

CITY OF SIKESTON

**105 East Center
Sikeston, MO 63801**

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WATER PROTECTION PROGRAM

January 14, 2008

Ruth A. Wallace
MS4 Storm Water Program Coordinator
Missouri Department of Natural Resources
Water Pollution Control Program
P. O. Box 176
Jefferson City, MO 65401

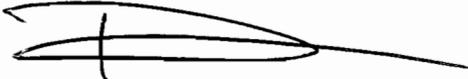
Dear Ms. Wallace:

Enclosed please find our Storm Water Management Program which outlines our proposed activities over the next 5 years.

If you have any questions please contact the undersigned.

Sincerely,

CITY OF SIKESTON



Doug Friend
City Manager

STORM WATER MANAGEMENT PROGRAM CITY OF SIKESTON

January 14, 2008

The City of Sikeston was issued an Operating Permit by the Missouri Department of Natural Resources for their Small Metropolitan Separate Storm Sewer System (MS4). This permit requires that a Storm Water Management Program (SWMP) be prepared for the implementation of the requirements of the permit over a maximum 5-year period.

The City of Sikeston has established an interim committee charged with the responsibility of formation a SWMP. This interim committee is comprised of the staff of the Public Works Department, the City Manager and the City's consulting engineer, Waters Engineering, Inc.

This SWMP shall address the following tasks:

- Identify specific objectives for each of the required control measures noted in the Operating Permit.
- Stipulate who will be responsible for completion of those objective.
- Prescribe a schedule for when the action should be completed.
- Form a permanent Storm Water Advisory Board (SWAB) to develop initial recommendations and to assume oversight duties for the continued efforts in storm water management and planning .

1. **PUBLIC EDUCATION AND OUTREACH.**

1.1 **Past Efforts.**

Sikeston was the first community in the region to develop a Storm Water Management Plan and Ordinance which was adopted by the City in 1983. This ordinance has been used since that time for the control of the rate and quality of storm water discharges. This ordinance was developed in response to community awareness of the potential negative impacts that increased runoff from development might have on existing drainage systems.

A substantial discussion of goals and needs was conducted prior to adoption of the Storm Water Ordinance as the implementation required substantial and costly changes to be made in how developments in Sikeston were made.

Other programs relating to storm water management include the following:

- The semi-annual clean-up programs, instituted in 1995, which provides residents the opportunity to properly dispose of bulk items, white goods, household hazardous waste, batteries, waste oil and the like through the City's solid waste contractor. Most items are disposed at no charge to residents.
- In 1995 a compost site was developed by the City to receive yard waste, which is made available to the public numerous times per year with no use fees.
- In 1999 a leaf collection program was instituted by the City to reduce the migration of leaves and like debris into the City's drainage system. This program helps eliminate problems with deposition in the stormsewer lines and ditches and helps reduce solids and organic loadings on the receiving streams. The City purchased and operates a leaf collection system that is made available on published days.

1.2 Five-year Plan for Public Education and Outreach.

The City of Sikeston believes that educating the public is an essential part of incorporating changes in storm water management into permanent practice. It is planned to start the education effort through City resources and then to transfer as much of the responsibility as possible to volunteer organizations.

The following educational resources would be utilized:

1.2.1 Employee Education.

Employees would be educated on the new regulations and instructed on how this would change and expand their responsibilities. In particular items of internal housekeeping and monitoring for erosion and sediment problems and illicit discharges would be discussed. This would be accomplished by City-wide training meetings.

Timeline:	Start:	September 2008
	Duration:	Annual educational updates.
Responsibility:	Public Works Department & Board of Municipal Utilities	

1.2.2 City Web Site.

The City of Sikeston web site would also be used and updated to provide information on educational efforts. Links would also be provided to pertinent DNR and EPA web sites.

Timeline: Start: November 2009
 Duration: Updates whenever new information becomes available.
Responsibility: City Administrative Staff

1.2.3 Utility Bill Memos.

Utility bill and other City-wide mailings would be used to transmit brochures and other information concerning educational efforts.

Timeline: Start: August 2009
 Duration: Periodic as need and opportunities arise.
Responsibility: Public Works Department and Board of Municipal Utilities

1.2.4 EPA Web Casts.

Special notices would be made to sponsor attendance of EPA Stormwater web casts to be hosted by the City.

Timeline: Start: July 2008
 Duration: Sponsor meetings whenever web casts are offered.
Responsibility: Public Works Department

1.2.5 Contractor, Engineer and Architects Educational Meetings.

The City would sponsor meetings and seminars to target persons and organizations that deal with the design or construction of site improvements. The goal of these meetings would be to discuss new regulations and ordinances regarding storm water management, and in particular present required methods and techniques for erosion and sediment control measures.

Timeline: Start: January 2009
 Duration: Annual
Responsibility: Public Works Department

2.2.1 SWAB.

Form and appoint the SWAB.

