NORTH KANSAS CITY

STORMWATER MANAGEMENT PROGRAM

MS4 Permit #MOR040013

Prepared By:
Department of Public Works
Information on the Permittee:

Name of the Permittee: City of North Kansas City, Missouri
Type of Entity: City – Municipality
Total Area (acres): 4.5 Sq. Mi. = 2880 Acres
Mailing Address: 2010 Howell Street, North Kansas City, MO 64116
Primary Contact: Lisa Meyer
  Phone Number: (816) 412-8067
Secondary Contact: Pat Hawver
  Phone Number: (816) 274-6000

Information on the Municipal Separate Storm Sewer System:

MS4 System Location: North Kansas City, MO
Name of Organization: City of North Kansas City
County Permittee Resides: Clay County
There are no major receiving waters within the permitted area.
The Receiving waters are on the latest CWA’s List of impaired waters: N/A
Received certification that their SWMP complies with the requirements of Part 3.1: N/A

Information on Adjacent Waterways:

The Permittee is within 100 feet of: Rock Creek
The Permittee is within 100 feet of waters classified as major reservoirs:
None of the Permittee’s area is defined as wetland.
The Permittee has received a CWA, Section 404 permit from the US Army Corps of Engineers: N/A
Stormwater from North Kansas City does not discharge to a sinkhole.

Information on Critical Areas:

There are threatened or endangered species in the area: See Page 2
  The Permittee has met eligibility criteria for protection of threatened or endangered species.
There are critical habitats in the area: See Page 2
  The Permittee has met eligibility criteria for protection of critical habitats.
There are critical habitats in the area: See Page 2
### Endangered Species:

<table>
<thead>
<tr>
<th>County</th>
<th>Species</th>
<th>Status</th>
<th>Habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clay</td>
<td>Bald Eagle (Haliaeetus leucocephalus)</td>
<td>Threatened</td>
<td></td>
</tr>
<tr>
<td>Clay</td>
<td>Pallid Sturgeon (Scaphirhynchus albus)</td>
<td>Endangered</td>
<td>Mississippi and Missouri Rivers</td>
</tr>
</tbody>
</table>

### Historic Properties:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Owner</th>
<th>Year Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sears, Roebuck and Company Warehouse Building</td>
<td>715 Armour Rd, North Kansas City</td>
<td>Private</td>
<td>1997</td>
</tr>
<tr>
<td>Wheeling Corrugating Company Building</td>
<td>820 E. 14th Ave, North Kansas City</td>
<td>Private</td>
<td>1994</td>
</tr>
</tbody>
</table>
MCM #1: Public Education and Outreach on Stormwater Impacts

4.2.1.1 Permit Requirements

North Kansas City plans to continue a public education program by distributing educational materials to the community and conducting outreach activities. The focus of these efforts will be to educate the public with activities discussing the impact of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

4.2.1.1.1 Target Pollutants and Sources

North Kansas City developed their stormwater public education and outreach program in cooperation with other jurisdictions in the region. The target pollutants were identified and prioritized. The actions that impact the target pollutants were identified. The public education program was designed to impact the actions identified.

The following is a prioritized list of the leading pollutants, experienced in the permitted area, that are carried by stormwater runoff into water bodies. (1 = having the most impact and 10 = having the least impact)

- 1 Suspended Solids
- 5 Nutrients
- 4 Pesticides
- 7 Metals
- 6 Bacteria
- 9 Oxygen-Depleting Substances (BOD & other organics)
- 3 Oil and Grease
- 2 Salinity (Salt)
- 8 Priority Toxic Organic Chemicals (Household Hazardous Waste Pesticide/ Herbicides)
- 10 Habitat Alterations
- ______ Floatables
- ______ Temperature

The target pollutant sources having a major impact on stormwater quality were identified. The following is a list of these sources:

The following is a list of potential sources of pollutants that are experienced in the permitted area. (1 = Major impact, 2 = Minor impact, 3 = Not an impact)
2. Construction activities (sediment, construction chemicals and debris, solid and sanitary wastes)
2. Over-application of fertilizer, herbicides, pesticides
2. Improper disposal of paint and household hazardous chemicals
3. Pet waste contamination
2. Improper disposal of waste oil, grease, and gasoline disposal
2. Trash, debris, and illegal dumping
2. Detergents washed into drains
2. Snow removal (salt, sand and snow disposal)
2. Sanitary sewer overflows
3. Infiltration from cracked sanitary sewers
3. Failing septic systems
2. Sewer service connections to storm drainage system
2. Foundation drains connected to storm drainage system
2. Downspouts connected to storm drainage system
3. Lake or water body used for motor boating
2. Spills from roadway accidents or fires
2. Connected impervious areas covering large acreages (such as malls, institutions with large parking areas)
2. Stream bank erosion
3. Waste transfer station

4.2.1.1.2 Target Audience

During the development of the educational program, North Kansas City identified the sources of stormwater pollutants that needed to be reduced to improve overall water quality. The target audiences were selected because changing their behavior would have a significant stormwater quality impact on the target pollutants. The target audiences for the public education program are:

1. Citizens (Homeowners)
2. Developers and Home Builders
3. Business Owners
4. Elected Officials
5. City Staff
6. Students and Children

4.2.1.1.3 Plan to Inform

North Kansas City’s stormwater education and outreach program was developed in cooperation with other jurisdictions in the region.
North Kansas City informs businesses, individuals and households in the community about the steps they can take to reduce stormwater pollution with the following programs:

<table>
<thead>
<tr>
<th>Educational Materials:</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Information on Website</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Maintain a Library of Stormwater Educational Materials</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Distribute Brochures:</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lawn and Garden Activities</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pet Waste Management</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Vehicle Maintenance and Washing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Illicit Discharges</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Topics for the brochures will be dependent on the topics of the Mid-America Regional Council's (MARC) seasonal campaign for public education. Additional topics will be included in the program, depending on the immediate needs of the surrounding communities. Detailed information about each seasonal campaign will be included in North Kansas City’s annual report.

<table>
<thead>
<tr>
<th>Public Awareness:</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Storm Water Quality Signs in Public Buildings</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Issue Press Release Regarding Local Storm Water Issues</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Show Storm Water Info on Local TV Station</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Publish Articles in Local Newspaper</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Publish Articles in Quarterly City Newsletter</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Run Public Service Announcement on Local Radio Stations</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

4.2.1.1.4 How to Become Involved

North Kansas City plans to inform individuals and groups on how to become involved in the stormwater program by providing those instructions in all materials distributed to the public. This is described in more detail in 4.2.2 Public Involvement/Participation.

4.2.1.1.5 Outreach Strategy & Partnerships

North Kansas City’s outreach strategy is to implement a variety of methods to reach a number of different target audiences multiple times. To change
behavior, repetition is important. The mechanisms are described in 4.2.1.1.3 of this permit application.

The strategy is to partner with other governmental and non-governmental entities to execute the public outreach strategy. The idea is to share information and resources so duplication does not occur. The following entities will be assisting with the effort:

1. Other Communities in the Region
2. Regional Planning Organization (MARC)

The number of people targeted to be reached by the public education and outreach strategy is Approx. 4000 per year.

4.2.1.1.5 Person Responsible

The person responsible for the overall management and implementation of the permittee’s stormwater public education and outreach program is WATER/WASTEWATER SERVICES SUPERINTENDENT. Others may be involved in the execution of each of the individual activities in the programs.

4.2.1.1.6 Evaluating Success

From a regional perspective, we can measure the success of this effort by gauging citizen knowledge and behaviors concerning waste minimization and environmental restoration. A MARC-sponsored environmental awareness survey of the Kansas City region indicated a higher level of environmental awareness than the last survey. The survey can be found at the following site:

http://www.marc.org/Environment/Water/surveys.htm
4.2.2.1  Permit Requirements

North Kansas City will comply with State and Local public notice requirements when implementing the public involvement and participation program.

4.2.2.1.1  Public Involvement Process

North Kansas City has involved the public in the development and submittal of the application and stormwater management program as follows:

1. Held a Public Hearing
2. Posted Public Meeting Announcements

North Kansas City will solicit public input on the stormwater program through various sources, including:

1. City staff will periodically meet with concerned civic groups
2. Creation of a stormwater management panel
3. Creation of a stormwater/environmental webpage that allows submissions by the public

North Kansas City plans to continue actively involving the public in the further development and implementation of the stormwater program through a number of different methods selected because they are existing effective methods used by North Kansas City or because of EPA guidance documents that list these BMPs as effective public involvement methods.

