DARDENNE PRAIRIE

CITY OF DARDENNE PRAIRIE

STORM WATER MANAGEMENT PROGRAM

Renewal Application

Missouri Operating Permit Number (NPDES) MO-R040024

May 13, 2013

PRESERVING OUR STREAMS

A Part of the Environmental Protection Agency's
National Pollution Discharge Elimination System Phase II Storm Water Management

THE CITY OF DARDENNE PRAIRIE

City of Dardenne Prairie Mayor and Board of Aldermen Members

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City Administrator: Frank Schoneboom

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Administration Department:
Kimberlie Clark, City Clerk / City Treasurer

Engineering Department:
Luke Kehoe, City Engineer

Legal Department:
David Hamilton, City Attorney
John Young, City Attorney

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INTRODUCTION

MISSION AND PURPOSE OF THE PROGRAM

The Dardenne Prairie Storm Water Management Program (SWMP) provides a comprehensive approach to storm water pollution management within the City. Specifically, the Program is designed to oversee the implementation of the NPDES Phase II requirements within the City. The City is currently operating under MDNR NPDES Phase II Permit No. MOR040024, which was approved in April 2003. All implementation times presented in the report reference the start date to be the time of permit approval.

The Program has established a five year action plan that will direct Dardenne Prairie's storm water management. The primary means of improving storm water runoff quality is through the use of best management practices (BMPs). This report outlines the tenth year and 2nd renewal to the approved Program and the current status of BMPs under the six program areas. These six program areas are:

1. Public education and outreach on storm water impacts.
2. Public involvement/participation.
3. Illicit discharge detection and elimination.
4. Construction site storm water runoff control.
5. Post-construction storm water management in new development and redevelopment.
6. Pollution prevention/good housekeeping for municipal operations.

DARDENNE PRAIRIE GEOGRAPHIC INFORMATION

Since the Program was implemented, Dardenne Prairie has performed the following annexations, adding to its total geographic area:

1. 2003:
    a. Ordinance 664, August 2003 – 9.0 acres
    b. Ordinance 710, November 2003 – 3.8 acres
    c. Ordinance 711, November 2003 – 3.9 acres
    d. Ordinance 712, November 2003 – 3.8 acres
    e. Ordinance 713, December 2003 – 1.3 acres
2. 2004:
    a. Ordinance 759, June 2004 – 8.4 acres
    b. Ordinance 834, December 2004 – 3.6 acres
3. 2005
    a. Ordinance 873, May 2005 – 10.1 acres
    b. Ordinance 898, June 2005 – 9.8 acres
    c. Ordinance 916, August 2005 – 212.9 acres
    d. Ordinance 928, September 2005 – 2.9 acres
4. 2006 (none)

5. 2007
    a. Ordinance 1145, April 2007 – 10.0 acres
    b. Ordinance 1157, May 2007 – 25.3 acres
    c. Ordinance 1162, May 2007 – 4.0 acres
    d. Ordinance 1167, June 2007 – 12.3 acres
    e. Ordinance 1174, June 2007 – 2.0 acres
    f. Ordinance 1187, July 2007 – 1.3 acres
    g. Ordinance 1202, August 2007 – 17.2 acres
    h. Ordinance 1207, August 2007 – 4.3 acres
    i. Ordinance 1233, November 2007 – 3.8 acres
6. 2008 (none)
7. 2009
    a. Ordinance 1203, November 2009 – 5.6 acres (Walmar)
    b. Ordinance 1204, November 2009 – 0.9 acres (Bryan Road Retail)
8. 2010 (none)
9. 2011
    a. Ordinance 1546, April 2011 – 175 acres (Bopp)
    b. Ordinance 1548, February 2011 – 1.0 acres (Martin)
10. 2012
    a. Ordinance 1626, May 2012 – 3.65 acres (Yancey)
    b. Ordinance 1634, July 2012 – 1.84 acres (Krah)
    c. Ordinanace 1637, July 2012 – 0.92 acres (Lumley)

This has resulted in a total increase of approximately 537.84 acres to the City's boundaries. Please refer to Appendix "A" for the City's current SWMP map.

The legal descriptions for the locations of the storm sewer outfalls with 36" equivalent diameter and larger that are shown in the City's SWMP map are provided in Appendix "C".

STORM WATER MANAGEMENT PROGRAM

As previously discussed, this Program implements the following measures aimed at the reduction of storm water pollution:

1. **Public education and outreach on storm water impacts.**

2. **Public involvement/participation.**

3. **Illicit discharge detection and elimination.**

4. **Construction site storm water runoff control.**

5. **Post-construction storm water management in new development and redevelopment.**

6. **Pollution prevention/good housekeeping for municipal operations.**

SECTION 1

Minimum Control Measure 1 – Public Education and Outreach on Storm Water Impacts

NPDES Phase 2 Discussion

The overall thrust of the EPA program is to ensure that storm water related educational efforts adequately reach all types or categories of citizens within the community and that special emphasis is placed on intercepting those sources of pollution particular to Dardenne Creek and Lake St. Louis and their tributary waters. The EPA believes that as various sectors of the community are educated and informed; their support for program initiatives will grow.

There is a single mandatory component requiring:

M1. Implementation of a public education program to distribute educational materials to the community, or conduct equivalent outreach activities regarding the impacts of storm water discharge on water bodies and steps that can be taken to reduce storm water runoff.

1. IMPLEMENTATION STATUS:

a. General Summary:

In accordance with the permit, there are two action items the City will implement to address this minimum control measure:

1A. Create a storm water web page to provide the public with information on storm water pollution and storm water management within Dardenne Prairie. The site will also feature access to a storm water problem reporting form that can be used to notify the City of storm water concerns, detect illicit discharges, and provide input from the community on storm water management within Dardenne Prairie. The storm water problem reporting form will be filed with the City Clerk for citizens to access.

- Measurable Goal: Availability of the storm water web page.
- Measurable Goal: Documented and filed storm water problem reporting forms.

1B. Addition of a storm water impact section to the City's Newsletter. Twice each year, Dardenne Prairie will include a storm water impact section to the City Newsletter that will inform citizens of the website and the problem reporting form, describe where citizen's may obtain information related to storm water pollution, request volunteers for Clean Stream activities (See Section 2, Item 2B), and describe a different issue with each publication related to storm water pollutant runoff. The City's newsletter goes to each Dardenne Prairie household.

- Measurable Goal: City residences receiving storm water awareness sections in their newsletter semi-annually.

b. Program Elements Refined:

No Program elements have been refined for the area of public education.

c. Status of Measurable Goals:

These Program elements have been implemented and are planned to continue.

2. **OVERALL COMPLIANCE WITH PERMIT CONDITIONS:**

a. Assessment of the Appropriateness:

These program elements should serve well to educate the public. Dardenne Prairie is a small community with a great deal of information exchanged to homeowner's and builders through the website and newsletter.

b. Progress towards achieving the statutory goal:

The overall effectiveness of the public education area for this permit should be most beneficial to homeowners and home builders in the City. These are probably the main contributors to any potential storm water pollution; even more so than agricultural users in the City.

3. **INFORMATION COLLECTION AND ANALYSIS:**

No online illicit discharge-related complaints have been received by the City through the online information and complaint reporting web page.

4. **SUMMARY OF ACTIVITIES FOR THIS REPORTING CYCLE:**

Storm water web page relaunched to provide the public with information on storm water pollution and storm water management within the City.

Ongoing storm water web page and newsletter inserts (targeted twice annually) Storm water impact articles have been included in the City's newsletter per the following:

Mid Rivers News Magazine	06/27/12	Storm Sewer Questions and Answers
Mid Rivers News Magazine	11/07/12	Discharges into Storm Sewers
Mid Rivers News Magazine	03/06/13	Detention Basin Inspection Program

The storm water impact newsletter articles that have been distributed to the residents of the City have been focused on public education in the areas of general storm water/storm sewer system explanation, illicit discharges, and how to report illegal dumping.

5. **PROPOSED CHANGES TO THE PROGRAM:**

a. Changes to BMPs:

Make BMP information available to homebuilders through the City's website and City Hall.

b. Changes to Measurable Goals:

None in this reporting cycle.

6. **RELIANCE ON OTHER GOVERNMENT AGENCIES:**

Dardenne Prairie is not relying on any other agency for the implementation of its public education program area.

7. **SUMMARY OF NUMBER AND NATURE OF INSPECTIONS AND FORMAL ENFORCEMENT ACTIONS:**

No inspection or formal enforcement actions have been taken for this program area in this reporting cycle.

SECTION 2
Minimum Control Measure 2 – Public Involvement and Participation

NPDES Phase 2 Discussion

The specific goals of this minimum control measure are to: (1) ensure that public notice requirements are met, and (2) that citizens have both a voice and involvement in the ongoing storm water program so that they feel they have a stake in the success in the program and a sense of ownership.

This Minimum Control Measure is designed to support the public education component described in Minimum Control Measure 1 by:

M1. Ensuring adequate public notice be provided by municipalities regarding storm water related activities;
M2. Developing and implementing formal procedures designed to provide organized citizen input to the decision making process, and;
M3. Empowering citizens and citizen organizations, to enhance community support for city activities related to storm water management.

This is a single mandatory component that requires the City to comply with State and local public notice requirements. There are also three *suggested* components;

S1. Inclusion of the public in developing, reviewing, and implementing the City storm water management program;
S2. Efforts to involve all economic and ethnic groups in the public participation process, and;
S3. Development of a formalized citizen work group (stakeholders) to participate in decision-making, hold public hearings, and work with volunteers.

1. IMPLEMENTATION STATUS:

a. General Summary:

In accordance with the permit, at a minimum, Dardenne Prairie will develop sufficient public notice actions to be in compliance with NPDES public notice permit requirements. The City plans to develop public notice procedures in support of ongoing programs such as advertising group meetings, providing public notices of storm water management policy hearings, and other informational meetings in accordance with State requirements.