Timeline: Start: July 2008
 Duration: 2 months
Responsibility: City Council

2.2.2 Train Volunteers & SWAB Members.

Hold city-wide public meetings for education and to receive feedback from the public.

Timeline: Start: September 2008
 Duration: 2 Months
Responsibility: Public Works Department & SWAB

2.2.3 Public Meetings.

Hold city-wide public meetings for education and distribution brochures to receive feedback from the public.

Timeline: Start: November 2008
 Duration: Periodic
Responsibility: Public Works Department & SWAB

2.2.4 Student Education.

Set-up educational programs for area schools.

Timeline: Start: September 2009
 Duration: Semi-annual
Responsibility: SWAB

2.2.5 Citizens Watch Groups.

Sponsor formation of citizens watch groups, supervise initial meetings and form response format for groups to provide information to City.

Timeline: Start: September 2009
 Duration: 4 Months
Responsibility: Public Works Department and SWAB

2.2.6 Community Clean-up Efforts.

Add measures relating to storm water to the current fall and spring clean-up efforts.

Timeline:	Start:	October 2008
	Duration:	Semi-annual
Responsibility:	Public Works Department and SWAB	

3. ILLICIT DISCHARGE DETECTION AND ELIMINATION PLAN.

The new storm water regulations require that the City adopt ordinances and policies to take positive measures to find and eliminate illicit discharges to the storm water system. An illicit discharge is any discharge, intentional or otherwise, that is not a resultant of rainfall or is not otherwise specifically permitted.

3.1 Past Efforts.

The City has completed a substantial amount of work that is integral in the process of detecting and eliminating illicit discharges. These items include the following:

- A detailed storm sewer map was developed with the 1983 Storm Water Management Plan. The map has been updated by attachment of plans kept on file by the City for all developments after the 1983 city-wide mapping project.
- The current ordinance includes language prohibiting non-storm water discharges and stipulates enforcement actions. There should be no new ordinances required for compliance with this control measure.
- The Sikeston Board of Municipal Utilities makes annual inspections of the industries in Sikeston for illicit discharges as part of their EPA Pretreatment Program duties.

3.2 Five-Year Plan for Illicit Discharge Detection and Elimination.

3.2.1 Mapping.

The existing storm water maps are hand drawn and drainage work completed since 1983 is shown in an accumulation of separate drawings. The City now has GIS mapping capability, and the City should add a layer to these drawings for the complete storm sewer system and keep them updated as changes are made.

Timeline: Start: July 2008
Duration: Complete initial mapping by July 2009,
and update as required.
Responsibility: Public Works Department or Consultant

3.2.2 Employee Training.

The staff of the City of the Board of Municipal Utilities should be trained on the detection of illicit discharges and be directed to make such detection a part of their normal routine.

Timeline: Start: September 2008
Duration: Initial indoctrination with annual
updates.
Responsibility: Public Works Department and Board of Municipal

3.2.3 Site Inspections.

The City of the Board of Municipal Utilities should work to share the burden to routinely make inspections of locations and entities that pose a threat of illicit discharge generation especially directed at the detection of illicit discharges.

Timeline: Start: July 2008
Duration: Annual
Responsibility: Public Works Department and Board of Municipal
Utilities

3.2.4 Public Education.

The City should inform residents of the dangers of illicit discharges and recruit the help of the public in detection. Such information can be made through mailers, utility bill memos and work through watch groups.

Timeline: Start: August 2009
Duration: Periodic
Responsibility: Public Works Department and Board of Municipal
Utilities

3.2.5 Emergency Response.

The Sikeston Department of Public Safety is very well equipped for hazardous materials emergency response. The Department of Public Works, Board of Municipal Utilities and other City branches must establish

lines of communication to provide reliable information that would be needed for an emergency response by the Department of Public Safety. To that end the above agencies should conduct period meetings to discuss and share information.

Timeline:	Start:	July 2008
	Duration:	Initial indoctrination plus annual update meetings.
Responsibility:	Department of Public Safety, Public Works Department and Board of Municipal Utilities	

4. CONSTRUCTION SITE RUNOFF CONTROL.

The new storm water regulation will require the City to take measures to require control of runoff from construction sites to minimize pollution. This will require the City to revised the goals of storm water management to address both the rate of the runoff and quality of the runoff.

4.1 Past Efforts.

Sikeston is fortunate in that their flat topography and relatively underdeveloped drainage systems do not lead to serious erosion and sediment problems. Consequently erosion and sediment control has not been given much serious attention in areas other than along the Sikeston Ridge.

Since 1980 the City of Sikeston has had a Storm Water Management Plan. This plan was developed to manage and control the rates of runoff to help prevent hydraulic overloads of the drainage systems. This Plan has minimal requirements relating to water quality. The ordinance does provides for storm water detention basins which have the ancillary benefits of helping control erosion and transport of sediment.