4.2.2.1.2  Target Audiences to Involve in Program

The target audiences for the permittee’s public involvement program are:
1. Citizens (Homeowners)
2. Mass Media
3. Local Elected Officials
4. Civic Groups
5. Teachers
6. Youth

4.2.2.1.3  Public Involvement Activities

North Kansas City plans will involve the public through the activities described below:
4.2.2.1.3.1 Stormwater Management Panel

North Kansas City will create a stormwater management panel comprised primarily of staff, but will be open to council members and other concerned members of the community. The City will also participate in the Choose Environmental Excellence program.

4.2.2.1.3.2 Public Hearings

City Council meetings are open to the public and provide time on the agenda for public comments on any subject.

4.2.2.1.3.3&4 Citizen Volunteers

Citizen volunteers can participate in the City’s drain stenciling program. North Kansas City also partners with the Boy Scouts of America to stencil 500 drain markings per year.

4.2.2.1.4 Public Involvement

A stormwater management panel will be created specifically to gather input from the public concerning direction and implementation of stormwater corrective measures taken within the City. This panel will also review stormwater concerns/requests for work that are submitted on the City’s website.

4.2.2.1.5 Evaluating Success

North Kansas City selected the measurable goals for each of the BMPs after reviewing EPA & ASCE research on the effectiveness of certain BMPs. The implementation of BMPs selected will determine the success of the measure on water quality.
North Kansas City will also implement a work order system. This system will track stormwater issues and the City’s response to those issues as an additional measure of success.
MCM #3: Illicit Discharge Detection and Elimination

4.2.3.1 Permit Requirement

North Kansas City has implemented and enforced a program to detect and eliminate illicit discharges (as defined in 10 CSR 20-6.200) within the City’s corporate limits. The, “Illicit Discharge and Connection – Stormwater,” (Chapter 15.55) can be found at: http://library.municode.com/index.aspx?clientId=16014

4.2.3.1.1 Map

North Kansas City has developed a GIS-based storm sewer system network map, showing the location of all outfalls and the names and location of all waters of the State that receive discharges from those outfalls. This network allows for tracing of flow in order to assist with illicit discharge investigations. The stormwater data layer is fully integrated with all of the other GIS-data layers including one-foot contours, sanitary sewers, planimetric data, and impervious surfaces.

The City will acquire new aerial photography at least once each permit cycle.

Updates to the stormwater sewer network occur when as-constructed building plans are submitted and approved or corrections are found in the field (changes submitted via a Map Correction standard form). The following sources are used to compile maps:

As-built drawings
Survey Records
Sewer Maintenance Records
Aerial Photography

4.2.3.1.2 Enforcement

North Kansas City effectively prohibits non-stormwater discharges into the stormwater system via the ordinances and regulations. Each ordinance/regulation is enforceable by North Kansas City with appropriate procedures and consequential actions.

4.2.3.1.3 Methods to Detect
North Kansas City will detect and address illicit discharges to the MS4, including discharges from illegal dumping and spills. North Kansas City's program will address on-site sewage disposal systems that flow into the MS4.

North Kansas City will implement a plan using the following methods to detect and address non-stormwater discharges, including illegal dumping to the stormwater system:

<table>
<thead>
<tr>
<th>Method</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed Circuit Television (As needed)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Outfall/Manhole Inspection Program</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Visual Inspection</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Smoke Testing</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Dye Testing</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Public Watch Programs</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

The North Kansas City Fire Department's hazardous materials team responds to emergency spills and containment issues. Spill absorbent materials are also available at Public Works facilities throughout the city.

4.2.3.1.3.1 Priority Areas

North Kansas City will use the system maps identified in 4.2.3.1.1 above and other data to identify priority areas with likelihood of illicit connections. The City will also use televised inspection of older sewer lines to determine priority areas for corrective action.

4.2.3.1.3.2 Tracing Illicit Discharge Sources

North Kansas City will develop an illicit discharge detection program based upon the EPA IDDE Guidance Manual to trace illicit discharges to the source.

The City uses the mapping system described in 4.2.3.1.1 to back trace pollutant sources.

