature	NA	NA
pH	NA	NA
Conductivity	NA	NA
Metals	HNO_3 to pH < 2	6 months
Nitrogen, Ammonia	H_2SO_4 to pH < 2	28 days
Nitrogen, Kjeldahl	H_2SO_4 to pH < 2	28 days
Nitrogen, Nitrate	---	48 hours
Phosphorus	H_2SO_4 to pH < 2	28 days
Biochemical Oxygen Demand	---	48 hours
Chemical Oxygen Demand	H_2SO_4 to pH < 2	28 days
Hardness	HNO_3 to pH < 2	6 months
Total Suspended Solids / Dissolved Solids	---	7 days
Oil and Grease	H_2SO_4 to pH < 2	28 days
Fecal Coliform (or E. coli)	sodium thiosulfate ($Na_2S_2O_3$)	6 hours

Appendix C

Water Quality Parameter Overview

This appendix provides an overview of the thirteen different water quality parameters that can be used to confirm the presence or origin of an illicit discharge.

Ammonia

Ammonia is a good indicator of sewage, since its concentration is much higher there than is ground or tap water. High ammonia concentrations may also be found in liquid waste streams generated on industrial sites. Ammonia is relatively simple and safe to analyze. Some challenges associated with analyzing ammonia include the tendency for it to volatilize and the fact that it can come from non-human sources, such as pets or wildlife.

Boron

Boron is an element present in the compound borax, which is often found in detergents and soaps. Consequently, boron should be a good indicator for both wash water and sewage. Preliminary research conducted in Alabama supports this contention, particularly when it is combined with other detergent indicators, such as surfactants. Boron may not be a useful indicator everywhere in the country since it is occasionally found at elevated levels in groundwater and is a common ingredient in a number of water softener products. Over time, the CITY should collect data on the boron concentrations found in local tap water and groundwater sources to confirm whether or not it is a useful local indicator of illicit discharges.

Chlorine

Chlorine is used throughout the country to disinfect tap water, except where private wells serve as the primary water supply. Chlorine concentrations in tap water tend to be significantly higher than those in most other flow types. Unfortunately, chlorine is extremely volatile, and even moderate concentrations of organic material can cause chlorine levels to drop below detection levels. Because chlorine is non-conservative, it is not a reliable indicator, although if a very high chlorine concentration is found, it typically indicates a water main break, swimming pool discharge, or a discharge from a chlorine-based industrial process.

Color

Color is a numeric computation of the color observed in a water quality sample, as measured in terms of cobalt-platinum units. Both industrial wastes and sewage tend to have elevated color values. Unfortunately, some "clean" flows can also have high color values. Field testing in Alabama found high color values associated with all contaminated flows, but also for many "clean" flows, which yielded many false positive results. Overall, color may be a good initial screening parameter, but needs to be supplemented by other indicator parameters.

Conductivity

Conductivity, or specific conductance, is a measure of how easily electricity can flow through water. Conductivity is often strongly correlated with the total amount of dissolved solids found in the water column. The utility of conductivity as an indicator depends on whether concentrations are elevated in natural or "clean" waters. In particular, conductivity is a poor indicator of illicit discharges in estuarine waters and in northern climates where salt is used to remove salt from roadways.

Field testing in Alabama suggests that conductivity has limited value in detecting sewage or wash water. It does, however, have some value in detecting industrial-related illicit discharges, some of which can exhibit extremely high conductivity values. Conductivity is extremely easy to measure using meters, so it has the potential to be a useful supplemental indicator in sub-watersheds dominated by commercial and industrial land uses.

Detergents

Most illicit discharges have elevated concentrations of detergents. Sewage and wash water discharges contain detergents that were used to wash clothes or dishes, whereas industrial-related discharges contain detergents used in commercial or industrial cleaning compounds. The nearly universal presence of detergents in illicit discharges, combined with their absence in natural waters or tap water, makes them an excellent indicator parameter. Research has revealed that three indicator parameters that measure detergents or its components: surfactants, fluorescence, and surface tension. Surfactants have been the most widely applied and transferable of these three indicator parameters.

E. coli, Enterococci and Total Coliform

Each of these bacteria is found in very high concentrations in sewage flows, particularly when compared with other flow types. They are very good indicators of sewage and septic discharges, except in sub-watersheds where pet or wildlife sources exist. Overall, bacteria is a good supplemental indicator and can be used to find "problem" outfalls that are discharging flows with bacteria concentrations that exceed public health standards. Relatively simple analytical methods are now available for bacteria samples, although they still suffer from two monitoring constraints. The first is the relatively long time (i.e., 18-24 hours) it takes to get results. The second is that the waste produced during analysis may be considered a biohazard and may require special disposal procedures.

Fluoride

Fluoride is added to drinking water supplies in most communities to improve dental health, and is normally found in tap water at a concentration of two parts per million. Consequently, fluoride is an excellent indicator of tap water discharges and water main breaks or leaks that end up in the storm drain system. Fluoride is obviously not a useful indicator in communities that do not fluoridate their drinking water supplies or in areas where private wells serve as the primary water supply. One key constraint is that the recommended analytical method for fluoride uses a reagent that is considered to be a hazardous waste. It must be properly disposed of.

Hardness

Hardness measures the number of positive ions dissolved in the water column. It primarily measures magnesium and calcium, but sometimes measures the presence of other metals. Field testing in Alabama suggests that hardness has limited value as an indicator parameter, except where values are extremely high or low, which may indicate the presence of an industrial-related discharge. It may be a useful supplemental indicator in communities where groundwater has hardness levels that are higher than those in tap water. In these situations, hardness can help distinguish between groundwater and tap water and other potable water-derived flows (i.e., sewage, wash water).

pH

Most discharges are neutral, having a pH value of around 7, although groundwater pH values can be somewhat variable. pH is a reasonably good indicator for industrial-related discharges, which can have

very high or very low pH values ranging from 3 to 12. pH is very simple to measure in the field using low cost test strips or meters. Although pH, on its own, isn't a particularly conclusive indicator parameter, it can be used as an initial screening parameter, identifying outfalls that merit follow up investigation.

Potassium

Potassium is found at relatively high concentrations in sewage and in extremely high concentrations in many industrial-related discharges. Consequently, it is a very useful indicator parameter. Although simple meters can be used to detect potassium at relatively high concentrations (i.e., 5 mg/L or greater), more complex colorimetric methods are needed to detect potassium at concentrations lower than 5 mg/L.

Surfactants

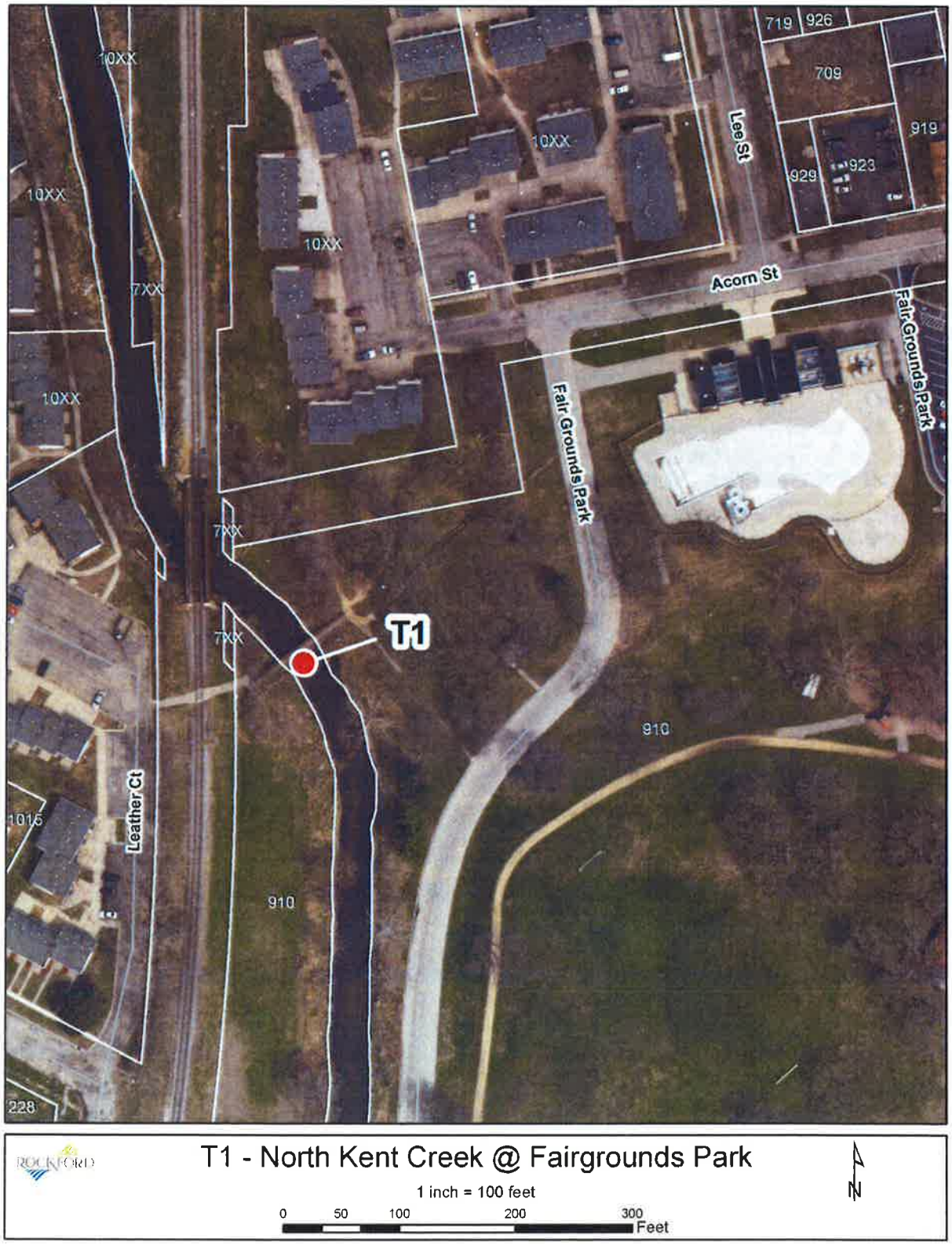
Surfactants are the active ingredient in most commercial detergents and are typically measured as Methyl Blue Active Substances (MBAS). They are a synthetic replacement for soap. Since surfactants are not found in nature, but are always present in detergents, they are excellent indicators of sewage and wash water flows. The presence of surfactants in cleaners, emulsifiers and lubricants also makes them an excellent indicator of industrial-related discharges. Several analytical methods are available to measure the surfactant content of a water quality sample. Unfortunately, the reagents used in these analyses include toluene, chloroform or benzene, each of which is considered hazardous waste and each of which pose a potential human health risk. The recommended analytical method uses chloroform as a reagent, which is safer than the reagents used in the other analytical methods.