4.2 Five-Year Plan for Construction Site Runoff Control.

The tasks to be accomplished under this control measure include the following:

- Review the current ordinance and recommend updates.
- Outline a procedure for construction plan review, approval and inspection of projects that would have an impact on water quality.

5. POST-CONSTRUCTION RUNOFF CONTROL.

The City must develop, implement and enforce a program to reduce pollutants from post-construction runoff. Currently the City has no formal requirements for such controls, but in practice there have been several major improvements of such nature.

5.1 Past Efforts.

Since 1990, new development in the City has been done with a strategy for control of runoff through the use of regional detention ponds and retention basins. Such facilities offer both attenuation of discharge rates and reduction of erosion and sediment pollution.

These efforts have resulted in the construction of the facilities noted below which are judged to have been very effective in both controlling the rate and improving the quality of the storm water discharges from Sikeston.

- In 1990 a detention lake was developed that receives all runoff from the northeast section of the City. This lake has a depth of over 15 feet and is used for control of both the rate and quality of runoff.
- In 1997 the Sikeston Business, Education and Technology Park was developed. All runoff from this approximate 1,000-acre City-developed region at the northern limits of Sikeston was developed to drain to deep retention basins into the very sandy underlying soils that drain dry to allow maintenance by mowing.
- In 2000 a project for the entire developing area in the southeast portion of Sikeston was constructed including a recreational lake/detention basin.
- Also in 2000 a project was undertaken to drain the existing southern portion of the City to existing large dry borrow pits along Route 60 that functions as a retention basins.

The City has taken responsibility for operation and maintenance of the regional storm water management facilities.

5.2 Five-Year Plan for Post-Construction Site Runoff Control.

The tasks to be accomplished under this control measure include the following:

- The current ordinance has very few requirements relative to water quality, and a substantial amount of new local requirements will need to be developed.

- The City will need to develop a strategy for determining the Best Management Practices (BMPs) that would be used for controlling post-construction runoff.
- Include steps in the construction plan review process to assure that adequate methods and responsible parties for post-construction runoff control are provided.
- Adopt a procedure to assure long-term maintenance.

5.2.1 Review of Existing Storm Water Ordinance.

The SWAB would review the existing ordinances and storm water management practices to assess the need for future amendments. The SWAB should also review the ordinances annual to determine if modifications are in order.

Timeline:	Start:	November 2008
	End:	Initial review in 2 months, continue annual reviews
Responsibility:	Public Works Department and SWAB	

5.2.2 Draft New Ordinances and Procedures.

The SWAB would develop recommendations for new ordinances and City review and inspection practices for compliance with new storm water regulations. The SWAB would also develop specific procedures to deal with common pollutant and sediment pollution from various types of sources.

Timeline:	Start:	November 2008
	Duration:	6 months
Responsibility:	Public Works Department and SWAB	

5.2.3 Adopt Storm Water Ordinance Amendments.

The City Council with the advice of the SWAB would develop and adopt amendments to the current Storm Water Ordinance.

Timeline:	Start:	May 2009
	Duration:	3 months
Responsibility:	City Engineer, City Attorney and City Council	

6.2.2 Drainage System Maintenance.

Establish and implement an organized plan for the orderly maintenance and cleaning of the storm sewer and drainage ditch facilities in the City.

Timeline:	Start:	May 2009
	Duration:	Perpetual
Responsibility:	All City Departments	

TIMELINE FOR STORM WATER MANAGEMENT PLAN

CITY OF SIKESTON, MISSOURI

January 14, 2008

CONTROL MEASURE	2008						2009												
	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
PUBLIC OUTREACH																			
Employee Education																			
City Web Site																			
Utility Bill Memos																			
EPA Web Casts																			
Contractor & A/E education																			
Volunteer Education																			
PUBLIC PARTICIPATION																			
Form SWAB																			
Train SWAB																			
Public Meetings																			
Student Education																			
Citizens Watch Groups																			
Community Clean-up																			
ILLICIT DISCHARGE																			
Mapping																			
Employee Training																			
Site Inspections																			
Public Education																			
Emergency Response																			
CONSTRUCTION SITE RUNOFF CONTROL																			
Review Existing Ordinances																			
Draft New Ordinances and Procedures																			
Adopt Ordinance Amendments																			
Implement Amendments																			
POST-CONSTRUCTION RUNOFF CONTROL																			
Review Existing Ordinances																			
Draft New Ordinances and Procedures																			
Adopt Ordinance Amendments																			
Implement Amendments																			
POLLUTION PREVENTION																			
Employee Training																			
Drainage System Maintenance																			

LEGEND

TASKS WITH CRITICAL TIMELINES



TASKS WITH PERPETUAL TIMELINES