2A. Describe and document public notice procedures for storm water related activities in accordance with Missouri public notice requirements. These may include public notice being provided for adopting the storm water management policy, new ordinances related to storm water management, or major development projects that could have an impact to storm water runoff

- Measurable Goal: Maintain documentation (i.e. copies of postings, news releases, and public notice ads) of public notices for storm water related ordinances and other

actions, if required by the State.

2B. Enlist volunteers and continually participate in the stream cleanup day. Volunteers from area municipalities and organizations remove trash, debris, and other pollutants from local creeks.

- Measurable Goal: Notification of the event in the City's newsletter.
- Measurable Goal: Participation in the Dardenne Creek Clean Stream Day yearly.

2C. Development of a Storm Water Problem Reporting Form that will be accessible from the storm water section of the City's web site and made available with the City Clerk and provide regular notification of this form (See Section 1).

2D. Participation in the creation of the Dardenne Creek Greenway Commission which commissioned the comprehensive study and planning of a new Greenway along Dardenne Creek. The Dardenne Creek Greenway Study is to improve water quality and storm water management; provide community trails and connections; improve, restore, expand and ensure safe local parks; increase public access to the greenway experience; and preserve wildlife habitats. This study shall be used by each community involved in the project to program the above described purposes. The Communities involved are:

St. Charles County, City of St. Peters, City of O'Fallon, City of Dardenne Prairie, City of Cottleville and the City of St. Charles.

Other interested and participating organizations include the U.S. Army Corps of Engineers, The Greenway Network, St. Charles County Land Trust, USDA Natural Resources Conservation Service, the Missouri Department of Conservation and the Great River Alliance.

- Measurable Goal: Completed Dardenne Creek Greenway Study
- Approximately 93-acre Dardenne Greenway at BaratHaven City Park is now built.
- Approximately 75-acre Dardenne Greenway Bluebird Meadow City Park is planned to be developed in 2013.

b. Program Elements Refined:

The City will create policy for public notice procedures and retain copies of the public notices that are provided for the stormwater management program meetings and hearings.

c. Status of Measurable Goals:

Enlist volunteers and continually participate in a stream cleanup day. Volunteers from area municipalities and organizations remove trash, debris, and other pollutants from local creeks. This year, 38 people participated in the stream cleanup, which included the cleanup of Dardenne Creek at BaratHaven Park and the unnamed tributary to Dardenne Creek that flows between Feise Road and White Birch Lane.

2. **OVERALL COMPLIANCE WITH PERMIT CONDITIONS:**

a. Assessment of the Appropriateness:

These program elements serve well to involve the public. However, public notice procedures and receiving input from the public will only be limited to minimum State requirements similar to that required of public notice for zonings in cities.

b. Progress towards achieving the statutory goal:

The overall effectiveness of the public involvement area for this permit should be beneficial for raising awareness of storm water pollutants and storm water management for citizens in the City. The focus on the City's main creek system, Dardenne Creek, should make residents very aware of how runoff affects this system.

3. **INFORMATION COLLECTION AND ANALYSIS:**

The City will collect and retain information for Public Involvement and Participation.

4. **SUMMARY OF ACTIVITIES FOR THIS REPORTING CYCLE:**

The stream cleanup event occurred on April 6, 2013.

5. **PROPOSED CHANGES TO THE PROGRAM:**

a. Changes to BMPs:

The City will collect information for analysis.

b. Changes to Measurable Goals:

N/A.

6. **RELIANCE ON OTHER GOVERNMENT AGENCIES:**

Dardenne Prairie relied on the other agencies involved in the Dardenne Greenway study. This reliance was mostly upon the U.S. Army Corps of Engineers who prepared the study.

7. **SUMMARY OF NUMBER AND NATURE OF INSPECTIONS AND FORMAL ENFORCEMENT ACTIONS:**

No inspection or formal enforcement actions have been taken for this Program area in this reporting cycle.

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SECTION 3

Minimum Control Measure 3 – Illicit Discharge Detection and Elimination

NPDES Phase 2 Discussion

The primary thrust of this Minimum Control Measure is to identify and eliminate illicit discharges to the City storm water system. There are four mandatory program components to achieve this goal. The EPA has also made two suggestions pertaining to the program.

The mandatory components require:

M1. Development of a storm sewer system map, or equivalent, showing locations of major pipes, outfalls, and topography. In addition, if data already exists (*the City is to)* show areas of concentrated activities likely to be a source of storm water pollution;
M2. Effective prohibition of illicit discharges to the City's storm sewer system through ordinance, order, or similar means (to the extent allowable under State law), including implementation of appropriate enforcement procedures and actions;
M3. Implementation of a plan to detect and address illicit discharges, including illegal dumping, to the City storm sewer system; and
M4. Actions to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of wastes.

The *suggestions* include:

S1. Development of recycling or other public outreach programs to address potential sources of illicit discharges including used motor oil, antifreeze, pesticides, herbicides, and fertilizers, and
S2. Implementation of a program to address discharges or flows from other identified sources, and assess whether such discharges or flows should be identified as significant sources of pollutants.

1. IMPLEMENTATION STATUS:

a. General Summary:

The summary of Dardenne Prairie's planned Program elements for this area is as follows:

3A. Development and implementation of an ordinance prohibiting illicit discharges to the storm water system, including funding, inspection, and enforcement mechanisms (perhaps incorporated into an overall storm water management ordinance).
- Measurable Goal: Documented Ordinance.

3B. Development of a storm water web page with access to a Storm Water Problem Reporting Form on the City's existing web site. The storm water problem reporting form will also be made available with the City Clerk (See Section 1).

3C. Addition of a storm water impact section to the City's Newsletter (See Section 1).

3D. Updating of the City's storm sewer system map showing major storm sewer discharge points, outfalls, and topography. Part of this plan will include the requirement that all new developments provide as built drawings (including CAD files) which display property lines and all storm water discharge points for consolidation in a master database. In addition, this plan will require that business license applications include a line for a storm water runoff ranking (to be determined in the plan). These rankings will be documented in order to detect areas of concentrated activities of potential storm water pollution.

- Measurable Goal: Documented plan on record with the City Engineer.
- Measurable Goal: Documented as-built plans of all new developments on record with the City Engineer, which display storm sewer outfalls.
- Measurable Goal: Documented business related storm water runoff rankings and revised business license application including storm water runoff ranking.

b. Program Elements Refined:

Ordinance No. 1635, regulating the contribution of pollutants to publicly owned storm sewers, prohibiting illicit connections and discharges to publicly owned storm drainage systems and establishing legal authority for the City to carry out inspection, surveillance and monitoring was passed in July 2012, and is attached in Appendix "B".
Ordinance No. 1636, requiring a permit from the City to operate and maintain a detention basin in the City, was passed in July 2012, and is attached in Appendix "B".

c. Status of Measurable Goals:

The information for a storm sewer system map and database has been compiled from field surveys, as-built plans, construction plans, and aerial maps. The storm sewer system map will be continuously updated with newer and better information as it is received by the City.

2. OVERALL COMPLIANCE WITH PERMIT CONDITIONS:

a. Assessment of the Appropriateness:

With the storm sewer reporting form on the City website and newsletter section inserts, these items address procedures and contact information for anyone observing illicit discharges and thereby establish a means of detecting them. Both should also provide notification of the hazards of illegal dumping to businesses and the public.

b. Progress towards achieving the statutory goal:

As discussed above, these measures are felt to be appropriate for meeting the permit requirements and preventing and eliminating illicit discharges.

3. **INFORMATION COLLECTION AND ANALYSIS:**
No information has been collected or analyzed for this Program area.

4. **SUMMARY OF ACTIVITIES FOR THIS REPORTING CYCLE:**
The storm sewer system map will continually be updated on a regular basis. No other activities are anticipated for this reporting cycle.

5. **PROPOSED CHANGES TO THE PROGRAM:**
a. Changes to BMPs:
The City will develop written procedures for construction site inspections. The City will collect and retain information for Illicit Discharge Detection and Elimination in a database tracking system for inspections, findings and follow ups.
b. Changes to Measurable Goals:
N/A.

6. **RELIANCE ON OTHER GOVERNMENT AGENCIES:**
Dardenne Prairie is not relying on any the other agencies for compliance with this program area.

7. **SUMMARY OF NUMBER AND NATURE OF INSPECTIONS AND FORMAL ENFORCEMENT ACTIONS:**
No inspection or formal enforcement actions have been taken for this Program area in this reporting cycle.

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SECTION 4

Minimum Control Measure 4 – Construction Site Storm Water Runoff Control

NPDES Phase 2 Discussion

The primary thrust of this program is to ensure that construction sites control on-site erosion and sedimentation during construction activities, and limit the exposure of storm water to pollutants. There are four mandatory and *no suggested* components of this minimum control measure. The mandatory components are:

M1. Development, implementation, and enforcement of a program to reduce pollutants in storm water runoff to the City storm sewer system from construction activities that result in land disturbance greater than or equal to one acre;

M2. Development and implementation of an ordinance or other regulatory mechanism to control erosion and sedimentation to the maximum extent practicable and allowable under State law;

M3. Requirements for construction site owners or operators to implement appropriate BMPs (i.e., silt fences, temporary detention ponds, etc.); and

M4. Pre-construction review of site management plans, regular inspections during construction, penalties to ensure compliance, and formal procedures for receipt and consideration of information and inquiries submitted by the public.

1. IMPLEMENTATION STATUS:

a. General Summary:

The City of Dardenne Prairie has already taken a number of steps that will contribute toward compliance with the Program Area of Construction Site Storm Water Runoff Control. These regulations include:

4A. Chapter 412 of the City Code:

- It shall be unlawful for the owner of a property and/or that owner's agent to perform land disturbance activities affecting five thousand (5,000) square feet or more (including portions of development sites which have an active building permit) without obtaining a land disturbance permit. (Ord. No. 1155 §3, 5-16-07; Ord. No. 1510 §2, 7-21-10)

b. Program Elements Refined:

In April 2003, the City passed a grading ordinance, Ordinance No. 635, which was previously provided, updating the grading permitting procedures of the City so that all land disturbance greater than or equal to 10,000 square feet to obtain permits, the standard siltation control details are the most current and effective structural BMPs, and all grading operations follow-up standard revegetation requirements.