Turbidity

Turbidity is a quantitative measure of the cloudiness of a water column and is normally measured with a specialized instrument called a turbidimeter. While turbidity itself cannot always be used to distinguish between different flow types, it is potentially useful in determining whether or not a discharge is illicit and merits a follow up investigation.

Appendix D

Tributary Site Map



T1 - North Kent Creek @ Fairgrounds Park

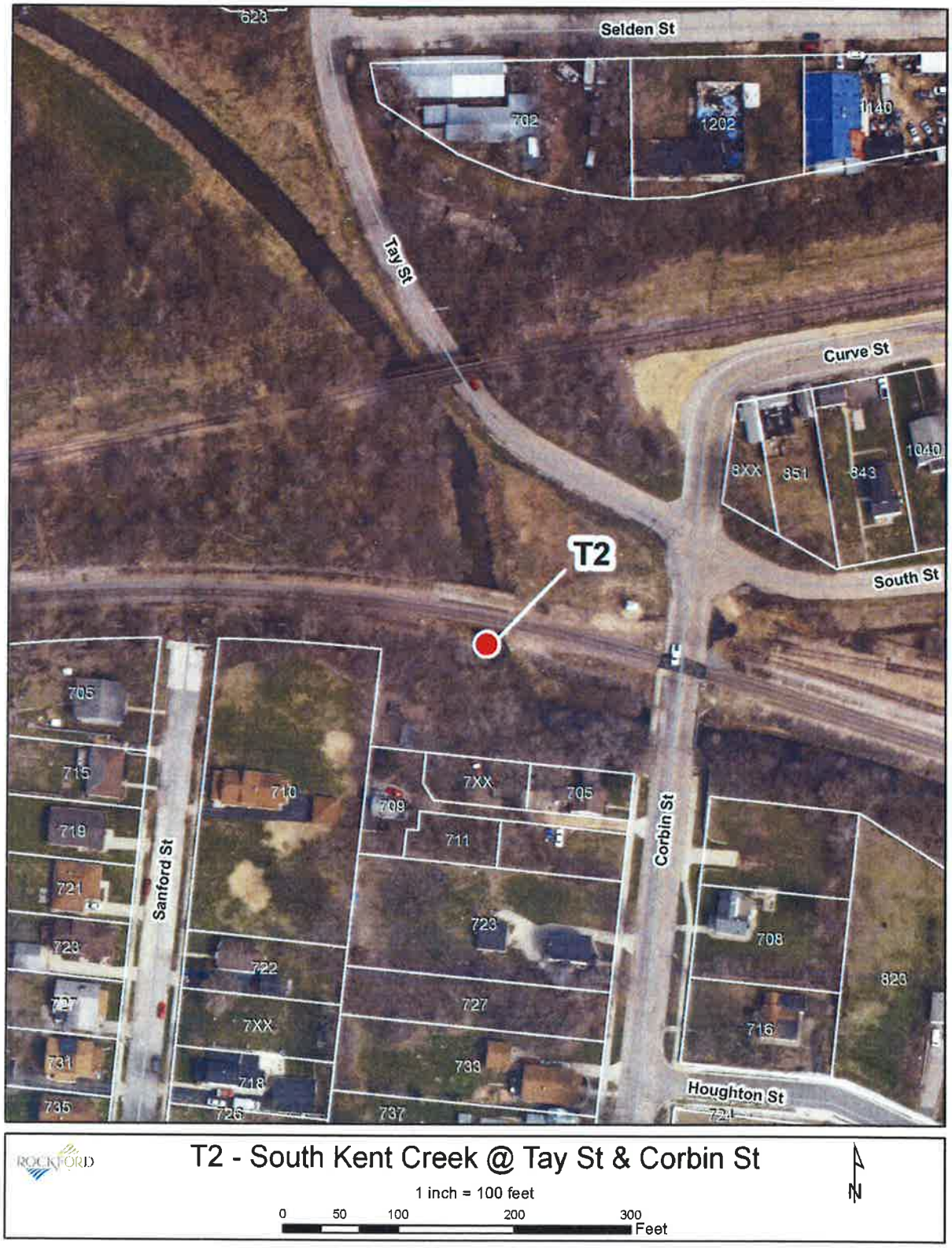
1 inch = 100 feet

0 50 100 200 300 Feet

N

Appendix E

Tributary Site Map



Appendix F

Tributary Site Map

Appendix G

Tributary Site Map

Appendix H

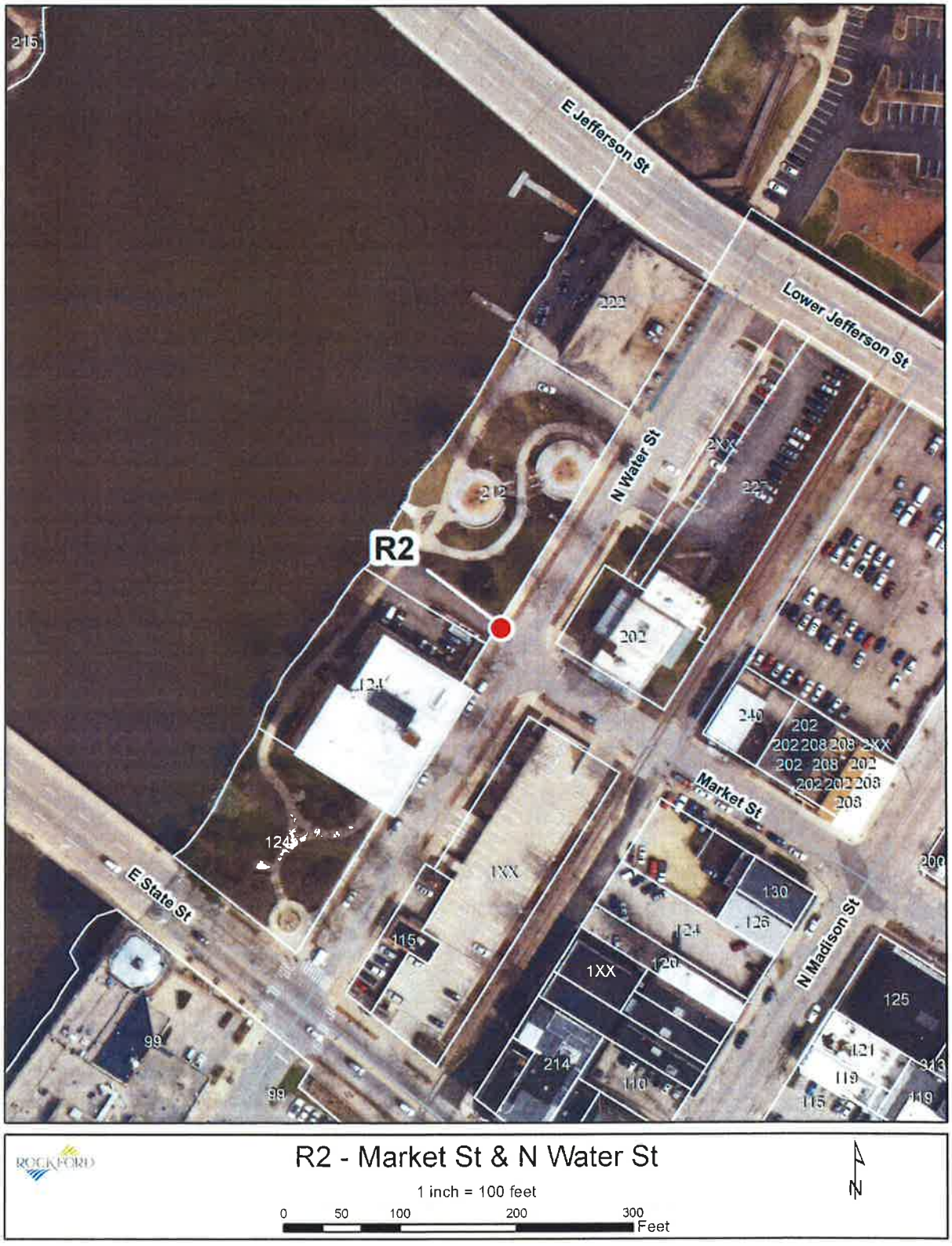
Tributary Site Map

Appendix I

Outfall Site Map

Appendix J

Outfall Site Map



R2 - Market St & N Water St

1 inch = 100 feet

0 50 100 200 300 Feet

N

Appendix K

Outfall Site Map

Appendix L

Outfall Site Map

Appendix M

Outfall Site Map

Appendix N

Baetis

ROCK RIVER WATER RECLAMATION DISTRICT
Storm Water Sample Sheet

LAB NUMBER:

Outfall Number:	Fecal Grab Grid Locations:
Date:	Sample Tech(s):
Weather Conditions:	

STREAM CHARACTERISTICS

Sample Grid Location	Time Collected	D.O.	Temp °C	pH	River Elevation	Secchi Disc Clarity

COMPOSITE SAMPLE DATA

Sample Volume:

Preservative:

CHAIN OF CUSTODY

Relinquished by:	Rec'd by:
Date:	Date:
Time:	Time:

Sample Number:					
Analysis Requested	Result (indicate units)	Analyst	Analysis Requested	Result (indicate units)	Analyst
METALS			pH		
Cu			Conductivity		
Cd					
Zn					
Pb			Fecal Coliform		
			BOD		
			COD		
			TSS		
			FOG		
NITROGEN					
TKN					
NH^3					
NO_3					
CYANIDE					
Total					
			Other		
PHOSPHORUS					
Total					
Chemist:				Date:	

ROCK RIVER WATER RECLAMATION DISTRICT
Tributary Sample Sheet

LAB NUMBER:

Site:	Fecal Grab :
Date:	Sample Tech(s):
DO Probe Model No.:	DO Probe Serial No.:
Weather Conditions:	

STREAM CHARACTERISTICS

Sample Grid Location	Time Collected	D.O.	Temp °C	pH	Conductivity	Secchi Disc Clarity

COMPOSITE SAMPLE DATA

Sample Volume:

Preservative:

CHAIN OF CUSTODY

Relinquished by:	Rec'd by:
Date:	Date:
Time:	Time:

Sample Number:					
Analysis Requested	Result (indicate units)	Analyst	Analysis Requested	Result (indicate units)	Analyst
METALS			pH		
Cu			Conductivity		
Cd					
Ni					
Cr			Fecal Coliform		
Zn			E. coli		
Pb			BOD		
			COD		
			TSS		
			TDS		
NITROGEN			Hardness		
NH^3					
NO_3					
CYANIDE					
Total					
			Other		
PHOSPHORUS					
Total					
Chemist:				Date:	

Appendix E. – Enforcement Response Plan

City of Rockford
Stormwater Division
Enforcement Response Plan

Introduction

The intent of this document is to provide guidance to City officials and staff in enforcing the stormwater management ordinance. It should be used only as a guide while recognizing that each situation is unique. The provisions of this enforcement response plan are not intended to limit the judgment and flexibility of the administrator in determining an appropriate response.