4.2.3.1.3.3 Removal

North Kansas City will follow the ordinance adopted and the enforcement mechanisms detailed in the City's ordinance for the effective removal of any identified illicit connection.
4.2.3.1.3.4 Enforcement

North Kansas City will use the following mechanism to effectively prohibit illicit discharges to the MS4:

1. City Ordinance
2. Inspection

This mechanism was selected because ordinances are commonly used by North Kansas City to establish laws and set forth the enforcement mechanisms. The ordinance establishes legal authority to: regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) of stormwater discharges by any use; to prohibit illicit connections and discharges to the MS4; and to establish legal authority to carry out all inspections, surveillance and monitoring procedures necessary to ensure compliance.

North Kansas City will ensure implementation of the mechanisms described above with the following enforcement actions:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discontinue Water Service</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Civil Penalties</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

4.2.3.1.3.5 Informing the Public and Employees

North Kansas City will inform public employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste using the following methods:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Programs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural Training for City Staff</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Distribute Literature</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Post Signs</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Volunteer Programs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storm Drain Stenciling</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Household Hazardous Waste Collection</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Illegal Dumping Hotline</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Where applicable, the information distributed through these means will coordinate with the information distributed in the Public Education minimum control measure (e.g., consistent/coordinated messages in literature).

4.2.3.1.3.6 Program Evaluation

North Kansas City will evaluate this program by the quantity of the following measures:

- Linear feet of mains that are smoke tested
- Visual inspections of manholes, catch basins, and outfalls
- Calls received on the hotline

The success of the described program will be evaluated annually by analyzing the number of illicit connections discovered and eliminated.

4.2.3.1.4 Not Significant Contributors

North Kansas City has not identified any of the following categories of non-stormwater discharges or flows (i.e. illicit discharges) as significant contributors to pollutants to their small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined in 10 CSR 20-6.200), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pumps, footing drains, lawn watering, flows from riparian habitats and wetlands, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-stormwater and will only be addressed where they are identified as significant sources of pollutants to waters of the State.)

4.2.3.1.5 Occasional Incidental Non-Stormwater Discharges

North Kansas City's illicit discharge ordinance does not include a list of other similar occasional incidental non-stormwater discharges (e.g. Non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges because they are not reasonably significant sources of pollutants to the MS4. Should these occasional or incidental non-stormwater discharges be identified in the future, those entities responsible for discharging will be prohibited or conditions placed on them so as to minimize their discharge of pollutants.
North Kansas City’s **WATER/WASTEWATER SERVICES SUPERINTENDENT** and the **DIRECTOR OF CODES ADMINISTRATION** will be responsible for overall management and implementation of North Kansas City’s stormwater illicit discharge detection and elimination program. Others will be involved in the execution of each of the individual activities in the programs, but most of the activities will be delegated through the Public Works Department.

North Kansas City’s municipal code 15.55.100 allows inspection and enforcement authority for industries and commercial enterprises within the jurisdictional limits of the City of North Kansas City.
MCM #4: Construction Site Stormwater Runoff Control

4.2.4.1 Permit Requirements

North Kansas City plans to enforce its policies & procedures concerning construction site stormwater run-off control to construction activities that result in disturbance of greater than or equal to one (1) acre. North Kansas City also plans to reduce pollutants and storm water run-off from construction activities that disturbs an area less than one (1) acre if the site is part of a larger common plan of development or sale.

4.2.4.1.1 Regulatory Mechanism

North Kansas City will continue to use its adopted ordinance with the required erosion and sediment controls, as well as sanctions to ensure compliance.

4.2.4.1.1.1 Best Management Practices (BMPs)

North Kansas City will require construction site operators to implement the appropriate erosion and sediment control Best Management Practices (BMPs) based on the adopted Kansas City Metro American Public Works Association’s (APWA) Erosion and Sediment Control Manual in their ordinance which includes the construction specification and design standards.