In August 2007, the City passed a land disturbance ordinance, Ordinance No. 1155 attached in Appendix "B", creating a permitting procedure for all land disturbances greater than or equal to 5,000 square feet to obtain a land disturbance permit.

The type, size and length of development projects have significantly changed within the City due to the downturn in the economy. Land development projects have become more lot-by-lot type development by home builders who may or may not be the primary property owner. In response to this change in the market, in July 2010, the City passed a land disturbance ordinance, Ordinance No. 1510, which was previously provided and includes a permitting procedure for all land disturbances greater than or equal to 5,000 square feet.

c. Status of Measurable Goals:

Ordinance No. 635 regulating grading operations was passed in April 2003. Ordinance No. 1155 creating a new chapter of the Municipal Code (Erosion and Sediment Control Regulations) regulating land disturbances was passed in August 2007. Ordinance No. 1510 specifically addressing erosion and sediment control in portions of development sites which have an active building permit.

2. OVERALL COMPLIANCE WITH PERMIT CONDITIONS:

a. Assessment of the Appropriateness:

The City feels that these measures are highly appropriate for construction sites. Regular inspections of developments are made and deficiency letters are issued with follow-up dates assigned.

b. Progress towards achieving the statutory goal:

These measures have been highly effective at creating standards for developers and citizens to follow. Applicants that apply for grading permits are becoming more familiar with City standards for construction site run-off control. If nothing else, these ordinances have effectively established the criteria that the City expects for pollution prevention at construction sites.

3. INFORMATION COLLECTION AND ANALYSIS:

No information has been collected or analyzed for this program area.

4. SUMMARY OF ACTIVITIES FOR THIS REPORTING CYCLE:

Implementation for this program area has been completed.

5. PROPOSED CHANGES TO THE PROGRAM:

a. Changes to BMPs:

No changes are proposed for the Program area's BMPs.

b. Changes to Measurable Goals:

N/A.

6. RELIANCE ON OTHER GOVERNMENT AGENCIES:

Dardenne Prairie is not relying on any the other agencies for compliance with this program area.

7. SUMMARY OF NUMBER AND NATURE OF INSPECTIONS AND FORMAL ENFORCEMENT ACTIONS:

Roughly 6 enforcement letters were issued in this last reporting period requiring developers to maintain erosion and/or siltation control on their site. No other penalties were distributed by the City for violations.

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SECTION 5

Minimum Control Measure 5 – Post-Construction Storm Water Management in New Development and Redevelopment

NPDES Phase 2 Discussion

The purpose of this Minimum Control Measure is to ensure that land development and redevelopment projects meet storm water BMP requirements, and that structural and non-structural BMPs are maintained in functional condition so that removal of storm water pollutants is not compromised. In order to accomplish this, the City will need to undergo a major reorientation in its development methods and approach. The approach will need to begin to incorporate full consideration of water quality impacts of development from the initial planning stages through post-construction maintenance and operation. This reorientation will affect zoning ordinances, subdivision regulations, the comprehensive planning process, construction site plan review and inspections, design criteria and guidance, the use of regional BMPs and master plan implementation. This will be a long-term process of change that needs to be masterminded and appropriately guided every step of the way. There will be a great need for consensus building and public education.

Development of a complete description of this Minimum Control Measure is not possible at this time without much more detailed discussions. However, the main points contained within this Measure will be briefly discussed.

There is one, programmatic mandatory component and a lengthy set of suggestions for this minimum control measure. The mandatory component includes development of a complete post-construction BMP-based water quality program including:

M1. Development, implementation, and enforcement of a program to address storm water runoff from new development and redevelopment projects that result in land disturbance of greater than or equal to one acre and that discharge to the City storm sewer system;
M2. Implementation of site-appropriate and cost-effective structural and nonstructural BMPs,
M3. Provisions ensuring adequate long-term BMP operation and maintenance; and
M4. Inclusion of in-place controls that would prevent or minimize water quality impacts.

1. IMPLEMENTATION STATUS:

a. General Summary:

The City of Dardenne Prairie has already taken some steps that will contribute toward compliance with Program Area 5. Other items are planned for implementation as part of this permit. These items are outlined as follows:

5A. The development of ordinances that prohibit the release of any material except water from property, require documented minimum erosion and siltation control standards, and establish penalties for non-compliance (See Section 4, Item 4A.)

5B. Participation in the creation of the Dardenne Creek Greenway Commission which

undertook the comprehensive study and planning of a new Greenway along Dardenne Creek. (See Section 2, Item 2D.).

5C. Development of a comprehensive storm water policy that seeks to integrate storm water considerations in current regulations and comprehensive planning. This will include the development of internal policies, modification of ordinances, educational materials, inter-staff coordination, education, etc. The City should also document all activities sufficient for permit application and annual update purposes. This policy will be finalized with the update to the City's Comprehensive Plan.

- Measurable Goal: Documentation of the completed policy this upcoming year.
- Measurable Goal: Documented Revised Ordinances for compliance with the policy.
- Measurable Goal: Establishment of a means for long-term maintenance funds through the policy.

b. Program Elements Refined:

The creation of a comprehensive storm water policy document that examines all City planning and development procedures/ordinances was planned to occur previously as a part of an update to the City's Comprehensive Plan, which has not yet occurred. The City's Comprehensive Plan was last updated in 2002. An update of the City's Comprehensive Plan is now being discussed and is expected to occur this year.

c. Status of Measurable Goals:

The City is currently developing a quality post-construction runoff program. The City has held public hearings on the creation of a storm water regulation that requires mandatory watercourse protection and maximum extent practicable storm water runoff mimicking for new development projects. Along with this new regulation, the City will develop water quality plan review procedures.

2. OVERALL COMPLIANCE WITH PERMIT CONDITIONS:

a. Assessment of the Appropriateness:

Currently, the City's comprehensive storm water policy is a conglomerate of all City ordinances and policies related to urban storm water, which should achieve all mandatory requirements for storm water management criteria in new development and establishing post-construction operation/maintenance of the City's permit BMPs.

b. Progress towards achieving the statutory goal:

The regulations passed by the City will have a significant impact at protecting and improving water quality. What the completion of this Program area will do is provide a comprehensive policy to govern nearly all other areas.

3. INFORMATION COLLECTION AND ANALYSIS:

No information has been collected or analyzed for this program area.

SUMMARY OF ACTIVITIES FOR THIS REPORTING CYCLE:
Ordinance No. 1256 Pertaining to the construction of storm sewers regarding urban storm water quality management was passed by the City of Dardenne Prairie on December 19, 2007, and was previously provided. The ordinance provides the technical guidance necessary to comply with the flow control requirements prescribed in the City's stormwater management regulations.

4. PROPOSED CHANGES TO THE PROGRAM:

a. Changes to BMPs:
Creation of comprehensive storm water quality regulations.

b. Changes to Measurable Goals:
N/A.

5. RELIANCE ON OTHER GOVERNMENT AGENCIES:
Dardenne Prairie is not relying on any the other agencies for compliance with this program area.

6. SUMMARY OF NUMBER AND NATURE OF INSPECTIONS AND FORMAL ENFORCEMENT ACTIONS:
No enforcement actions have been taken relative to this Program Area.

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SECTION 6

Minimum Control Measure 6 – Pollution Prevention and Good Housekeeping for Municipal Operations

NPDES Phase 2 Discussion

The purpose of this Minimum Control Measure is to ensure that municipalities plan and implement good housekeeping procedures to limit introduction of pollutants that might result from municipal activities to storm water, and to educate municipal employees in this area. There are two (2) mandatory and four (4) *suggested* components of this minimum control measure.

Mandatory components include:

M1. Development and implementation of a cost-effective operation and maintenance program with the ultimate goal of preventing or reducing, pollutant runoff from municipal operations; and

M2. Training of City employees, using available training materials approved by the City, to prevent or reduce storm water pollution from government operations such as park and open space maintenance, planning, building oversight, and storm water system maintenance.

1. IMPLEMENTATION STATUS:

a. General Summary:

Currently, the City of Dardenne Prairie has a very small amount of municipal operations and therefore, municipal operations very likely do not contribute significantly to pollutant runoff. Sanitary sewer service and water service are provided by private companies and street maintenance is conducted by St. Charles County. The only possible contributor would be the municipal building, storage areas and park lands. However, it is possible that in the future the City could have municipal operations that contribute more significantly to pollutant runoff; therefore, the City plans to undertake the following activities:

6A. Develop or improve post-development best management practices at government-owned facilities as appropriate.

- Measurable Goal: A review will be conducted of each existing and planned government-owned facility to evaluate if additional best-management practices should be implemented to control storm water pollution.

b. Program Elements Refined:

Concerning item *6A.*, a review of City Hall property, which is not yet fully developed, indicates that no additional best-management practices are required be implemented to control storm water pollution at this time. The creation of a comprehensive storm water policy document that addresses procedures for improving best management practices at the newly developed City Hall property is planned to occur by this year.

c. Status of Measurable Goals:

The City is in the process of implementing a complete Pollution Prevention and Good Housekeeping for Municipal Operations program.

2. **OVERALL COMPLIANCE WITH PERMIT CONDITIONS:**

a. Assessment of the Appropriateness:

Even though the City municipal operations are small, this item will raise the awareness of urban storm water pollution for City employees. Therefore, it will make the City staff more effective at identifying concerns at sites throughout the City. It will also make certain that municipal operations are setting the pace relative to storm water pollution control. This will prevent developers from questioning the City's ability to enforce pollution prevention standards.

b. Progress towards achieving the statutory goal:

The action items in this program area will likely have the least amount of overall impact to improving water quality since so little work is done by actual municipal operations. The majority of the work will be contracted or done by utilities. Nevertheless, it will still benefit water quality in the City as a whole if City operations are aware of the need for these standards. Appropriate City staff has begun training for the prevention or reduction storm water pollution from government operations.