While the purpose is to provide guidance for administration of the stormwater management ordinance, actual enforcement procedures should consider any unusual aspects of a violation or condition, as well as special characteristics of an enforcement action, in determining the proper response.

Minor infractions may be resolved by a verbal notice, telephone call, or warning letter advising the owner/operator/person of the nature of the violation. If such action fails to generate an adequate response by the owner/operator/person, further enforcement actions as provided by the ordinance may be taken.

Inspections

The Stormwater Division completes the inspections that are incorporated and required under the City's National Pollutant Discharge Elimination System (NPDES) permit. This includes the following categories of the NPDES permit:

1. Structural Controls
    a. Private detention ponds including the structures and drainage easements
    b. Creeks located through private property
2. Erosion and Sediment Control
    a. Construction Site Runoff
    b. Post Construction Maintenance
3. Flood Control/Floodplain Management
4. Pesticide, Herbicide and Fertilizer Applications
5. Illicit Discharges and Improper Disposal
6. Industrial and High Risk Runoff

Inspections for the above categories shall be completed in accordance with their corresponding standard operating procedures. After inspection is completed and the properties are found in non-compliance of the City's stormwater management ordinance this document provides the enforcement responses as needed or required.

Enforcement Responses

The order of precedence for enforcement responses outlined in this guide should not be construed to prevent the administrator from taking a stronger action without first implementing less stringent steps, if in his opinion, a more forceful response is necessary.

A code enforcement hearing shall be held prior to any enforcement action other than a telephone call, warning letter, notice of violation (NOV), or stop work order. The purpose of a code enforcement hearing is to provide a forum for the owner to present a defense to charges as outlined, or, to obtain additional information.

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Documented Phone Calls or Informal Discussions

In the case of the most minor violation of a permit or the ordinance, a telephone call or informal meeting may be sufficient to obtain the desired compliance. Phone calls should be documented onto the division's violation tracking table. Likewise, if an informal discussion is held, it should be entered onto the division's violation tracking table.

Warning Letter

A warning letter is the lowest level of formal response to a violation. It is intended for minor violations which would not cause harm to the environment.

Notice of Violation

A notice of violation (NOV) is an official notification to inform a non-compliant owner of a violation of the stormwater management ordinance. Within ten (10) days of receipt of this notice, a written explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the owner to the administrator. Inspection to ensure performance of any corrective actions may be conducted by the administrator at his discretion. Submission of this plan in no way relieves the owner of liability for any violations occurring before or after receipt of the notice of violation.

Stop Work Order

A Stop Work Order may be issued when the administrator finds that an owner has violated, or continues to violate, the stormwater management ordinance or order issued thereunder. The order shall require that the owner:

(a) Comply forthwith; and
(b) Take such appropriate remedial or preventive action as may be needed or deemed necessary to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

Administrative Orders

Administrative code hearing findings, decision and orders (AO) are enforcement documents which direct owners to perform, or to cease, specific activities. These administrative orders may also invoke a penalty. There are three (3) primary types of administrative code hearing orders: consent orders; compliance orders; and cease and desist orders. These administrative orders are issued by the Code Hearing Officer as a result of a code enforcement hearing.

Consent orders are entered into between the City and the owner to assure compliance as to specific actions to be taken by the owner to correct non-compliance within a specified time period. The code hearing officer may officially enter such consent orders, assurances of voluntary compliance or other similar documents establishing an agreement between the City and any owner responsible for noncompliance. Such documents shall include specific action to be taken by the owner to correct the noncompliance within a time period specified in the document. Such documents shall have the same force and effect as orders issued pursuant to Chapter 109 Article 13.

Compliance orders may be issued when the code hearing officer finds that an owner has violated, or continues to violate, the ordinance or an order issued thereunder. It is similar to a consent order except that the consent of the owner is not implied in its issuance. When the code hearing officer finds that an owner has violated or continues to violate a section of this article, or a permit or order issued under this article, the code hearing officer may issue an order to the owner responsible for the violation directing that the owner come into compliance within a specified time, and such order may include assessment of a penalty to be paid if the owner does not come into compliance within the time provided. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring and

management practices designed to minimize the amount of pollutants discharged offsite. A compliance order does not relieve the owner of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against or a prerequisite for taking any other action against the owner.

Cease and desist orders may be issued when the administrator or code hearing officer finds that an owner has violated, or continues to violate, the stormwater management ordinance or order issued thereunder. Issuance of a cease and desist order shall not be a bar against or a prerequisite for taking any other action against the owner.

Administrative orders contain the following components:

1. Title - The title specifies the type of order being issued (see below), to whom it is being issued, summarizes the purpose of the order, and contains an identification number.

2. Legal Authority - The authority under which the order is issued (the stormwater management ordinance).

3. The Finding of Noncompliance - All violations must be described including the dates, the specific permit and/or ordinance provisions violated, and any damages known and attributable to the violation.

4. Required Activity - All orders should specify the required actions, such as installation of BMPs, additional inspections, appearance at show cause hearings, etc.

5. Milestone Dates for Corrective Actions - When compliance schedules are appropriate, all milestone dates must be established including due dates for required written reports.

6. Supplemental Clauses - The document should contain standard clauses providing that:

   (a) Compliance with the terms and conditions of the administrative order shall not be construed to relieve the owner of its obligation to comply with applicable state, federal or local law, or the permit;
   (b) Violation of the administrative order itself may subject the owner to additional penalties as set out in the stormwater management ordinance;
   (c) No provision of the order shall be construed to limit the town's authority to issue supplementary or additional orders, or to take action deemed necessary to implement this program or ordinance;
   (d) The order shall be binding upon the owner, its officers, administrators, agents, employees, successors, assigns, and all persons, firms or corporations acting under, through or on behalf of the owner.

Administrative orders issued as a result of a violation of the stormwater management ordinance may contain a penalty pursuant to Chapter 109-13:03 of the stormwater management ordinance. Administrative orders may also be used to advise an owner of the need to take, or cease, certain actions, and in such case, may or may not be associated with penalties as defined in the ordinance or in this guide.

Civil Litigation

Pursuant to Section 109-13:03 of the stormwater management ordinance, the administrator may, through the city attorney, petition the appropriate court(s) for issuance of preliminary or permanent injunctions to restrain or compel activities by an owner.

Penalties, Administrative or Civil

The stormwater management ordinance authorizes assessment of penalties not to exceed $750 per violation per day. Additionally, Section 109-13:03 of the ordinance and state statutes authorize the administrator to assess a civil penalty for actual damages incurred by the City.

If a violation results in conditions requiring the expenditure of public funds for mitigation of damages, a penalty shall be assessed in such amount as to offset the public funds so expended. This will in no way reduce or offset the liability of the owner with respect to damages incurred. Mitigation of damages may include, but not limited to, maintenance and repairs to the structural controls, implementation of erosion and sediment control measures, illicit discharge and high risk runoff cleanup and the labor and equipment utilized for such efforts.

Cease and Desist Order

A civil injunction may be requested at any time, for any violation, if in the opinion of the administrator in consultation with the city attorney, such action is justified, needed or appropriate.

Criminal Action

In cases where criminal acts are suspected by the administrator, after consultation with the city attorney, information shall be gathered and forwarded to the district attorney of the appropriate county for action. Criminal prosecution, if pursued, shall be in addition to other actions authorized by ordinance.

THE CITY OF ROCKFORD ILLINOIS, USA

TABLE A

ENFORCEMENT RESPONSE GUIDE

ESCALATION OF RESPONSES

The following table outlines a recommended course of action for violations of the stormwater ordinance. When enforcement actions involving a specific site, a common operator or owner include multiple or successive violations then the severity level may be increased.

While the purpose is to provide guidance for administration of the stormwater management ordinance, it is not intended to limit the judgment and flexibility of the administrator in determining an appropriate response.

SEVERITY OF VIOLATION	ACTION
1	Informal Phone Call/Discussion
2	Written warning
3	Notice of Violation
4	Stop Work Order
5	Administrative Order
6	Administrative Order with up to $750 per day Penalty

Appendix F. – Stormwater Staff Responsibilities

THE CITY OF ROCKFORD ILLINOIS, USA

Stormwater Program Staff Responsibilities

Marcy Leach - Stormwater Administrator & Engineering Operations Manager

Dean Kurth - Stormwater Program Manager

Brad Holcomb - Stormwater Program Manager

Jason Irvin - Project Manager (Storm & Water)

Ryan Lundberg - Storm & Environmental Coordinator

Justin Emerson - Sr. Project Manager (GIS/Facilities Mngt)

Warren Stahl - Sr. Engineering Technician

Justin Kink - Sr. Engineering Technician

Interns/temps

PERSONNEL REQUIREMENTS FOR STORMWATER PROGRAM

Current Staff	Titles	FTE
Marcy Leach	Stormwater Administrator	0.75
Dean Kurth	SW Program Manager	0.75
Brad Holcomb	SW Program Manager	1.0
Jason Irvin	Project Manager	0.6
Ryan Lundberg	SW Coordinator	0.6
Justin Emerson	GIS Sr. Project Manager	0.5
Warren Stahl	Sr. Engineering Tech	0.75
Justin Kink	Sr. Engineering Tech	0.5
New Position	*Sr. Engineering Tech*	0.75
New Position	*Sr. Engineering Tech*	0.75
Intern		0.3
Intern		0.3

Total FTE 7.55

Attached is a list of duties/tasks each staff member is responsible for.