4.2.4.1.2 Wastes to be controlled

North Kansas City will require construction site operator to control wastes that may cause adverse impacts to water quality such as:

1. Discarded Building Materials
2. Concrete Truck Washout
3. Sediment
4. Litter or Trash
5. Sanitary Waste

4.2.4.1.3 Site Plan Review

North Kansas City will continue to utilize procedures in their ordinance for site plan review (multi-departmental), which will incorporate consideration of potential water quality impacts.
4.2.4.1.4 Receipt & Consideration of Public Comment

North Kansas City will accept and evaluate any information submitted by the public. Significant development/redevelopment projects are approved by the Planning Commission and City Council prior to issuance of construction permits. The public has opportunity to speak concerning significant projects proposed in City Council session and/or the Planning Commission meetings as well as staff contacts through various media.

4.2.4.1.5 Site Inspection

North Kansas City will continue to perform inspections on all construction sites and ensure enforcement of erosion and sediment control measures. The sites will be inspected using a priority rating system. The site with the most potential risk to the community will be top on the priority list.

4.2.4.1.6 Regulatory Mechanism and Enforcement

North Kansas City will continue to enforce the adopted Kansas City Metro APWA BMP's ordinance that will require the use of erosion and sediment controls on construction sites. This ordinance outlines the requirements for designers and contractors before, during and after the construction activities. The ordinance will provide enforcement measures for those designers and contractors who do not follow the ordinance.

Other mechanisms that will be available to anyone involved in design and construction of erosion and sediment control activities include:

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Methodologies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMP Fact Sheets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Plans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Specifications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Details</td>
<td></td>
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<tr>
<td>Ordinance</td>
<td></td>
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<td></td>
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<tr>
<td>Staff Training</td>
<td></td>
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</tbody>
</table>

North Kansas City will ensure compliance with the adopted ordinance by including an enforcement section in the ordinance detailing the sanctions and enforcement mechanisms. North Kansas City will use the following sanctions:

1. Non-Monetary Penalties (such as Stop Work Orders)
2. Permit Denial for Non-Compliance
3. Ordinance

The person responsible for overall management and implementation of the construction site storm water runoff control program is the CODES DIRECTOR. Others will be involved in the execution of each of the individual activities in the programs.

4.2.4.1.7 Measurable Goals

The Codes Department can track required enforcement actions over time. North Kansas City measures success of this program by the downward trend of citations, fines, and enforcement actions taken against the development community.
MCM #5: Post-Construction Stormwater Management in New Development and Redevelopment

4.2.5.1 Permit Requirement

North Kansas City will continue to enforce its program that addresses stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.

4.2.5.1.1 Strategies

North Kansas City has implemented APWA-KC section 5600, “default,” protection strategy, as defined in 5601.5.A.4.a, which requires a combination of structural and/or non-structural Best Management Practices (BMP’s).

4.2.5.1.2 Regulatory Mechanisms

North Kansas City will use ordinance #8248 and other regulatory mechanisms to address post-construction runoff from new development and redevelopment projects to the extent allowable under Federal, State, and Local laws.

North Kansas City will implement regulatory procedures that will be specifically tailored for the community and will maintain pre-development runoff conditions to the maximum extent practicable.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforcement of Ordinance</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Publication of BMPs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

North Kansas City will implement policies and ordinances that will help minimize water quality impacts.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain and/or Increase Open Space</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Minimize Impervious Surfaces</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

North Kansas City will ensure compliance with the developed ordinance by way of sanctions and enforcement mechanisms. North Kansas City will implement the following sanctions in their ordinance:
1. Non-Monetary Penalties (such as Stop Work Orders)
2. Permit Denial for Non-Compliance
3. Nuisance abatement

4.2.5.1.3 Long-Term Operation & Maintenance

North Kansas City will ensure adequate long-term operation and maintenance of ordinances and BMPs by way of sanctions and enforcement mechanisms. North Kansas City has implemented the following sanctions in their ordinances:
- Non-Monetary Penalties/Stop Work Orders
- Fines
- Permit revocation for non-compliance

4.2.5.1.4 Priority Areas

North Kansas City will implement regulatory procedures to address stormwater runoff from all new development and redevelopment projects greater than one acre. There are no areas identified as a priority for regulatory procedures.

4.2.5.1.5 Non-Structural Measures

The City will review existing ordinances and standards related to development and redevelopment in order to determine if they hinder or promote water quality protection. These ordinances may include, but are not limited to: parking requirements, weed ordinances, subdivision codes, zoning codes, stream setbacks and street standards. Regulations and standards will be amended as necessary to better address water quality protection during the 2013-2018 permit cycle.