3. **INFORMATION COLLECTION AND ANALYSIS:**

No information has been collected or analyzed for this Program area.

4. **SUMMARY OF ACTIVITIES FOR THIS REPORTING CYCLE:**

Appropriate outside staff has taken basic MS4 employee training.

5. **PROPOSED CHANGES TO THE PROGRAM:**

a. Changes to BMPs:

The City will establish policy for all contractual agreements to include relevant water quality requirements.

The City will assess all municipal facilities this year for best management practices.

b. Changes to Measurable Goals:

N/A.

6. **RELIANCE ON OTHER GOVERNMENT AGENCIES:**

Dardenne Prairie is not relying on any the other agencies for compliance with this program area.

7. **SUMMARY OF NUMBER AND NATURE OF INSPECTIONS AND FORMAL ENFORCEMENT ACTIONS:**

No enforcement actions have been taken relative to this Program Area.

ACTION ITEM IMPACT SUMMARY TABLE SUMMARY TABLE:

Many of the proposed action items address a number of the minimum control measures. The following table provides an overall summary of each of the City's action items. This table has been updated to correspond with changes made as a result of this reporting period.

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Municipal Action Items			Control Measure Addressed			Details		
			Control	Components		Current/	Est. Implementation	Mandatory Components
Section -	Item No	Description	Measure	Mandatory	Suggested	Proposed	Time*	Est. Cost of Implementation
1 -	A	Storm Water Web Page w/ Storm Water Problem Reporting Form (Electronic and Hardcopy Files)	1 - 2 - 3 -	M1 M1, M2, M3 M3, M4	 S1, S2 S2	Current	Continual	$3,000 set-up + $1,000/yr
1 -	B	Newsletter Insert	1 - 2 - 3 -	M1 M1, M3 M4	 S1, S2	Current	Bi-annual	$3,500/yr
2 -	A	Public Notice Procedures	2 -	M1		Current	Continual	$1,000
2 -	B	Dardenne Creek Clean Stream Day	2 -	M3		Current	Annual	$200/yr
2 -	C	Same as 1-A	N/A			Current		
2 -	D	Dardenne Creek Greenway Study	2 - 5 -	M3 M2, M4	 S2	Current	Existing	N/A
3 -	A	Illicit Discharge Ordinance	3 - 2 - 5 -	M2, M3, M4 M1 M1, M4	S2	Current	Existing	$1,000 setup + $10,000/yr outfall reconnaissance
3 -	B	Same as 1-A	N/A			Current		
3 -	C	Same as 1-B	N/A			Current		
3 -	D	Storm Sewer System Map and Database	3 - 5 -	M1, M3, M4 M4	 S1, S2	Current	Continual	$55,000 set-up + $5,000 updates
4 -	A	Existing Development Ordinances	4 - 5 -	M1, M2, M3, M4 M1, M2		Current	Existing	
5 -	A	Same as 4-A	N/A			Current		
5 -	B	Same as 2-D	N/A			Current		
5 -	C	Same as 3-D	N/A			Current		
5 -	D	Comprehensive Storm Water Policy	5 - 1 - 2 - 4 - 6 -	M2, M3, M4 M1 M3 M1, M2, M3, M4	S1, S2 S1, S2 S1, S3, S4	Current Current Current Current Proposed	Continual	$10,000 (Costs will be included in the update to the Comp. Plan)
6 -	A	City Facility Review	6 -	M1, M2	S2	Proposed	1 year	$1,000

* Estimate: May vary on availability of information and degree of accuracy (all implementation periods reference the permit approval date as the start time).

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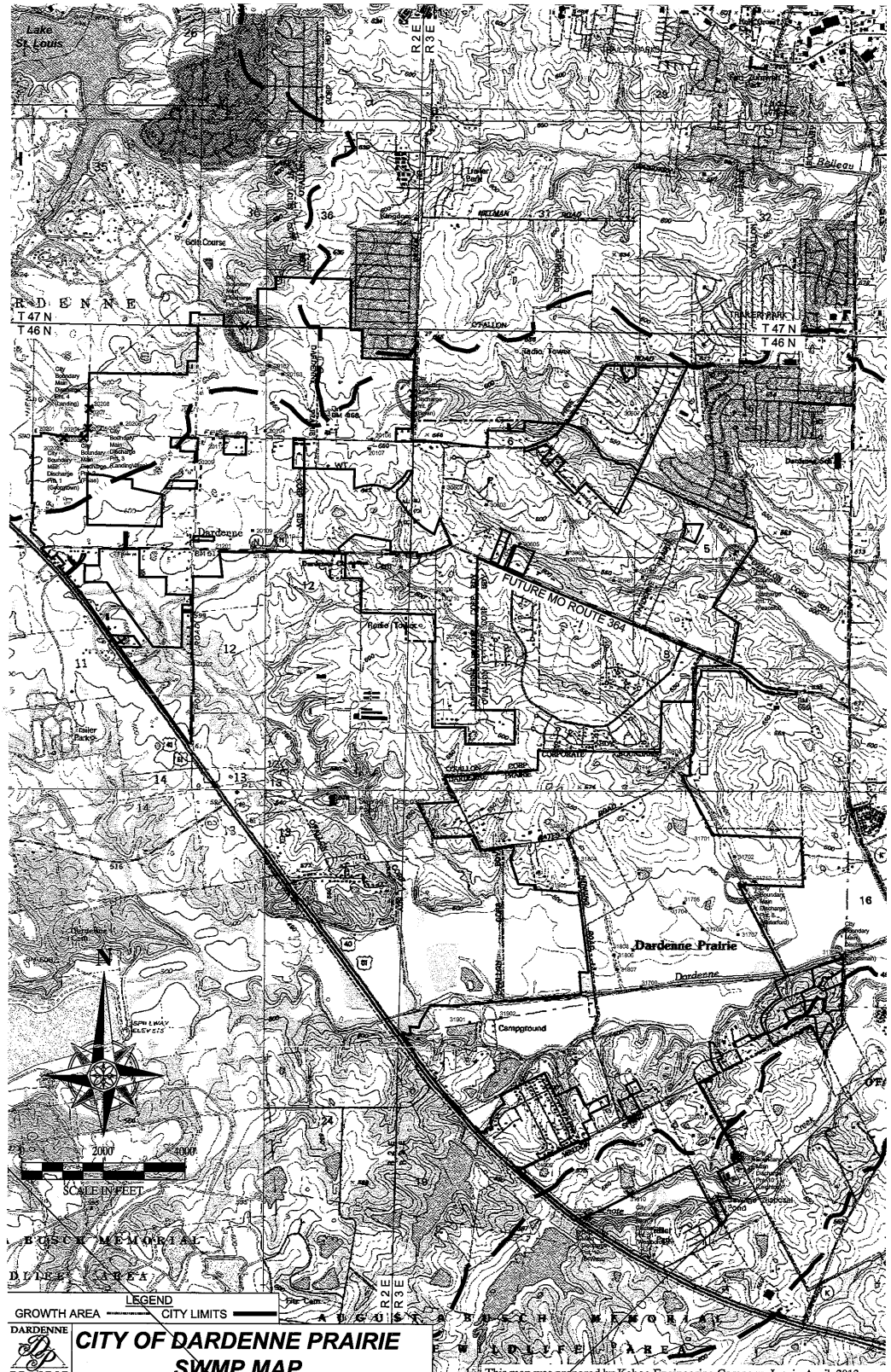
APPENDIX A

CITY OF DARDENNE PRAIRIE SWMP MAP



DARDENNE PRAIRIE

CITY OF DARDENNE PRAIRIE SWMP MAP

This map was prepared by Kehoe Engineering Company, Inc. in April 2013.

APPENDIX B

NEW CITY OF DARDENNE PRAIRIE STORM WATER ORDINANCES

BILL NO. 12-41

ORDINANCE NO. 1635

AN ORDINANCE OF THE CITY OF DARDENNE PRAIRIE, MISSOURI, AMENDING TITLE IV OF THE MUNICIPAL CODE OF THE CITY OF DARDENNE PRAIRIE, MISSOURI, BY ENACTING A NEW CHAPTER 422; PROVIDING FOR THE REGULATION OF NON-STORMWATER DISCHARGES INTO A STORMWATER DRAINAGE SYSTEM; AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF DARDENNE PRAIRIE, MISSOURI, AS FOLLOWS:

SECTION 1. That Title IV of the Municipal Code of the City of Dardenne Prairie, Missouri, be and is hereby amended by the enactment of a new Chapter 422, which shall read as follows:

CHAPTER 422: ILLICIT DISCHARGE AND CONNECTION

SECTION 422.010: PURPOSE—INTENT

The purpose of this Chapter is to provide for the health, safety and general welfare of the citizens of the City of Dardenne Prairie through the regulation of non-stormwater discharges to a stormwater drainage system to the maximum extent practicable as required by Federal and State law. Specifically, this Chapter establishes methods for controlling the introduction of pollutants into the stormwater drainage system in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this Chapter are:

1. To regulate the contribution of pollutants to publicly-owned stormwater drainage systems due to stormwater discharges by any user;

2. To prohibit illicit connections and discharges to publicly-owned stormwater drainage systems; and

3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this Chapter.

SECTION 422.020: DEFINITIONS

For the purposes of this Chapter, the following terms shall mean:

AUTHORIZED ENFORCEMENT AGENCY: The City Administrator of the City of Dardenne Prairie or his or her designee or an agency or other political subdivision of the State of Missouri authorized to regulate the discharge or control of stormwater.

BEST MANAGEMENT PRACTICES (BMPS): 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.

CITY ADMINISTRATOR: the City Administrator of the City of Dardenne Prairie, Missouri, or his/her designee.

CODE: The Municipal Code of the City of Dardenne Prairie, Missouri.

CONSTRUCTION ACTIVITY: Activities subject to NPDES construction permits. These include construction projects resulting in land disturbance of one (1) acre or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating and demolition.