THE CITY OF ROCKFORD ILLINOIS, USA

Marcy Leach, CFM

- Public Works/Engineering Coordinator for Rockstat, Goals & Strategic Planning
- Stormwater Program Management
  - City's Stormwater Administrator
  - City's Floodplain Manager
  - Oversee NPDES Permit - Clean Water Act
  - Dam/Levee Management
  - IDNR-OWR, ACOE Permits & IDNR-Endangered Species Act
  - Stormwater/Drainage Plan Review
  - Stormwater Program/Project Management (Brad/Dean primary)
  - Post Construction Management
  - Floodplain & Watershed Management
  - Budget & Grant Management
- Subdivision and Site Development Management
  - Subdivision Review Team Representative
  - Tentative and Final Plat review and approval
  - Development & Annexations Agreements
  - Plan reviews - General, Water, Traffic, Storm
  - Construction Inspection Coordination
  - Letter of Credit Management
  - Vacation/Dedication Management
- Permit Management
  - ROW/Driveway/Sidewalk Permits, Easements & Agreements for Use
  - Special Events, Sidewalk Café and Vendor Permits (Kelly primary)
  - Code Enforcement
- Water Engineering (Jamie primary)
  - Short-term/Long-term Planning
  - Oversee Project Design
  - Oversee IEPA Water Permit
  - Oversee Asset Management & Mapping
  - Oversee Water Service Quotes/Water Requests
- Engineering/CIP Administration
  - Budget, Timekeeping, FMLA, Personnel Management
  - Cell Phones/Office Supplies/Software/Computers (Kelly primary)
  - Economic Interest Statements
  - Training Coordination (Kelly Primary)
- Policy Management - Review, Update, Create
  - Chapter 109 of City Ordinance Management - Stormwater Management
  - Chapter 26 of City Ordinance Management - Streets & Sidewalks
  - Chapter 121 of City Ordinance Management - Subdivision
  - Engineering Design Criteria Manual
  - Stormwater Technical Manual
  - Driveway/Sidewalk/Encroachment Policies

- Emergency Management
  - Public Works Emergency Manager
  - ESDA/EOP Book Revisions Including Public Works Annex
  - County Hazard Mitigation Plan
  - Debris Management & Damage Assessment
  - Pre and Post Disaster Recovery Planning
  - Public Works Mutual Aid Agreements
- Grant & Special Projects Management
- Committee Representative
  - Code and Regulations Committee Meetings
  - Liquor Advisory Board/Zoning Board of Appeals Meetings
  - Rockford Redevelopment Group Representative
  - LEPC Representative/Treasurer

Dean Kurth

- Stormwater Management
  - Clean Water Act Management
    - Construction Site Runoff (Brad Primary)
    - Industrial High Risk Runoff Inspections (Brad Primary)
    - Spill Prevention and Response
    - Illicit Discharge and Improper Disposal
    - Public Education & Staff Training
    - PHF Controls Management
    - Stormwater & Tributary Sampling
    - Creek Inspections & Outfall Monitoring
    - Detention Pond Inspections (Brad Primary)
    - Dam/Levee Management
    - Nuisance Drainage
  - Project/Contract Management
  - Mapping Oversight Relating to Stormwater Infrastructure
  - Database Management
- Demolition Management
  - Contract Document Management
  - Engineering Estimates
  - Inspections
  - Utility Coordination
- Emergency Flood Control
- Emergency Damage/Debris Assessment

THE CITY OF ROCKFORD ILLINOIS, USA

Brad Holcomb, CPESC, CFM, MS4S

- Stormwater Program Management
  - Clean Water Act/NPDES Permit Management
    - Construction Site Runoff – E&SC Plan Review & Inspections
    - Industrial High Risk Runoff Inspections
    - Spill Prevention and Response (Dean Primary)
    - Illicit Discharge and Improper Disposal (Dean Primary)
    - Public Education & Staff Training
    - PHF Controls Management (Dean Primary)
    - Creek Inspection & Outfall Monitoring (Dean Primary)
    - Floodplain Management (Marcy primary)
    - Detention Pond Management
  - Mapping Oversight Relating to Stormwater Infrastructure
  - Database Management
  - Annual Report
- Emergency Damage/Debris Assessment
- Green Team Coordinator
- Bio Energy Days Representative
- Special Projects

Jason Irvin

- Stormwater Project Management
  - Design, Inspection, Coordination of City Drainage Projects
  - Industrial, Illicit Discharge, Detention Basin Inspections
  - Erosion & Sediment Control Inspections
  - Nuisance Drainage Complaint Investigations
- Development Site Project Management
  - Plan Review, Inspection, Coordination of private site development
- Water Project Management
  - Design, Inspection, Coordination
- GPS Field Inventory
- Emergency Damage/Debris Assessment

Ryan Lundberg

- Stormwater Program
  - Industrial, Illicit Discharge, Detention Basin Inspections
  - Erosion & Sediment Control Inspections
  - Creek & Outfall Inspections
  - Stormwater & Tributary Sampling
  - Nuisance Drainage Complaint Investigations
- Demolition Project Management
- Emergency Damage/Debris Assessment

THE CITY OF ROCKFORD ILLINOIS, USA

Justin Emerson

- Asset Management
  - ArcGIS Layer Creation & Management
  - Record Drawings & Asset Inventory Management
  - Access database creation & Management
- Water Service Quotes
- Water Pressure Information
- Water Map Modeling
- Map Requests

Warren Stahl – Justin Kink

- ROW Permit Issuance & Inspection
- ROW Complaint Investigation
- Traffic Counts/Speed Trailer
- Record Keeping Management
- Scanning – Plans/Documents
- Safety Committee Representative
- Mapping & Hansen Requests
- Site/Subdivision Data Entry, Initial Plan Review, Permit Issuance
- Emergency Damage/Debris Assessment
- Field Inventory

Appendix G. – Definitions

DEFINITIONS

(1) ***Administrator*** means the person designated by the permitting authority to administer and enforce this ordinance, the City's designated Certified Floodplain Manager;

(2) ***BMP*** or ***best management practices*** means the schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage

(3) ***buffer*** means an area of natural or established vegetation that is predominantly deeply rooted native vegetated land adjacent to channels, wetlands, lakes, ponds or other neighboring areas for the purpose of stabilizing banks, reducing contaminants, including sediments, in stormwater that flows to such areas;

(4) ***Bulletin 70*** means *Frequency Distributions and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois*, by Floyd Huff and James Angel of the Illinois State Water Survey (1989);

(5) ***channel*** means any river, stream, creek, brook, branch, natural or artificial depression, ponded area, flowage, slough, ditch, conduit, culvert, gully, ravine, wash, or natural or manmade drainageway which has a definite bed and bank or shoreline, in or into which surface, groundwater, effluent, or industrial discharges flow either perennially or intermittently;

(6) ***channel modification*** means alteration of a channel by changing the physical dimensions or materials of its bed or banks, and includes damming, riprapping (or other armoring), widening, deepening, straightening, relocating, lining, and significant removal of bottom or woody rooted vegetation, but does not include the clearing of debris or removal of trash or dredging to previously documented thalweg elevations and sideslopes;

(7) ***City*** means the City of Rockford, Illinois;

(8) ***Clean Water Act*** means the federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

(9) ***COE or ACOE*** means the United States Army Corps of Engineers;

(10) ***Construction Activity*** means activities subject to NPDES Construction Permits. NPDES Stormwater Phase II permits are required for construction projects resulting in land disturbance of 1 acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

(11) ***control structure*** means a structure designed to control the rate of flow that passes through the structure given a specific upstream and downstream water surface elevation;

(12) ***County*** means Winnebago County, Illinois;

DEFINITIONS

(13) ***dam*** means any obstruction, wall embankment, or barrier, together with any abutments and appurtenant works, constructed to store or divert water or to create a pool (not including underground water storage tanks);

(14) ***Department*** means the Public Works Department – Stormwater Section;

(15) ***developer*** means a person who creates or causes a development;

(16) ***development*** means any manmade change to the land and includes—

(A) the demolition, construction, reconstruction, or replacement of a building or an structural alteration to a building;
(B) the installation of utilities, construction of roads, bridges, culverts or similar projects;
(C) drilling and mining;
(D) the construction or erection of levees, walls, fences, dams, or culverts;
(E) channel modifications, filling, dredging, grading, excavating, paving, or other nonagricultural alterations of the ground surface;
(F) the storage of materials and the deposit of solid or liquid waste;
(G) the installation of a manufactured home on a site, the preparation of a site for a manufactured home, or the installation of a recreational vehicle on a site for more than 180 days per year;
(H) any wetland impact; and
(I) any other activity of man that might change the direction, height, or velocity of flood or surface water, including the extensive removal of vegetation;

development, however, does not include—

(J) maintenance and repair of existing buildings or facilities;
(K) repair or replacement of an existing parking lot outside the floodplain provided that no new impervious surfaces are added, there is no increase in peak flows, and there is no change in the location of the stormwater discharge;
(L) resurfacing of streets and highways outside the floodplain;
(M) resurfacing of publicly owned streets and highways within the floodplain provided the difference between the elevation of the road surface after resurfacing and the elevation of the road surface on the effective date is not more than two inches;
(N) for agricultural uses, maintenance of existing drainage systems for the limited purpose of maintaining cultivated areas and crop production; or
(O) for agricultural uses, improvements undertaken pursuant to a written NRCS conservation plan;

(17) ***Director*** means the Director of the Public Works Department;

(18) ***drainage area*** means the land area above a given point that may contribute runoff flow at that point from rainfall;

(19) ***erosion*** means the process whereby soil is detached by the action of water or wind;

DEFINITIONS

(20) ***FEMA*** means the Federal Emergency Management Agency and its regulations at 44 CFR 59-79, effective September 29, 1989, as amended;

(21) ***flood*** means a general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal ways or the unusual and rapid accumulation of runoff of surface waters from any source;

(22) ***FIRM*** or ***Flood Insurance Rate Map*** means a map published by FEMA on which FEMA has delineated both the special flood hazard areas and the risk premium zones applicable to a community;

(23) ***FIS*** or ***Flood Insurance Study*** means a study of flood discharges and flood profiles for the City of Rockford adopted and published by FEMA;