4.2.5.1.5.2 Infill Development

The City of North Kansas City is extensively built out. Infill development of greater than one acre will be minimal and is therefore not considered a priority for this program.

4.2.5.1.5.3 Education

North Kansas City will implement education programs for developers and the public about project designs that minimize water quality impacts.

4.2.5.1.5.4 Best Management Practices
Source control measures often thought of as good housekeeping, preventative maintenance, and spill prevention are encouraged by offering Household Hazardous Waste collection days throughout the year.

4.2.5.1.6 Structural BMPs

North Kansas City will implement the following structural BMPs:

<table>
<thead>
<tr>
<th>Structural BMPs</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detention/Retention</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Filtration Practices</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Microdetention Practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Infiltration Practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

4.2.5.1.7 Evaluate Success

North Kansas City will evaluate success by a reduced number of citations and fines issued to the development community as a result of education and compliance with ordinances that have been put in place.
**MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations**

4.2.5.1 Permit Requirement

North Kansas City has developed and implemented an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

4.2.6.1.1 Municipal Operations

All departments who have potential to impact water quality including Public Works, Fire, Police, and Parks are covered by this operating permit. The water plant and the abandoned landfill each have separate and distinct NPDES permits and specific limits associated with them. (Permits MOR040013 and MO704706)

4.2.6.1.2 Maintenance

North Kansas City has implemented pollution prevention and good housekeeping measures in the following areas:

<table>
<thead>
<tr>
<th>Catch Basin Cleaning</th>
<th>Street Sweeping</th>
<th>Recycling Program</th>
<th>Maintenance Schedule</th>
<th>Maintenance Activities</th>
<th>Ensure Proper Disposal of Animal Waste</th>
<th>Employee Training</th>
</tr>
</thead>
</table>

4.2.6.1.3 Pollution Reduction

North Kansas City reduces potential pollutants from municipal operations by street sweeping operations. Hazardous materials are stored indoors in appropriate spill containment facilities. Our road salt storage is stored in covered/closed facilities. Fleet maintenance is performed in covered areas with appropriate spill containment. All streets are swept every 7-10 days.

4.2.6.1.4 Controls

North Kansas City controls/programs have been implemented to reduce or eliminate the discharge of pollutants from city-owned facilities:
4.2.6.1.5 Waste Disposal

North Kansas City’s standard procedure for the disposal of dredge spoil, accumulated sediments, floatables, and other debris from our storm sewer system is disposal in the landfill which is regulated by state and federal guidelines.

4.2.6.1.6 Flood Management

The APWA-KC Section 5600 requirements for water quality are implemented by the City of North Kansas City on all flood management projects and practices.

North Kansas City will review their current regulations concerning flood management to ensure they allow for:
1. Assessment and implementation of solutions that address impacts to water quality for new projects and;
2. Review of existing projects for inclusion of water quality aspects

4.2.6.1.7 Training Program

Using training materials that are available from EPA, State and other organizations, North Kansas City’s program will include employee training to prevent and reduce stormwater pollution from activities.

North Kansas City has implemented an employee-training program in the following areas so as to prevent and reduce stormwater pollution from the following activities:

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park and Open Space Maintenance</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fleet and Building Maintenance</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Street Maintenance</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
These activities will be coordinated with the outreach programs developed for the public information and illicit discharge minimum control measures so that a consistent message is presented throughout North Kansas City's program.

**PUBLIC WORKS DIRECTOR** will be responsible for overall management and implementation of the pollution prevention and good housekeeping program for North Kansas City. Others will be involved in the execution of each of the individual activities in the programs.

4.2.6.1.8 Program Evaluation

North Kansas City will evaluate the success of the pollution prevention/good housekeeping minimum control measure by tracking the progress of each measure against the implementation schedule and monitoring compliance by city personnel. Each one of the measures described in this permit was chosen based on its ability to be implemented by North Kansas City staff and impact on water quality.
Renewal for MS4 permit for the City of North Kansas City per Jimmy Coles

<table>
<thead>
<tr>
<th>Total remitted</th>
<th>$150.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>WP 05 Generals MO-G &amp; MO-R</td>
<td>(none, none) - $150.00</td>
</tr>
</tbody>
</table>

The charge will show on your account as:

CSI MO Dept of Natural Resour