HAZARDOUS MATERIALS: Any material, including any substance, waste or combination thereof, which is defined as a hazardous substance by the Administrator of the United States Environmental Protection Agency pursuant to 33 USC Section 1321(b)(2)(A), as amended, of the Clean Water Act, in 40 CFR Sections 117.1 to 117.3 and 302.1 to 302.4 and its Appendices A and B.

ILLEGAL DISCHARGE: Any direct or indirect non-stormwater discharge to stormwater drainage systems, except as exempted in Section 422.070 of this Chapter.

ILLICIT CONNECTIONS: Either of the following:

1. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter stormwater drainage systems including, but not limited to, any conveyances which allow any non-stormwater discharge including sewage, process wastewater and wash water to enter stormwater drainage systems and any connections to such systems from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted or approved by the City of Dardenne Prairie; or

2. Any drain or conveyance connected to a stormwater drainage system which has not been documented in plans, maps or equivalent records and approved by the City of Dardenne Prairie.

INDUSTRIAL ACTIVITY: Activities subject to NPDES industrial permits as defined in 40 CFR, Section 122.26 (b)(14).

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT: A permit issued by EPA (or by a State under authority delegated pursuant to 33 U.S.C. Section 1342(b)) 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.

NON-STORMWATER DISCHARGE: Any discharge to a stormwater drainage system that is not composed entirely of stormwater.

PERSON: Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

POLLUTANT: Anything which causes or contributes to pollution including, but 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 or accumulations; floatables; pesticides, herbicides and fertilizers; hazardous materials; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

PREMISES: Any building, lot, parcel of land or portion of land whether improved or unimproved including adjacent walks and parking areas.

STORMWATER: Any surface flow, runoff and drainage consisting entirely of water from any form of natural precipitation and resulting from such precipitation.

STORMWATER DRAINAGE SYSTEM: Publicly-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, reservoirs and other drainage structures.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): 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.

WASTEWATER: Any water or other liquid discharged from a facility that is —wastewater□ as defined in 10 CSR 20-2.010, as amended.

WATERS OF THE UNITED STATES: All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial,

public or private, which are contained within, flow through, or border upon the State or any portion thereof.

SECTION 422.030: APPLICABILITY

This Chapter shall apply to all water entering stormwater drainage systems generated on any developed and undeveloped lands unless explicitly exempted by the City of Dardenne Prairie.

SECTION 422.040: RESPONSIBILITY FOR ADMINISTRATION

The City Administrator shall administer, implement and enforce the provisions of this Chapter. Any powers granted to or duties imposed upon the City Administrator may be delegated by the City Administrator to a duly authorized City employee.

SECTION 422.050: ULTIMATE RESPONSIBILITY

The standards set forth herein and promulgated pursuant to this Chapter are minimum standards; therefore this Chapter does not intend or imply that compliance by any person will ensure that there will be no contamination, pollution or unauthorized discharge of pollutants.

SECTION 422.060: DISCHARGE PROHIBITIONS

A. *Prohibition of Illegal Discharges*. No person shall discharge or cause to be discharged into stormwater drainage systems or watercourses any materials including, but not limited to, pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater. The commencement, conduct or continuance of any illegal discharge to stormwater drainage systems or watercourses is prohibited except as described as follows:

1. The following discharges are exempt from discharge prohibitions established by this Chapter: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to stormwater drainage systems, uncontaminated pumped ground water, foundation or footing drains (not including active ground water dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wet-land flows, swimming pools (if dechlorinated—typically less than one (1) PPM chlorine), firefighting activities and any other water source not containing pollutants.

2. Discharges specified in writing by the City Administrator or another authorized enforcement agency as being necessary to protect public health and safety.

3. Dye testing is an allowable discharge, but requires a verbal notification to the City of Dardenne Prairie City Engineer prior to the time of the test.

4. The prohibition shall not apply to any non-stormwater discharge permitted under an NPDES permit, waiver or waste discharge order issued to the discharger

and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver or order and other applicable laws and regulations and provided that written approval has been granted for any discharge to stormwater drainage systems.

B. *Prohibition Of Illicit Connections.*

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

2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

3. A person is considered to be in violation of this Chapter if the person connects a line conveying sewage to stormwater drainage systems or allows such a connection to continue.

SECTION 422.070: SUSPENSION OF ACCESS TO STORMWATER DRAINAGE SYSTEMS

A. *Suspension Due To Illicit Discharges In Emergency Situations.* The City Administrator may, without prior notice, suspend discharge access to stormwater drainage systems by any person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment or to the health or welfare of persons or to stormwater drainage systems or to Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the City Administrator may take such steps as deemed necessary to prevent or minimize damage to the stormwater drainage system or Waters of the United States or to minimize danger to persons.

B. *Suspension Due To The Detection Of Illicit Discharge.* Any person discharging to stormwater drainage systems in violation of this Chapter may have their access to such systems terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its access to a stormwater drainage system. The violator may petition the authorized enforcement agency for a reconsideration and hearing.

C. A person commits an offense if the person reinstates access to a stormwater drainage system for premises terminated pursuant to this Section, without the prior approval of the authorized enforcement agency.

SECTION 422.080: INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City Administrator prior to the allowing of discharges to stormwater drainage systems.

SECTION 422.090: MONITORING OF DISCHARGES

A. *Applicability.* This Section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.

B. *Access To Facilities.*

1. The City Administrator shall have the right to enter and inspect facilities subject to regulation under this Chapter as often as may be necessary to determine compliance with this Chapter. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements with its security guards so that, upon presentation of suitable identification, the City Administrator shall be permitted to enter without delay for the purposes of performing specific responsibilities.

2. Facility operators shall allow the City Administrator ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater and the performance of any additional duties as defined by State and Federal law.

3. The City Administrator shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's stormwater discharge.

4. The City Administrator, have the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.

5. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City Administrator, and shall not be replaced. The costs of clearing such access shall be borne by the operator.

6. Unreasonable delays in allowing the City Administrator access to a permitted facility is a violation of a stormwater discharge permit and of this Chapter.

7. If the City Administrator has been refused access to any part of the premises from which stormwater is discharged and he/she is able to demonstrate probable cause to believe that there may be a violation of this Chapter or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this Chapter or any order issued hereunder or to protect the overall public health, safety and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from the Circuit Court of St. Charles County of the State of Missouri, or any other court of competent jurisdiction.

SECTION 422.100: REQUIREMENT TO PREVENT, CONTROL AND REDUCE STORMWATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES

City of Dardenne Prairie will adopt requirements identifying Best Management Practices (BMPs) for any activity, operation or facility which may cause or contribute to pollution or contamination of stormwater, of stormwater drainage systems or of Waters of the United States. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and nonstructural BMPs. Further, any person responsible for a property or premise, which is or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to stormwater drainage systems. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this Section. These BMPs shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

SECTION 422.110: WATERCOURSE PROTECTION

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation and other obstacles that would pollute, contaminate or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function or physical integrity of the watercourse.

SECTION 422.120: NOTIFICATION OF SPILLS

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, stormwater drainage

systems or Waters of the United States, said person shall take all necessary steps to ensure the discovery, containment and cleanup of such release. In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the authorized enforcement agency in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City Administrator within three (3) business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the City of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years.

SECTION 422.130: ENFORCEMENT—NOTICE OF VIOLATION

Whenever the City Administrator finds that a person has violated a prohibition or failed to meet a requirement of this Chapter, the City Administrator may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

1. The performance of monitoring, analyses and reporting;

2. The elimination of illicit connections or discharges;

3. That violating discharges, practices or operations shall cease and desist;

4. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property; and

5. Payment of a fine to cover administrative and remediation costs; and

6. The implementation of source control or treatment BMPs.

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

SECTION 422.140: SHOW CAUSE HEARING

A. The City Administrator may order any person who has violated, or continues to violate, any provision of this Chapter or order issued hereunder to appear before the City Administrator and show cause why the proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the hearing, the

proposed enforcement action, the reasons for such action, and a request that the person show cause why the proposed enforcement action should not be taken. The notice of the hearing shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. A show cause hearing shall not be a bar against, or prerequisite for, taking any other action against such person violating the provisions of this Chapter.

B. The Board of Aldermen may itself conduct the hearing and take the evidence, or may designate the City Administrator to:

1. Issue in the name of the Board of Aldermen notices of hearings requesting the attendance and testimony of witnesses and the production of evidence relevant to any matter involved in such hearings;

2. Take the evidence; and

3. Transmit a report of the evidence and hearing, including transcripts and other evidence, together with recommendations to the Board of Aldermen for action thereon.

C. At any hearing held pursuant to this Chapter, testimony taken must be under oath and recorded stenographically. The transcript, so recorded, will be made available to any member of the public or any party to the hearing upon payment of the usual charges thereof.

SECTION 422.150: COMPLIANCE ORDERS

When the City Administrator finds that a person has violated, or continues to violate, any provision of this Chapter, the City Administrator may issue an order to such person responsible for the discharge directing that the person come into compliance within a specified time. If the person does not come into compliance within the time provided, sewer service may be discontinued unless adequate treatment facilities, devices, or other related appurtenances are installed and properly operated. 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 to the sewer. A compliance order does not relieve the User 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 such person.

SECTION 422.160: CEASE AND DESIST ORDERS

When the City Administrator finds that a person has violated, or continues to violate, any provision of this Chapter, or that such person's past violations are likely to recur, the City Administrator may issue an order to that person directing him/her to cease and desist all such violations and directing such person to:

A. Immediately comply with all requirements; and

B. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge. Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the User.

SECTION 422.170: PENALTIES

A. Any person in violation of the provisions of this Chapter may be prosecuted therefor, and, upon conviction, be subject to a fine in an amount not less than One Hundred Dollars ($100) nor more than Five Hundred Dollars ($500). Each day such violation continues shall constitute a separate offense.

B. Issuance of a fine under this Section shall not be a bar against, or a prerequisite for, taking any other action against a person pursuant to this Chapter.