(24) ***floodplain*** means that land typically adjacent to a body of water with ground surface elevations at or below the base flood or the 100-year frequency flood elevation and includes detached special flood hazard areas, ponding areas and the like;

(25) ***FPE*** or ***Flood Protection Elevation*** means the BFE plus two feet of freeboard for structures at any given location in the floodplain;

(26) ***Floodplain or Special Flood Hazard Area (SFHA)*** are synonymous and means those lands within the jurisdiction of the City of Rockford, the extraterritorial jurisdiction of the City of Rockford, or that may be annexed in the City of Rockford, that are subject to inundation by the base flood. The floodplains of the City of Rockford are generally identified as such on panel numbers 170723 of the countywide Flood Insurance Rate Map of Winnebago County prepared by the Federal Emergency Management Agency and date September 6, 2006 and subsequently updated. Floodplain also includes those areas of known flooding as identified by the community. The floodplains of those parts of unicorporated Winnebago County that are within the extraterritorial jurisdiction of the City of Rockford or that may be annexed into the City of Rockford are generally identified as such on the Flood Insurance Rate Map prepared for Winnebago County by the Federal Emergency Management Agency and dated September 6, 2006;

(27) ***floodproof*** means any combination of structural and nonstructural additions, changes or adjustments to structures or property which reduce or eliminate flood damage to real estate, water and sanitary facilities, structures and their contents;

(28) ***floodway*** or ***designated floodway*** means the channel, onstream lakes and that portion of the floodplain adjacent to a stream or channel which is needed to store and convey the critical duration 100- year frequency flood discharge with no more than a 0.1 foot increase in flood stage due to the loss of flood conveyance or storage, and no more than a 10% increase in velocities;

(29) ***groundwater*** means water that is located within soil or rock below the surface of the earth;

(30) ***groundwater control system*** means a designed system which may consist of tiles,

underdrains, French drains or other appropriate stormwater facilities whose purpose is to lower the groundwater table to a predictable elevation throughout the year;

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

(32) ***hydraulics*** means the science and study of the mechanical behavior of water in physical systems and processes;

(33) ***hydrology*** means the science of the behavior of water, including its dynamics, composition and distribution in the atmosphere, on the surface of the earth and underground;

(34) ***IDNR-OWR*** means the Illinois Department of Natural Resources, Office of Water Resources, or its duly authorized designee. The IDNR/OWR has jurisdiction over any stream serving a tributary of 640 acres or more in an urban area, or in the floodway of any stream serving a tributary area of 6,400 areas or more in a rural area. Construction on these streams requires a permit from the Department (Ill Admin. Code tit. 17, pt. 3700.30). The Department may grant approval for specific types of activities by issuance of a statewide permit which meets the standards defined in Section 4 of this ordinance;

(35) ***Illegal/Illicit Discharge*** means any direct or indirect non-stormwater discharge to the storm drain system, except as exempted in Section IV of this ordinance.

(36) ***Illicit Connections*** means an illicit connection is defined as either of the following: Any drain or conveyance, whether on the surface or subsurface, which allows an Illegal Discharge to enter the storm drain system including but not limited to any conveyances which allow any non-stormwater discharge including sewage, process wastewater, or wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency or, Any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

(37) ***Industrial Activity*** means activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14) or any other commercial or industrial activities which result in discharges which the City determines are contributing substantial Pollutant loading to the Storm Drain System

(38) ***interim watershed plan*** means a regional study of a watershed which does not address the entire range of purposes, goals and objectives outlined in the Plan;

(39) ***intermittent stream*** means a stream whose bed intersects the groundwater table for only a portion of the year on average or any stream that flows continuously for at least one month out of the year, but not the entire year;

DEFINITIONS

(40) ***lineal Waters of the U.S.*** means wetlands along creeks, streams, rivers, ponds, lakes, or impoundments that are hydraulically connected to surface water;

(41) ***major stormwater system*** means that portion of a stormwater facility needed to store and convey flows beyond the capacity of the minor stormwater system;

(42) ***mass grading*** means development in which the primary activity is a change in topography affected by the movement of earth materials;

(43) ***minor stormwater system*** means all infrastructure including curb, gutter, culverts, roadside ditches and swales, storm sewers and subsurface drainage systems intended to convey stormwater runoff at less than a 100-year flood frequency;

(44) ***mitigation*** means measures taken to offset negative impacts from development in waters of the U.S. including wetlands or the floodplain;

(45) ***NFIP*** or ***National Flood Insurance Program*** means the federal program codified in Title 44 of the Code of Federal Regulations;

(46) ***National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit*** means a permit issued by the U.S. Environmental Protection Agency or the Illinois Environmental Protection Agency that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

(47) ***net benefit in water quality*** means the institution of best management practices as part of a development that when compared to the pre-development condition can be judged to reduce downstream sediment or pollutant loadings;

(48) ***net watershed benefit*** means a finding that, when compared to the existing condition, the development will substantially reduce (more than 10%) downstream peak discharges, will reduce downstream flood stages (more than 0.1 feet), or will reduce downstream damage to structures occurring in the pre-development condition and must be demonstrated by detailed hydrologic and hydraulic analysis of watersheds on a regional scale as approved by the Administrator;

(49) ***non-riverine*** means areas not riverine in character such as isolated depressional storage areas, ponds and lakes;

(50) ***Non-Stormwater Discharge*** means any discharge to the storm drain system that is not composed entirely of stormwater;

(51) ***nuisance flow*** means primarily a dry weather flow resulting from groundwater pumped by individual sump pumps and other human activities not directly related to rainfall events and surface runoff;

DEFINITIONS

(52) ***open channel*** means a conveyance system with a definable bed and banks carrying the discharge from field tiles and surface drainage, but does not include grassed swales within farm fields under agricultural production which are ephemeral in nature;

(53) ***open water*** means surface water in lakes, ponds, impoundments and wetlands devoid of vegetative cover;

(54) ***overland flow path*** means a design feature of the major stormwater system which carries flows in excess of the minor stormwater system design capacity in an open channel or swale, or as sheet flow or weir flow over a feature designed to withstand the particular erosive forces involved;

(55) ***parcel*** means a separate tract of land identified by its own legal description;

(56) ***perennial stream*** means a riverine watercourse whose thalweg intersects the groundwater table continuously and flows throughout the year;

(57) ***permitting authority*** means the community having jurisdiction under this ordinance to issue permits;

(58) ***person*** means an individual, partnership, corporation, limited liability company, unincorporated association, trust, municipal corporation, unit of local government or other government agency or authority, or any combination of any of the foregoing;

(59) ***Plan*** means the City of Rockford Stormwater Management Plan;

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

(61) ***pond*** means a body of water less than two acres in size which retains a normal water level year-round;

(62) ***Premises*** means any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips

(63) ***primary gravity outlet*** means the outlet structure designed to meet the release rate requirements of this ordinance, the invert (lowest elevation) of which shall be considered the high water elevation for required stormwater retention;

(64) ***public flood control project*** means a flood control project which will be operated and maintained by a public agency or entity to reduce flood damage to existing buildings and

structures which includes a hydrologic and hydraulic study of the existing and proposed conditions of the watershed;

(65) ***public flood easement*** means an easement acceptable to the appropriate jurisdictional body that meets the regulations of IDNR-OWR, the Department and the community and provides legal assurances that all areas subject to flooding in the created backwater of the development will remain open to allow flooding;

(66) ***record drawings*** means drawings prepared, signed and sealed by a professional engineer or professional land surveyor representing the final record of the actual in-place elevations, locations of structures and topography;

(67) ***redevelopment*** means development on a developed site devoted to an existing urban land use the stormwater from which discharges into an existing stormwater facility either owned or maintained by a unit of local government, or discharges directly onto a regulatory floodplain; redevelopment includes the widening of an existing street or highway owned by a unit of local government;

(68) ***regulatory floodplain*** means the floodplain depicted on maps recognized by IDNR-OWR for regulatory purposes;

(69) ***regulatory floodway*** means those portions of the floodplain depicted as floodway on maps recognized by IDNR-OWR for regulatory purposes;

(70) ***restrictive bridge or culvert*** means a bridge or culvert that crosses a floodplain and cannot convey the base flood without causing increases in the upstream flood profile;

(71) ***retention facility*** means a facility which stores stormwater runoff without a gravity release;

(72) ***riverine*** means related to, formed by or resembling a channel and includes creeks and rivers;

(73) ***runoff*** means the waters derived from melting snow or rain falling within a tributary drainage basin that exceeds the infiltration capacity of the soils of that basin;

(74) ***sedimentation*** means the process that deposits hydraulically moved soils, debris and other materials on other ground surfaces or in bodies of water or stormwater drainage systems;

(75) ***sedimentation trap*** means a structure or area that allows for the temporary deposit and removal or disposal of sediment materials from stormwater runoff;

(76) ***seepage*** means the movement of drainable water through soil and rock;

(77) ***site*** means all of the land contemplated to be part of a coordinated development of one or more parcels;

DEFINITIONS

(78) ***site runoff storage facility*** means a manmade structure for the temporary storage of stormwater runoff with a controlled release rate;

(79) ***SFHA*** or ***Special Flood Hazard Area*** means an area having special flood, mudslide or mudflow, or flood related erosion hazards and which is shown on an FHBM or FIRM as Zone A, AO, A1- 30, AE, A99, AH, VO, V1-30, VE, V, M or E. See Floodplain;

(80) ***special management area*** means a floodplain, regulatory floodplain, wetland, wetlands mitigation area, stream, river, or other water body;

(81) ***Storm Drain System*** means apublicly-owned facilities by which stormwater is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels or water courses, reservoirs, and other drainage structures. In this Ordinance, the Storm Drain System may also be referred to as the "MS4"

(82) ***Stormwater*** means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation

(83) ***stormwater facility*** means all ditches, channels, conduits, bridges, culverts, levees, ponds, natural and manmade impoundments, wetlands, riparian environment, tile, swales, sewers or other natural or artificial structures or measures which serve as a means of draining surface water and groundwater from land;

(84) ***stormwater management permit*** means the permit issued under Article 5;

(85) ***Stormwater Pollution Prevention Plan*** means a document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Stormwater, Stormwater Conveyance Systems, and/or Receiving Waters to the Maximum Extent Practicable

(86) ***subsurface drainage*** means the removal of excess soil water to control water table levels at predetermined elevations for structural, environmental or other reasons in areas already developed or being developed for agricultural, residential, industrial, commercial or recreational uses;

(87) ***SWPPP*** means Stormwater Pollution Prevention Plan;

(88) ***Technical Manual*** means the manual adopted by the City which refers to this ordinance and provides additional explanations and examples;

(89) ***thalweg*** means a line along the lowest point in a channel;

(90) ***topsoil*** means the uppermost part of the soil, ordinarily moved in tillage, or its equivalent in uncultivated soils;

DEFINITIONS

(91) ***USEPA*** means United States Environmental Protection Agency;

(92) ***Wastewater*** means any water or other liquid, other than Stormwater, discharged from a facility;

(93) ***Watercourse*** means a natural or artificial channel through which water flows, ie. a stream or river;

(94) ***Waters of the State*** means all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected water as sewers or treatment works except that in-stream aeration under agency permit is allowable;

(95) ***Waters of the U.S.*** is defined by COE in 33 CFR 328.3 and, for purposes of this ordinance, includes wetlands, lakes, rivers, streams, creeks, bogs, fens, ponds and isolated wetlands but does not include maintained stormwater facilities;

(96) ***watershed*** means all land drained by, or contributing water to the same stream, lake, stormwater facility, or draining to a point;

(97) ***watershed characteristics*** means the land use, physiology, habitat, climate, drainage system and community profile of a watershed;

(98) ***watershed plan*** means a study and evaluation of an individual drainage basin's stormwater management, floodplain management, water quality and flood control needs capabilities adopted by the City;

(99) ***wetland*** is defined by COE and the USEPA as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas;

(100) ***wetland mitigation*** means the creation and long-term maintenance of wetlands to offset wetland impacts from development;

Appendix H. – City Yards Stormwater Plan

Professional Certification and General Approval

I hereby certify that I have examined the facility and attest that this Stormwater Pollution Control Plan covers the operations at the Rockford City Yards. I certify that this document and all attachments were prepared under my supervision by qualified personnel who gathered and evaluated the information contained herein.

Ken R. Thompson, Principal/Environmental Division Manager
Fehr Graham

Date

I hereby certify that I have reviewed and approved this Plan.

Brad Holcomb, Stormwater Program Manager
City of Rockford Public Works Department

Date

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1.0 Introduction

This Stormwater Pollution Control Plan covers operations at the Rockford City Yards. This Plan describes this facility and its operations, identifies potential sources of stormwater pollution at the facility, recommends appropriate Best Management Practices (BMPs) or pollution control measures to reduce the discharge of pollutants in stormwater runoff, and provides a periodic review of this Plan. BMPs are defined as structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the state. The Plan will be amended whenever there is a change in construction, operation, or maintenance at the facility that may affect the discharge of significant quantities of pollutants into the stormwater discharge, or if a facility inspection indicates that an amendment is needed.

2.0 General Facility Information

Name of Facility: Rockford City Yards

Facility Address: 500 South Independence Avenue
Rockford, IL 61102

Facility Contact: Mark Stockman, Street Superintendent
Rockford City Yards
500 South Independence Avenue
Rockford, IL 61102
779-348-7631

Owner/Operator: City of Rockford

Stormwater Receiving Body: Kent Creek

Total Site Acreage: 42.8 acres

Impervious Areas: 68%

Emergency Contact: Mark Stockman, Street Superintendent
Rockford City Yards
500 South Independence Avenue
Rockford, IL 61102
779-348-7631

Emergency Response Notification

Contact for Spill Release to Surface Waters:
Duty Officer, National Response Center 800-424-8802
U.S. Coast Guard
400 Seventh Street, SW
Washington, D.C. 20590

Environmental Protection Agency (EPA) 312-353-2318
Region Five (24 hr)
Emergency Response Branch
77 West Jackson Boulevard
Chicago, IL 60604

Illinois Emergency Management Agency (IEMA)		800-782-7860 (24 hr)
IEPA Office of Emergency Response		217-782-3637

OTHER EMERGENCY TELEPHONE NUMBERS:

Fire		911
Rockford Fire Department	Non-Emergency	815-966-2900
Police		911
Rockford Police Department	Non-Emergency	815-966-2900
Medical Emergency:		911
Rockford Memorial Hospital	Non-Emergency	815-971-5000
SwedishAmerican Hospital	Non-Emergency	779-696-4400

Rock River Water Reclamation District (for discharges to sanitary sewer)	815-387-7455 (24-hour)

3.0 Topographic Map

A Topographic Map is provided showing the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and discharge points, as applicable. The map extends one-quarter mile beyond the property boundaries. The Topographic Map is included as Figure 1.

4.0 Site Map

The Site Map is provided in Figure 2 and contains the following:

- The stormwater conveyance and discharge structures.
- An outline of the stormwater drainage areas for each stormwater discharge point.
- Paved areas and buildings.
- Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
- Location of existing or proposed stormwater structural control measures (dikes, coverings, detention facilities, etc.).
- Surface water locations and/or municipal storm drain locations.
- Areas of existing and potential soil erosion.
- Vehicle service areas.
- Material loading, unloading, and access areas.

5.0 Facility Square Footage – Site Specific Information

This Plan provides an estimate of the size of the facility and the percent of the facility that has impervious areas such as pavement or buildings. The property occupies approximately 1,864,368 square feet. The main portion of the property is developed, with buildings and other impervious areas (pavement, compacted gravel, etc.) occupying approximately 68% of the site. The area East of South Central Avenue, which includes the mulch pile, is undeveloped. These areas are identified on the Site Map in Figure 2.

6.0 Existing Conditions

6.1 Nature of Activities Conducted at the Facility

Rockford City Yards is used primarily as a storage location for City of Rockford vehicles utilized for Public Works operations, including snow removal. A vehicle fueling station is located on the East side of the property. An enclosed dome located on the western portion of the property is used for ice-melting salt storage. Ice-melting solution is stored in aboveground storage tanks. A covered pile of ice-melting salt is located between the salt dome and the aboveground tanks. In addition to indoor vehicle storage areas, a Maintenance and Repair Shop is located on the property. A separate building houses a road/street sign production operation. An Administration building is also located on the property. A paved parking lot for employees is located on the northern portion of the property. A yard waste/mulch pile maintained by the City Yards is located to the east across South Central Avenue.

6.2 Materials, Equipment, and Vehicle Management Practices

Only one raw material, ice-melting salt, is stored outdoors on a temporary, occasional basis. When stored outside, the salt is covered with a heavy tarp in order to minimize runoff. All other raw materials, in-use materials, and waste materials are stored indoors under roof.

Trucks utilized for Public Works purposes (e.g. salt spreading and snow plowing) are stored in the Central Garage. The main garage building also houses a Repair Shop where vehicle repairs and maintenance are conducted indoors under roof. The Repair Shop contains a 600-gallon aboveground storage tank for the collection of used oil. This area also contains a drum for the collection of used antifreeze. The Stock Room in the Repair Shop contains 55-gallon drums of various vehicle fluids (motor oil, transmission fluid, antifreeze). A separate building located south of the salt dome contains a shop used for creating street signs and road signs. New, in-use and waste paints are stored within this building. A vehicle fueling station is located on the East side of the property.

6.3 Stormwater Discharge Treatment Facilities

There is no treatment of stormwater at this site. Vehicle washout/washdown water and rain/snow melt from vehicles go to stormwater drains and inlets. All wash water associated with bathrooms and sinks is discharged via sanitary sewer to the Rock River Water Reclamation District. A visual inspection of the facility during a period with no stormwater activity indicates that there are no known non-stormwater discharges from this site, other than sanitary water to the POTW.

6.4 Methods of On-Site Storage and Disposal of Significant Materials

Two dumpsters for general trash are located outdoors and are exposed to stormwater.
All other waste materials are stored inside under roof to prevent exposure to stormwater. Waste materials are disposed off-site at approved disposal facilities. The yard waste/mulch pile across South Central Avenue is exposed to stormwater.

6.5 Existing or Proposed Structural and Non-Structural Control Measures

The property is relatively flat in nature. Buildings and/or impervious surfaces occupy approximately 68% of the property area. Stormwater that falls on the roofs and other impervious areas is directed via overland flow to storm drains located throughout the site.

Site stormwaters drain to Kent Creek which borders the property on the North. Structural controls include buildings to house vehicles, raw materials, and maintenance activities. Non-structural controls include the elements of this Plan, visual inspections/observations of storage and maintenance areas, preventive maintenance and good housekeeping.

Preventative measure for these items are found in Section 8.0.

7.0 List of Pollutants

This Plan provides a list of pollutants that have a reasonable potential to be present in stormwater discharges in significant quantities. This facility's intent is to minimize the exposure of all pollutants to stormwater discharges at this site. Certain materials are not likely to come into contact with stormwater run-off. These materials include those stored in aboveground storage tanks (AST), underground storage tanks (UST) or those kept inside buildings. Potential sources of contamination at the site include, but are not limited to: the vehicle washout area; the vehicle fueling area; loading of salt trucks; salt pile residue; vehicle fluids entering drains or exiting the building envelope; and general runoff to yard inlets.

A list of potential pollutants in stormwater discharge is included in Table 7.1.

TABLE 7.1 - List of Potential Pollutants

Potential Pollutant	Location/Activity	Storage Method	Unit of Measure	Potential for SW Discharge
Sediment. Nutrients, Trash, Metals, Oil & Grease, Organics	Vehicle Washout Area	Open	N/A	Yes
Trash, Metals, Oil & Grease, Organics	Vehicle fueling	UST	Gallons	Yes
Ice-melting Salt	Loading of salt trucks, outdoor storage pile	Covered dome and pile	Tons	Yes
Metals, Oil & Grease, Organics	Vehicle Maintenance	Under roof	Gallons	Yes
Sediment. Nutrients, Trash, Metals, Oil & Grease, Organics	General runoff from vehicles	Open	N/A	Yes
Sediment, Nutrients, Trash	Mulch Pile	Open	Tons	Yes

8.0 Best Management Practices

This Plan describes the stormwater management controls, which will be implemented by the facility. Stormwater management controls, or Best Management Practices (BMPs), have been implemented at the facility to reduce the amount of potential pollutants in the stormwater discharge from the facility. BMPs are defined as physical, structural, and/or managerial practices that prevent or reduce pollution of water. BMPs can describe a wide range of management procedures, schedules of activities, prohibitions or practices, operating procedures, treatment requirements, and practices to control plant site run-off. Both general and site specific Best Management Practices are identified below.