SECTION 422.180: ENFORCEMENT--INJUNCTIVE RELIEF

When the City Administrator finds that a person has violated, or continues to violate, any provision of this Chapter, the City Administrator may petition the Circuit Court of St. Charles County through the City's Attorney for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the individual wastewater discharge permit, order, or other requirement imposed by this Chapter on activities of the person. The City Administrator may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the person to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a person.

SECTION 422.190: REMEDIES NONEXCLUSIVE

The remedies provided for in this Chapter are not exclusive. The City Administrator may take any, all, or any combination of these actions against a noncompliant person. Enforcement of violations of this Chapter will generally be in accordance with the City's enforcement response plan. However, the City Administrator may take other action against any person when the circumstances warrant. Further, the City Administrator is empowered to take more than one enforcement action against any noncompliant person.

SECTION 422.200: ENFORCEMENT--VIOLATIONS DEEMED A PUBLIC NUISANCE

A violation of any provision of this Chapter or order issued hereunder is hereby declared a public nuisance and shall be corrected or abated as directed by the City Administrator. Any person(s) creating a public nuisance shall be subject to the provisions of Chapter 215

of this Code governing such nuisances, including reimbursing the City for any costs incurred in removing, abating, or remedying said nuisance.

SECTION 2. Effective Date: That this Ordinance shall be in full force and effect from and after its passage and approval.

SECTION 3. Savings Clause: Nothing contained herein shall in any manner be deemed or construed to alter, modify, supersede, supplant or otherwise nullify any other Ordinance of the City or the requirements thereof whether or not relating to or in any manner connected with the subject matter hereof, unless expressly set forth herein.

SECTION 4. Severability Clause: If any term, condition, or provision of this Ordinance shall, to any extent, be held to be invalid or unenforceable, the remainder hereof shall be valid in all other respects and continue to be effective and each and every remaining provision hereof shall be valid and shall be enforced to the fullest extent permitted by law, it being the intent of the Board of Aldermen that it would have enacted this Ordinance without the invalid or unenforceable provisions. In the event of a subsequent change in applicable law so that the provision which had been held invalid is no longer invalid, said provision shall thereupon return to full force and effect without further action by the City and shall thereafter be binding.

Read two times, passed, and approved this 5th day of July, 2012.

As Presiding Officer and as Mayor

Attest:

Kim Clark

City Clerk

Approved this 5th day of July, 2012.

Mayor

Attest:

Kim Clark

City Clerk

BILL NO. 12-40

ORDINANCE NO. 1636

AN ORDINANCE OF THE CITY OF DARDENNE PRAIRIE, MISSOURI, AMENDING TITLE IV OF THE MUNCIPAL CODE OF THE CITY OF DARDENNE PRAIRIE, MISSOURI, BY ENACTING A NEW CHAPTER 420; ESTABLISHING DETENTION BASIN INSPECTION, MAINTENANCE AND REPAIR CRITERIA AND PROCEDURES; AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF DARDENNE PRAIRIE, MISSOURI, AS FOLLOWS:

SECTION 1. That Title IV of the Municipal Code of the City of Dardenne Prairie, Missouri, be and is hereby amended by the enactment of a new Chapter 420, which shall read as follows:

CHAPTER 420: INSPECTION, MAINTENANCE AND REPAIR OF DETENTION BASINS

SECTION 420.010: PURPOSE.

Detention basins are usually located in new residential, commercial and industrial developments, helping to control potential flooding and improving water quality. Detention basins require regular maintenance in order to ensure proper function. Poorly maintained basins lose their ability to control flooding and pollution, allowing sediment, debris, fertilizers, pesticides and other pollutants to enter creeks and streams. It is the policy of the City to protect and promote the public health, safety and general welfare. The proper maintenance of detention basins will reduce the erosion on land and creek channels, assist in the attainment and maintenance of water quality standards, and preserve and enhance the environmental quality of watercourses in the City.

SECTION 420.020: DEFINITIONS.

In this section, the following words and terms are defined as provided below.

CITY: The City of Dardenne Prairie, Missouri.

CITY ADMINISTRATOR: the City Administrator of the City of Dardenne Prairie, Missouri, or his/her designee.

CODE: The Municipal Code of the City of Dardenne Prairie, Missouri.

DAY: A calendar day.

DETENTION BASIN: A man-made or natural water collector facility designed to collect surface and subsurface water in order to impede its flow and to release the

same gradually at a rate not greater than that prior to the development of the property, into natural or man-made outlets.

PERSON: An individual, corporation, partnership, and/or unincorporated association or persons.

SECTION 420.030: MAINTENANCE OF DETENTION BASINS.

It shall be unlawful for any person to own, operate or maintain a detention basin in violation of the provisions of this Chapter. Any person or persons owning land containing a detention basin shall maintain the detention basin as it was designed and approved by the City or otherwise approved pursuant to law or ordinance in order to continue the mitigation of the stormwater impacts and to prevent the contamination of discharge from the detention basin. This maintenance shall include, but not necessarily be limited to, the removal of any overgrown vegetation, trash and debris removal, repair of erosion, repairs to any inlet/outlet structures, and the removal of excess silt or any other maintenance deemed necessary to provide the design storage capacity.

SECTION 420.040: DETENTION BASIN PERMITS.

From and after, July 5, 2012, every person who owns, operates or maintains a detention basin shall obtain a permit from the City to operate and maintain a detention basin. Applications for permits required pursuant to this section shall be submitted on forms prepared by the City Administrator, and shall include the following:

1. The name, address and telephone number of the applicant;
2. The name of the owner of the property containing the detention basin;
3. An address or description of the property containing the detention basin;
4. The name of the subdivision in which the detention basin is located, if any;
5. A statement granting the City authority to enter upon the property containing the detention basin for purposes of conducting an inspection; and
6. A permit inspection fee of $140.00.

All permits issued pursuant to this section shall be valid for a period of three (3) years. Permits shall be issued if, upon inspection by the City, the detention basin is found to be in compliance with the provisions of this Chapter.

SECTION 420.050: MAINTENANCE STANDARDS.

In all inspections conducted pursuant to the requirements of this Chapter, the City Administrator shall determine whether the detention basin under inspection is maintained to the following standards:

1. The site plan or improvement plan for the detention basin approved by the City pursuant to the Code or such other ordinances, orders or regulations in place at the time such site plan or improvement plan was approved by the City or such

other entity with the authority and jurisdiction to approve such site plan or improvement plan; and

2. The Property Maintenance Code of the City; and

3. The performance and inspection criteria for detention basins duly promulgated by the City Administrator pursuant to this Chapter.

SECTION 420.060. PERFORMANCE AND MAINTENANCE CRITERIA.

The City Administrator is hereby authorized and directed to develop and distribute to owners of detention basins performance and maintenance criteria consistent with this Chapter.

SECTION 420.070. VIOLATIONS AND CORRECTIONS.

If upon inspection the City Administrator finds that a detention basin violates this Chapter, the City Administrator shall mail the owner or owners of the property upon which the detention basin is located a notice detailing those violations and requiring submission of a corrective action plan with deadlines for abating those violations within no more than twenty (20) days of the date of the notice. The deadlines for abating violations shall be approved by the City Administrator, but shall not exceed one hundred eighty (180) days from the date of the notice from the City Administrator. For good cause shown, and provided there is no immediate harm to the health, safety and general welfare to the residents of the City, the City Administrator may grant the owner or owners a reasonable extension for submitting that corrective action plan, such extension not to exceed fifteen (15) days. The City Administrator may approve the plan as submitted or require its amendment within no more than fourteen (14) days.

Prior the expiration of the time for corrective action as set forth in the corrective action plan, the owner or owners of the property upon which the detention basin is located shall submit a request to the City Administrator to reinspect the detention basin to determine compliance with this Chapter. Such requests for reinspection shall be made on forms prepared by the City Administrator and shall be accompanied by a reinspection fee of $140. If upon reinspection the City Administrator finds that a detention basin violates this Chapter, the City Administrator may declare the detention basin a public nuisance pursuant to Section 420.080 of this Code or proceed with any other remedies provided for in this Chapter.

SECTION 420.080. DECLARATION OF NUISANCE AND ABATEMENT.

Any violation of the performance and maintenance standards set forth in this Chapter is hereby declared a public nuisance. The City Administrator is hereby authorized to declare a public nuisance pursuant to the provisions of this Chapter and may abate the same after providing notice and conducting a hearing consistent with the procedures set forth in Section 215.010 of this Code.

SECTION 420.090. VIOLATION AND PENALTY

A. The City may institute a civil suit seeking injunctive relief and/or damages where appropriate.

B. No civil judgment or any act by the City Administrator or other persons affected shall bar or prevent a prosecution for each and every violation of this Chapter.

SECTION 2. Effective Date: That this Ordinance shall be in full force and effect from and after its passage and approval.

SECTION 3. Savings Clause: Nothing contained herein shall in any manner be deemed or construed to alter, modify, supersede, supplant or otherwise nullify any other Ordinance of the City or the requirements thereof whether or not relating to or in any manner connected with the subject matter hereof, unless expressly set forth herein.

SECTION 4. Severability Clause: If any term, condition, or provision of this Ordinance shall, to any extent, be held to be invalid or unenforceable, the remainder hereof shall be valid in all other respects and continue to be effective and each and every remaining provision hereof shall be valid and shall be enforced to the fullest extent permitted by law, it being the intent of the Board of Aldermen that it would have enacted this Ordinance without the invalid or unenforceable provisions. In the event of a subsequent change in applicable law so that the provision which had been held invalid is no longer invalid, said provision shall thereupon return to full force and effect without further action by the City and shall thereafter be binding.

Read two times, passed, and approved this 18th day of July, 2012.

As Presiding Officer and as Mayor

Attest:

Kim Clark

City Clerk

Approved this 18th day of July, 2012.

Mayor

Attest:

Kim Clark

City Clerk

The following excerpts were taken from Dardenne Prairie Ordinance No. 105, Section 4.4 – The City's Subdivision Ordinance, Improvement Plans and Installation:

i. Plans for sediment control will be submitted to, and approved by, the City Engineer and County Highway Engineer (Ord. 208). A dollar amount equal to the proposed cost will be included in the performance guarantee.