8.1 Stormwater Pollution Prevention Personnel

The stormwater pollution prevention team is responsible for developing, implementing, maintaining, and revising this Plan. The members of the team are familiar with the management and operations of the Rockford City Yards.

Brad Holcomb, Stormwater Program Manager, is the person in charge of Plan development and implementation. The member(s) of the team and their responsibilities (i.e. implementing, maintaining, record keeping, submitting reports, conducting inspections, employee training, conducting the annual compliance evaluation, testing for non-stormwater discharges, signing the required certifications) are as follows:

Table 8.1 – Stormwater Pollution Prevention Personnel

Name & Title	Responsibility	Contact Phone Number
Mark Stockman, Street Superintendent	Implementing, maintaining, training, conducting inspections, and compliance evaluation	779-348-7631
Dean Kurth, Stormwater Program Manager	Oversight observations	779-348-7617
Fehr Graham Environmental Consultant	Environmental Consultation	815-394-4700

8.2 Preventative Maintenance

Preventative maintenance involves the regular inspection, testing, and cleaning of facility equipment and operations systems. These inspections help to uncover conditions that might lead to a release of materials. The following table outlines the equipment/activities that are included in the preventative maintenance program. Routine inspections do not need to be documented.

Table 8.2 – Daily Preventative Maintenance

Equipment	Tasks	Inspection Frequency	Housekeeping Task
Loading/ Unloading Areas	Inspected for leaks/spills – visual only, not documented	During loading/ unloading activity	Spills are cleaned immediately. Leaky equipment shall be reported to maintenance for repairs. Absorbent material shall be available where liquid materials are stored.
Stormwater Outfalls	Inspected for leaks/spills, signs of debris	During annual inspection	Any IDDE indicators at the stormwater outfall shall be investigated to determine the source.
Indoor Storage Areas	Inspected for leaks/spills, – visual only, not documented	Daily	Spills are cleaned immediately. Leaky equipment shall be reported to maintenance for repairs. Absorbent material shall be available where liquid materials are stored.
Site Equipment	Inspected for breakdown/leaks, not documented	As required/ recommended	Equipment requiring repairs shall be reported to maintenance to have repairs scheduled.

8.3 Good Housekeeping

Good housekeeping practices are designed to maintain a clean and orderly work environment. This will reduce the potential for significant materials to come in contact with stormwater. Good housekeeping encompasses prompt clean-up of any spills and the proper storage and handling of vehicles and equipment. Specifically, any spills of salt to the ground during truck loading shall be cleaned up promptly. Upon removal of the outdoor covered salt pile, any remaining salt residue and debris shall be cleaned up promptly. Any spills of liquid ice melting material from the outdoor aboveground storage tanks shall be cleaned up or diverted as soon as possible to prevent entry into the nearby storm inlet. Any spills or leaks of vehicle fluids (gasoline/diesel, oil, etc.) shall be cleaned up immediately using absorbent materials.

8.4 Spill Prevention and Response

This Plan identifies areas where significant materials can spill into, or otherwise enter, the stormwater conveyance systems and their accompanying drainage points. Upon arrival, salt is loaded into the dome or piled under the tarp, as applicable. When needed for use, the salt is loaded into individual trucks. City Yards personnel are present during loading/unloading operations to respond immediately in the event of a significant spill to prevent the material from entering the storm drains. The interiors of the Central Garage and the Repair Shop contain floor drains. In order to prevent accidental discharges the drains shall be capped and cleaned quarterly. Any leaks or spills from vehicles during fueling are cleaned up promptly. Spills or failures that occur will be cleaned up with sorbent materials and/or a wet vacuum. These materials will be placed into 55-gallon containers and labeled as to the contents. The Street Superintendent will determine the appropriate method to reuse or dispose of the spilled materials. Refer to Pages 2 and 3 for emergency response contact information.

In the event of a parking lot or yard spill, appropriate response procedures utilizing the necessary spill equipment to contain the spill and prevent any discharge to storm or sanitary sewers will be employed. There are storm sewer inlets in the facility yard and parking areas that discharge to the storm sewer system.

Spill control and response equipment is located at strategic locations determined by the Street Superintendent and is readily accessible by spill response personnel. Materials that may not be absorbed or contained with the use of these materials, due to response time or larger spills, will be subject to additional containment measures.

8.5 Stormwater Management Practices

Structural control measures may be necessary to control pollutants that are still present in the stormwater after the non-structural controls have been implemented. These types of controls are physical features that control and prevent stormwater pollution. They can range from preventative measures to collection structures and treatment systems. Structural controls will require construction of a physical feature or barrier.

8.5.1 Preventative Measures

Preventative measures are controls that are intended to prevent the exposure of stormwater to contaminants. The following preventative measures have been identified for this facility. Spills of

quantities greater than limit noted on the Safety Data Sheets (SDS) shall be reported to the Stormwater Environmental Team (SWET).

Table 8.5.1 – Preventative Measures

Area	Materials	Control Measures
Vehicle Washout Area	Sediment. Nutrients, Trash, Metals, Oil & Grease, Organics	When possible, City vehicles shall be taken to the contracted commercial facility (Octopus Car Wash, 602 Kishwaukee St.) or within the wash bays at the City yards which drain to sanitary. Any vehicles washed outside will not use any detergents and wash water will be contained and removed for proper disposal
Vehicle fueling	Trash, Metals, Oil & Grease, Organics	Visual monitoring; Good Housekeeping, drivers will be instructed not to "top off" tanks. Absorbent material shall be placed by the fuel pumps in the event of accidental spills.
Loading of salt trucks, outdoor storage pile	Ice-melting salt	Prompt housekeeping; visual monitoring, Salt pile will be uncovered prior to snow operations and re-covered after operations are completed. Any tracked out salt will be swept into pile and covered
Vehicle Maintenance	Metals, Oil & Grease, Organics	Drip pans; absorbent materials; visual monitoring; housekeeping, not documented

8.5.2 Containment

Containment areas are structures designed to hold pollutants or contaminated stormwater to prevent it from being discharged to surface waters. These structures can range from drip pans to large retention areas. Drummed liquid materials, such as used oil and antifreeze, shall be stored within the building envelope and away from floor drains, as practicable. If these materials are stored or kept near floor drains, appropriate secondary containment such as spill skids or overpack drums shall be provided. For oils and other fluids stored on horizontal shelves/racks, secondary containment in the form of drip pans shall be provided. Absorbent materials, such as oil dry and absorbent pads, shall be provided in areas where liquid materials are stored.

Materials shall not be stored in quantities greater than noted on the Safety Data Sheets.

8.5.3 Waste Chemical Disposal

All waste materials, including oils and coolants, are handled on-site in a manner to prevent exposure to stormwater prior to being disposed off-site at an approved recycling or disposal facility. Absorbent materials, such as oil dry and absorbent pads, shall be provided in areas where liquid materials are stored.

8.5.4 Covered Storage Areas

All vehicle maintenance operations at the site shall be conducted under roof, minimizing exposure to stormwater. Additionally, all materials and wastes, with the exceptions of trash dumpsters and a covered outdoor salt pile, shall be maintained indoors under roof.

8.5.5 Open Areas

The site contains six primary areas where activities are conducted outdoors and have the potential to introduce contaminants into stormwater.

1. Salt dome and salt pile. The pile is located in a predominantly flat area to minimize material being removed via overland flow. During non-emergency operations the salt pile is completely covered with a tarp to minimize salt runoff. The tarp shall extend beyond the toe of the pile and have a weighted object (i.e. tires) placed around its perimeter to hold it in place. When a snow emergency is anticipated the tarp shall be removed as needed and then re-covered at the conclusion of emergency operations. Operators and equipment are available during snow operations and excess spillage from truck filling shall be cleaned up promptly. Additionally, upon depletion or removal of the salt pile, any remaining debris/residue shall be cleaned up promptly to prevent excess discharge to the storm sewer system. Inlets located in the proximity of the salt pile shall have a solid lid installed to prevent salt from entering the stormsewer. The Solid lid shall remain in place as long a salt is stored in the area.

2. Aboveground storage tanks containing liquid ice-melting material. A storm sewer inlet is located in close proximity to these tanks. The City is in the process of replacing this tank and shall review the site plans to determine if an alternative location for this tank is possible. If that is not possible the inlet shall be covered prior to any filling/emptying of the tanks to ensure that any accidental spills will not enter the inlet. Any spilled liquid shall be cleaned up promptly using absorbent materials which shall be located near the tank.

3. Outdoor vehicle washout area on the east side of the Central Garage building. When possible, City vehicles shall be taken to the contracted commercial facility (Octopus Car Wash, 602 Kishwaukee St.). The City shall install a series of sump pits to capture wash water and allow for settling of materials when using the wash bays. A settling basin shall be installed in front of the inlet to contain materials from the outdoor wash areas. The sump pits and settling basin shall be inspected weekly and cleaned as needed. Any vehicles washed in the bays or outside will not use any detergents or they will use environmentally friendly bio-degradable soaps and chemicals. Inlet protection shall be installed at the inlet to further catch and material that escapes the containment area. Inlet protection shall be inspected daily and cleaned as needed.

   The City is reviewing plans to install a wash water facility which would be connected to the sanitary sewer.

4. Mulch pile – The City's yard waste/mulch pile across South Central Avenue is exposed to stormwater. There is an approximately 120' vegetative buffer between the mulch pile and the creek to allow for filtering and absorption of any material running off the mulch pile. Mulch is also stored at the entrance to the mulch pile for public use. This mulch is stored within a walled concrete structure to prevent runoff towards the creek.

5. Fueling Area – Vehicle fueling operations are performed on a concrete pad. Spill clean-up materials shall be stored next to the pumps and spills will be cleaned and reported to the street superintendent or his designee immediately. Only dry cleaning methods shall be used to clean-up spills. Under no circumstances will the fueling area be hosed down. The fueling area shall be inspected daily for leaks and spills and signs shall be posted to discourage "topping off" of fuel tanks. Emergency Shut-offs are placed in the areas of the pumps.

6. Trash dumpsters - Two dumpsters for general trash are located outdoors and are exposed to stormwater. These are only available for use by City of Rockford employees or contractors and only solid waste can be placed in the dumpsters. Dumpsters shall be covered and signs shall be posted at the dumpsters to remind employees and contractors that only solid waste materials can be placed within the dumpsters.