The following Dardenne Prairie Ordinances have been provided in previous annual reports. Additional copies are available upon request:

Ordinance No. 635 – Grading Permit Process

Ordinance No. 738 – Urban Storm Water Quality Management and Discharge Control

Ordinance No. 1155 – Grading Permit Process

Ordinance No. 1256 – Construction of Storm Sewers

Ordinance No. 1510 – Erosion and Sediment Regulations

The following excerpt was taken from Dardenne Prairie Ordinance No. 372 establishing a means for funding siltation control inspections:

SECTION NO. 4.1: FILING FEES.

c. Construction Inspection: The Town of Dardenne Prairie shall charge the developer for inspection of all public improvements. Charges shall be invoiced based on hourly rates plus reimbursable expenses for work associated with inspections of public improvements and assurance that construction conforms with the plans and Town regulations.

APPENDIX C

STORM SEWER OUTFALLS
36" EQUIVALENT DIA. AND LARGER LIST

Municipal Action Items			Control Measure Addressed			Details		
Section -	Item No	Description	Control Measure	Components: Mandatory	Components: Suggested	Current/ Proposed	Est. Implementation Time*	Mandatory Components Est. Cost of Implementation
1 -	A	Storm Water Web Page w/ Storm Water Problem Reporting Form (Electronic and Hardcopy Files)	1 - 2 - 3 -	M1 M1, M2, M3 M3, M4	 S1, S2 S2	Current	Continual	$3,000 set-up + $1,000/yr
1 -	B	Newsletter Insert	1 - 2 - 3 -	M1 M1, M3 M4	 S1, S2	Current	Bi-annual	$3,500/yr
2 -	A	Public Notice Procedures	2 -	M1		Current	Continual	$1,000
2 -	B	Dardenne Creek Clean Stream Day	2 -	M3		Current	Annual	$200/yr
2 -	C	Same as 1-A	N/A			Current		
2 -	D	Dardenne Creek Greenway Study	2 - 5 -	M3 M2, M4	 S2	Current	Existing	N/A
3 -	A	Illicit Discharge Ordinance	3 - 2 - 5 -	M2, M3, M4 M1 M1, M4	S2	Current	Existing	$1,000 setup + $10,000/yr outfall reconnaissance
3 -	B	Same as 1-A	N/A			Current		
3 -	C	Same as 1-B	N/A			Current		
3 -	D	Storm Sewer System Map and Database	3 - 5 -	M1, M3, M4 M4	 S1, S2	Current	Continual	$55,000 set-up + $5,000 updates
4 -	A	Existing Development Ordinances	4 - 5 -	M1, M2, M3, M4 M1, M2		Current	Existing	
5 -	A	Same as 4-A	N/A			Current		
5 -	B	Same as 2-D	N/A			Current		
5 -	C	Same as 3-D	N/A			Current		
5 -	D	Comprehensive Storm Water Policy	5 - 1 - 2 - 4 - 6 -	M2, M3, M4 M1 M3 M1, M2, M3, M4 	S1, S2 S1, S2 S1, S3, S4	Current Current Current Current Proposed	Continual	$10,000 (Costs will be included in the update to the Comp. Plan)
6 -	A	City Facility Review	6 -	M1, M2	S2	Proposed	1 year	$1,000

* Estimate: May vary on availability of information and degree of accuracy (all implementation periods reference the permit approval date as the start time).

The following excerpts were taken from Dardenne Prairie Ordinance No. 105, Section 4.4 – The City's Subdivision Ordinance, Improvement Plans and Installation:

i. Plans for sediment control will be submitted to, and approved by, the City Engineer and County Highway Engineer (Ord. 208). A dollar amount equal to the proposed cost will be included in the performance guarantee.

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APPENDIX C

STORM SEWER OUTFALLS
36" EQUIVALENT DIA. AND LARGER LIST

DARDENNE PRAIRIE

www.DardennePrairie.org

Supplement to Form K

Project No.: 970780 **Date:** 9/10/2007

Amended: 10/10/2007

Application for Individual Small MS4 General Permit

Storm Sewer Outfalls - 36" Equivalent Dia. and Larger

Missouri Operating Permit Number (NPDES) MO-R040025

SECTION 6.00															SECTION 6.10
Outlet No.	Point No.	Longitude hh°mm'ss.s"			Latitude hh°mm'ss.s"			Outlet Description	East of 5th Principal Meridian 1/4	1/4	Sec.	T	R	Missouri County	Receiving Water
1	20104	N38	46	26.1	W90	45	0.7	36" RCP Flared End	SE	NW	1	46N	2E	St. Charles	Dardenne Creek (P)
2	20105	N38	46	25	W90	45	15.6	54" RCP Flared End	SW	NW	1	46N	2E	St. Charles	Dardenne Creek (P)
3	20107	N38	46	22	W90	44	28.5	42" RCP Flared End	NE	SE	1	46N	2E	St. Charles	Dardenne Creek (P)
4	20108	N38	45	58.3	W90	45	3.6	66" RCP Flared End	SE	SW	1	46N	2E	St. Charles	Dardenne Creek (P)
5	20109	N38	46	2.2	W90	45	4.4	48" RCP Flared End	SE	SW	1	46N	2E	St. Charles	Dardenne Creek (P)
6	20110	N38	46	0.9	W90	44	57.4	66" RCP Culvert Flared End	SE	SW	1	46N	2E	St. Charles	Dardenne Creek (P)
7	20111	N38	45	56.4	W90	44	20	48" RCP Flared End	SE	SE	1	46N	2E	St. Charles	Dardenne Creek (P)
8	20112	N38	46	24.2	W90	45	16.6	(2) 4'x4' RCB	NW	SW	1	46N	2E	St. Charles	Dardenne Creek (P)
9	20209	N38	46	18.5	W90	45	22.5	(2) 6'x5' RCB	NE	SE	2	46N	2E	St. Charles	Dardenne Creek (P)
10	21101	N38	45	57.5	W90	45	44.2	16'x5' RCB Culvert	NW	NE	11	46N	2E	St. Charles	Dardenne Creek (P)
11	21201	N38	45	57.2	W90	45	14.6	36" RCP Flared End	NW	NW	12	46N	2E	St. Charles	Dardenne Creek (P)
12	21202	N38	45	30.2	W90	45	22.6	12'x8' 3-Sided RCB Culvert Bridge	NE	SE	12	46N	2E	St. Charles	Dardenne Creek (P)
13	21203	N38	45	53.7	W90	44	18.6	72" RCP Flared End	NE	NE	12	46N	2E	St. Charles	Dardenne Creek (P)
14	21204	N38	45	49.4	W90	44	16.3	36" RCP Flared End	NE	NE	12	46N	2E	St. Charles	Dardenne Creek (P)
15	21205	N38	45	57.1	W90	45	3.4	8'x5' RCB Culvert	NE	NW	12	46N	2E	St. Charles	Dardenne Creek (P)
16	30501	N38	46	1.7	W90	42	59.3	60" RCP Flared End	SW	SW	5	46N	3E	St. Charles	Dardenne Creek (P)
17	30502	N38	46	0.5	W90	42	57.1	48" RCP Flared End	SW	SW	5	46N	3E	St. Charles	Dardenne Creek (P)
18	30503	N38	45	58	W90	42	35.2	42" RCP Flared End	SE	SW	5	46N	3E	St. Charles	Dardenne Creek (P)
19	30504	N38	45	57.3	W90	42	36	48" RCP Flared End	SE	SW	5	46N	3E	St. Charles	Dardenne Creek (P)
20	30601	N38	46	12.9	W90	44	5.8	36" CMP Culvert	NW	SW	6	46N	3E	St. Charles	Dardenne Creek (P)
21	30602	N38	46	12.8	W90	44	5.8	48"x76" Eliptical RCP	NW	SW	6	46N	3E	St. Charles	Dardenne Creek (P)
22	30603	N38	46	8.8	W90	43	52.5	36" RCP Flared End	SE	SW	6	46N	3E	St. Charles	Dardenne Creek (P)
23	30604	N38	46	3	W90	43	48.2	36" RCP	SE	SW	6	46N	3E	St. Charles	Dardenne Creek (P)
24	30605	N38	45	59.4	W90	43	42.2	'(2) 60" RCP Flared End	SE	SW	6	46N	3E	St. Charles	Dardenne Creek (P)
25	30606	N38	45	57.4	W90	43	27.4	36" RCP Flared End	SW	SE	6	46N	3E	St. Charles	Dardenne Creek (P)