   All other waste materials are stored inside under roof to prevent exposure to stormwater. Waste materials are disposed off-site at approved disposal facilities.

8.6 Sediment and Erosion Prevention

This Plan identifies areas, which due to topography, activities, or other factors, have a high potential for significant soil erosion. The majority of the property consists of impervious areas; however, there are unpaved areas and hills/slopes that are subject to erosion. These areas shall be examined, at a minimum, during the annual site inspection for evidence of erosion. In areas where erosion does exist these areas shall be stabilized with approved best management practices found in the Illinois Urban Manual.

8.7 Employee Training

The following is a description of the employee training programs to be implemented to inform appropriate personnel at every level of responsibility of the components and goals of the Plan. Training should address topics such as spill response, good housekeeping, and material management practices. Personnel shall be informed of operations and design features in order to prevent discharges or spills from occurring. The following table outlines employee-training programs to be implemented in association with this Plan.

Table 8.7 – Employee Training

Topic	Employees Included	Frequency	Presenter
Introduction to City Stormwater Program and It's Requirements	Supervisors and employees with the potential to affect stormwater exposure	Annual	Stormwater Program Manager
Review of City Yards Stormwater Plan	Supervisors and employees with the potential to affect stormwater exposure	Annual	Stormwater Program Manager & Street Supervisor
Reporting, Record Keeping, Inspections,	Supervisors and employees with the potential to affect stormwater exposure	Annual	Stormwater Program Manager & Street Supervisor
Spill Prevention and Response	Supervisors and employees with the potential to affect stormwater exposure	Annual	Street Supervisor or Designee
Safety measures	Supervisors and employees with the potential to affect stormwater exposure	Annual	Street Supervisor or Designee
Preventive Maintenance, Good Housekeeping, and Waste Minimization	Supervisors and employees with the potential to affect stormwater exposure	Annual	Street Supervisor or Designee

Training sessions will be attended by critical staff involved in any of the activities discussed in the BMP section. This includes all levels of personnel involved in operations and maintenance including new hires.

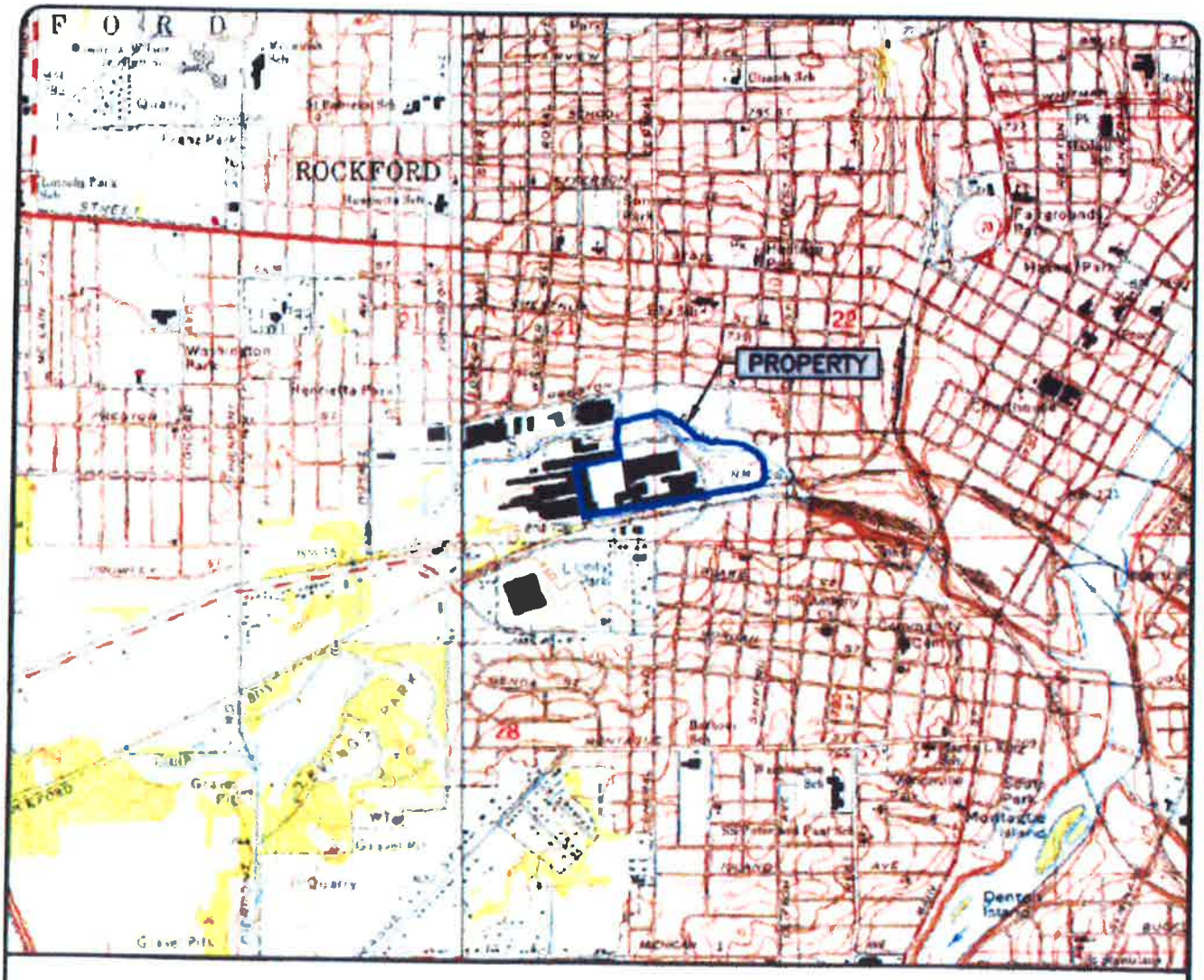
8.8 Facility Monitoring and Inspection

Monitoring includes annual site inspections. The purpose of monitoring is to: a) evaluate stormwater outfalls for the presence of non-stormwater discharges; and b) evaluate the effectiveness of the facility's pollution prevention activities in controlling contamination of stormwater discharges.

The inspection shall be adequate to verify that the site drainage conditions and potential pollution sources identified in the Plan remain accurate, and that the Best Management Practices prescribed in the Plan are being implemented, properly operated and adequately maintained. Documentation of inspections shall be completed on the inspection form included in Figure 3.

Figure 1

Topographic Map



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GRAPHIC SCALE IN FEET

FIGURE 1
TOPOGRAPHIC MAP
ROCKFORD CITY YARDS
500 S. INDEPENDENCE AVE.
ROCKFORD, ILLINOIS 61104

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Figure 2

Site Map

KEY NOTES

1. ADMINISTRATION BUILDING
2. ABOVE GROUND STORAGE TANK ICE MELTING SOLUTION
3. REPAIR SHOP/STOCK ROOM
4. CENTRAL GARAGE/CENTRAL SUPPLY
5. VEHICLE FUELING AREA
6. VEHICLE WASHOUT AREA
7. SALT STORAGE DOME
8. TEMPORARY TARPED SALT STORAGE (AS NEEDED)
9. SIGN SHOP
10. STORAGE
11. MULCH PILE

LEGEND

- (P) EMPLOYEE PARKING
- STORM WATER INLET
- TRASH DUMPSTER
- AREA OF INTEREST

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GRAPHIC SCALE IN FEET

FIGURE 2
SITE MAP
ROCKFORD CITY YARDS
500 S. INDEPENDENCE AVE.
ROCKFORD, ILLINOIS 61104

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Figure 3

Site Inspection Form

FIGURE 3 – Rockford City Yards

Stormwater Pollution Control Plan Site Inspection

Inspected by:	**Date:**
Signature:	**Time:**

Instructions: Inspect items listed below for signs of pollutants or conditions that could impact stormwater runoff. Use the comment section to note problems found, corrective action taken, management notification, and resolution. Maintain completed inspection form as noted in Plan.

Item/Areas Of Concern	Pass	Needs Attention	Comments
Stormwater Outfalls and Conveyances			
Stormwater Inlets			
Outdoor Fueling Station			
Interior Truck Bays - Materials and Equipment			
Loading/Unloading Areas • No Spills or Leaks			
Waste Storage Areas • Containers Covered and in Good Condition • No Spills and Leaks • Labels Intact			
Liquid Storage Areas			
Raw Material Storage			
Trash Collection Area Clean			
Soil Erosion			
General Housekeeping • Surfaces Clean, No Spills and Leaks • Containers Labeled and in Good Condition			
Spill Response Gear In Place and Operational			
Other Notes/Comments			

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Appendix I. – Reference Material

Stormwater Master Plan Reference Materials

1. Illinois Urban Manual (latest edition only available online): http://www.aiswcd.org/IUM/index.html
2. Illinois Department of Transportation Erosion and Sediment Control Field Guide for Construction Inspection – July 1, 2010
3. Storm Water & Environmental Program Field Guide for City of Rockford staff - April 2013 as updated
4. City Wide Stormwater Assessment – MWH March 2009
5. Alpine Dam Operation and Maintenance Manual with Emergency Action Plan
6. Kent Creek (Page Park Dam, Levings Lake Dam) Operations and Maintenance Manual, Emergency Operations – Flood Response Plan – May 2013
7. National Flood Insurance Program Guidebook – FEMA, March 2009
8. Industrial Storm Water Monitoring and Sampling Guide – USEPA, March 2009
9. Illicit Discharge Detection & Elimination, A Guidance Manual for Program Development and Technical Assessments – Center for Watershed Protection, October 2004
10. Intergovernmental Agreements with the City of Rockford and the Rockford Park District for maintenance at Alpine Dam, Levings Lake Dam and Page Park Dam.
11. City of Rockford Engineering Design Criteria Manual -
12. City of Rockford General Violation Ordinance – August 7, 2014
13. City of Rockford Subdivision Ordinance – August 17, 2015
14. City of Rockford Stormwater Management Ordinance – May 4, 2015
15. City of Rockford Stormwater Management Technical Requirements – May 18, 2015
16. US. Army Corps of Engineers Dam Inspection Reports
17. Streambank Restoration Manual – FISRWG Revised August 2001
18. ISWS Bulletin 70 & 71
19. Winnebago County Multi-Hazard Mitigation Plan – December 2014
20. City of Rockford 2020 Implementation Plan - 2015

Appendix J - Reserved