DARDENNE PRAIRIE

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Supplement to Form K

Project No.: 970780 **Date:** 9/10/2007

Amended: 10/10/2007

Application for Individual Small MS4 General Permit

Storm Sewer Outfalls - 36" Equivalent Dia. and Larger

Missouri Operating Permit Number (NPDES) MO-R040025

SECTION 6.00															SECTION 6.10
Outlet No.	Point No.	Longitude hh°mm'ss.s"			Latitude hh°mm'ss.s"			Outlet Description	East of 5th Principal Meridian 1/4	1/4	Sec.	T	R	Missouri County	Receiving Water
26	30607	N38	46	30.4	W90	43	3.4	78" CMP Culvert	SE	NE	6	46N	3E	St. Charles	Dardenne Creek (P)
27	30608	N38	46	4.9	W90	43	28.4	36" RCP Flared End	SW	SE	6	46N	3E	St. Charles	Dardenne Creek (P)
28	30701	N38	45	38.3	W90	43	55.3	8' Flat-Bottom Creek	SE	NW	7	46N	3E	St. Charles	Dardenne Creek (P)
29	30702	N38	45	38.4	W90	43	55.5	36" RCP Flared End	SE	NW	7	46N	3E	St. Charles	Dardenne Creek (P)
30	30703	N38	45	38.5	W90	43	56.6	36" RCP Flared End	SE	NW	7	46N	3E	St. Charles	Dardenne Creek (P)
31	30704	N38	45	38.1	W90	43	58.7	42" RCP Flared End	SW	NW	7	46N	3E	St. Charles	Dardenne Creek (P)
32	30705	N38	45	51.7	W90	43	4.3	42" RCP Flared End	NE	NE	7	46N	3E	St. Charles	Dardenne Creek (P)
33	30706	N38	45	53.2	W90	43	6.4	36" RCP Flared End	NE	NE	7	46N	3E	St. Charles	Dardenne Creek (P)
34	30707	N38	45	50.8	W90	43	13.2	(2) 8'x8' RCB Culvert	NE	NE	7	46N	3E	St. Charles	Dardenne Creek (P)
35	30708	N38	45	55.8	W90	43	28.2	48" RCP Flared End	NW	NE	7	46N	3E	St. Charles	Dardenne Creek (P)
36	30709	N38	45	47.7	W90	44	7.8	72" CMP Culvert	NW	NW	7	46N	3E	St. Charles	Dardenne Creek (P)
37	30710	N38	45	47.1	W90	44	5.6	48" RCP Flared End	NW	NW	7	46N	3E	St. Charles	Dardenne Creek (P)
38	30801	N38	45	54.2	W90	42	34.6	12' Flat-Bottom Creek	NE	NW	8	46N	3E	St. Charles	Dardenne Creek (P)
39	30802	N38	45	6	W90	42	57	36" RCP Flared End	SW	SW	8	46N	3E	St. Charles	Dardenne Creek (P)
40	30803	N38	45	7.2	W90	42	57.6	72" RCP Flared End	SW	SW	8	46N	3E	St. Charles	Dardenne Creek (P)
41	30804	N38	45	9.1	W90	42	53.5	36" RCP Flared End	SW	SW	8	46N	3E	St. Charles	Dardenne Creek (P)
42	31701	N38	44	50.1	W90	42	42.2	36" RCP Flared End	SE	NW	17	46N	3E	St. Charles	Dardenne Creek (P)
43	31702	N38	44	44.7	W90	42	35.6	36" RCP Flared End	SE	NW	17	46N	3E	St. Charles	Dardenne Creek (P)
44	31703	N38	44	40.5	W90	43	5	48" RCP Flared End	SW	NW	17	46N	3E	St. Charles	Dardenne Creek (P)
45	31704	N38	44	32.2	W90	42	55.3	54" RCP Flared End	NW	SW	17	46N	3E	St. Charles	Dardenne Creek (P)
46	31705	N38	44	33.5	W90	42	51	48" RCP Flared End	NW	SW	17	46N	3E	St. Charles	Dardenne Creek (P)
47	31706	N38	44	27.2	W90	42	45.3	(2) 8'x5' RCB Culvert	NE	SW	17	46N	3E	St. Charles	Dardenne Creek (P)
48	31707	N38	44	26	W90	42	34.4	42" RCP Flared End	NE	SW	17	46N	3E	St. Charles	Dardenne Creek (P)
49	31708	N38	44	50	W90	42	39.8	Dardenne Creek	SE	SE	17	46N	3E	St. Charles	Dardenne Creek (P)
50	31709	N38	44	13.3	W90	43	4	48" RCP Flapgate	SW	SW	17	46N	3E	St. Charles	Dardenne Creek (P)

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Outlet No.	Point No.	Longitude hh°mm'ss.s"			Latitude hh°mm'ss.s"			Outlet Description	East of 5th Principal Meridian 1/4	1/4	Sec.	T	R	Missouri County	Receiving Water
51	31710	N38	45	5	W90	43	2.1	36" RCP Flared End	NW	NW	17	46N	3E	St. Charles	Dardenne Creek (P)
52	31711	N38	45	5.1	W90	42	54.6	(3) 12'x9' RCB Culvert	NW	NW	17	46N	3E	St. Charles	Dardenne Creek (P)
53	31712	N38	44	38.7	W90	42	29.2	66" RCP Flared End	NW	SE	17	46N	3E	St. Charles	Dardenne Creek (P)
54	31801	N38	45	0.3	W90	44	3	60"x42" CMP Pipe Arch	NW	NW	18	46N	3E	St. Charles	Dardenne Creek (P)
55	31802	N38	44	45.5	W90	43	49.5	72" RCP Flared End Culvert	SE	NW	18	46N	3E	St. Charles	Dardenne Creek (P)
56	31803	N38	44	50.9	W90	43	28.5	48" RCP Flared End	SW	NE	18	46N	3E	St. Charles	Dardenne Creek (P)
57	31804	N38	44	44	W90	43	23.9	72" RCP Flared End	SW	NE	18	46N	3E	St. Charles	Dardenne Creek (P)
58	31805	N38	44	36.8	W90	43	31.9	60" RCP Flared End	NW	SE	18	46N	3E	St. Charles	Dardenne Creek (P)
59	31806	N38	44	20.9	W90	43	12.5	84" RCP Flared End Culvert	SE	SE	18	46N	3E	St. Charles	Dardenne Creek (P)
60	31807	N38	44	17.5	W90	43	11.6	48" RCP Flared End	SE	SE	18	46N	3E	St. Charles	Dardenne Creek (P)
61	31808	N38	44	22.1	W90	43	6.6	42" RCP Flared End	SE	SE	18	46N	3E	St. Charles	Dardenne Creek (P)
62	31901	N38	44	4.5	W90	43	56.7	36" PVC Truss Pipe	NW	NE	19	46N	3E	St. Charles	Dardenne Creek (P)
63	31902	N38	44	5.7	W90	43	47.1	36" PVC Truss Pipe	NW	NE	19	46N	3E	St. Charles	Dardenne Creek (P)
64	31903	N38	43	46.5	W90	43	48.6	36" RCP Flared End	NE	SW	19	46N	3E	St. Charles	Dardenne Creek (P)
65	31904	N38	43	55.8	W90	43	41	37'x10' Arch Bridge w/ 24" Flap	SW	NE	19	46N	3E	St. Charles	Dardenne Creek (P)
66	31905	N38	43	57.8	W90	43	28.1	48" RCP Flap Gate	SW	NE	19	46N	3E	St. Charles	Dardenne Creek (P)
67	31906	N38	43	57.4	W90	43	27.5	54" RCP Flared End	SW	NE	19	46N	3E	St. Charles	Dardenne Creek (P)
68	31907	N38	43	57.2	W90	43	29.8	36" RCP Flared End	SW	NE	19	46N	3E	St. Charles	Dardenne Creek (P)
69	31908	N38	44	2.1	W90	43	18.1	54" RCP Flared End	NE	NE	19	46N	3E	St. Charles	Dardenne Creek (P)
70	31909	N38	43	31.1	W90	43	35.9	36" CMP	SW	SE	19	46N	3E	St. Charles	Dardenne Creek (P)
71	32001	N38	43	46.6	W90	42	56.2	36" CMP	NW	SW	20	46N	3E	St. Charles	Dardenne Creek (P)
72	32002	N38	43	45.6	W90	42	43	48" RCP Flared End	NE	SW	20	46N	3E	St. Charles	Dardenne Creek (P)
73	32003	N38	43	42.9	W90	42	43.9	42" RCP Flared End	NE	SW	20	46N	3E	St. Charles	Dardenne Creek (P)
74	32004	N38	43	37.6	W90	42	47.8	36" RCP Flared End	NE	SW	20	46N	3E	St. Charles	Dardenne Creek (P)
75	20101	N38	46	51.1	W90	45	7.2	6' Flat-Bottom Creek	NW	NW	1	46N	2E	St. Charles	Lake St. Louis (L3)

DARDENNE PRAIRIE

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76	20102	N38	46	41.6	W90	44	59.5	42" RCP Flared End	NE	NW	1	46N	2E	St. Charles	Lake St. Louis (L3)
77	20103	N38	46	39.6	W90	44	55.4	36" RCP Flared End	NE	NW	1	46N	2E	St. Charles	Lake St. Louis (L3)
78	20106	N38	46	24.3	W90	44	27.8	54" RCP Flared End	SE	NE	1	46N	2E	St. Charles	Lake St. Louis (L3)
79	20201	N38	46	24.5	W90	46	4.8	(2) 60" RCP Flared Ends	SE	NW	2	46N	2E	St. Charles	Lake St. Louis (L3)
80	20202	N38	46	22.6	W90	46	3.4	66" RCP Flared End	NE	SW	2	46N	2E	St. Charles	Lake St. Louis (L3)
81	20203	N38	46	25.1	W90	45	57.3	7'x4' RCB Culvert	SE	NW	2	46N	2E	St. Charles	Lake St. Louis (L3)
82	20204	N38	46	25.3	W90	45	57.2	42" RCP Flared End	SE	NW	2	46N	2E	St. Charles	Lake St. Louis (L3)
83	20205	N38	46	26.3	W90	45	55.4	4' Flat-Bottom Creek	SE	NW	2	46N	2E	St. Charles	Lake St. Louis (L3)
84	20206	N38	46	27.6	W90	45	45	54" RCP Flared End	SW	NE	2	46N	2E	St. Charles	Lake St. Louis (L3)
85	20207	N38	46	30.9	W90	45	55.1	(2) 36" RCP Flared Ends	SE	NW	2	46N	2E	St. Charles	Lake St. Louis (L3)
86	20208	N38	46	31.4	W90	45	54.1	48" RCP Flared End	SW	NE	2	46N	2E	St. Charles	Lake St. Louis (L3)
87	31910	N38	43	23.2	W90	43	7.2	36" RCP Flared End	SE	SE	19	46N	3E	St. Charles	Schote Creek (P)
88	32005	N38	43	32.1	W90	42	34.6	36" CMP	SE	SW	20	46N	3E	St. Charles	Schote Creek (P)
89	32006	N38	43	22.8	W90	42	36.3	10' Flat-Bottom Creek	SE	SW	20	46N	3E	St. Charles	Schote Creek (P)
90	33001	N38	43	18.1	W90	43	20	48" RCP Flared End	NE	NE	30	46N	3E	St. Charles	Schote Creek (P)