

CITY OF ARNOLD

REVISED STORM WATER MANAGEMENT PLAN

FOR THE PERIOD 2008-2013

Summary of Minimum Control Measures (MCM)

Public Education and Outreach (MCM #1)

- A. Distribution of Educational Materials
- B. Web page Devoted to Clean Water Info & Storm Water Management Plan
- C. News Releases in City Newsletter & Local Newspapers
- D. Cross-Departmental Education
- E. Annual Report to City Council

Public Involvement (MCM #2)

- A. Clean Stream Activities
- B. Complaint Notification Procedures
- C. Stenciling Program

Illicit Discharge Detection & Elimination (MCM #3)

- A. GIS Mapping
- B. Ordinance Update & Adoption
- C. City-Wide Sewerage Program
- D. Management, Operation and Maintenance of Existing Sanitary Sewer System
- E. Inspection/Enforcement
- F. Suspected Illicit discharge Reporting Procedures

Construction Site Storm Water Runoff Control (MCM #4)

- A. Ordinance Review
- B. Inspection/Enforcement
- C. BMP Identification

Post-Construction Storm Water Runoff Control (MCM #5)

- A. Ordinance Review
- B. Inspection/Enforcement
- C. BMP Identification

Good Housekeeping (MCM #6)

- A. Facility Operations
- B. Street Sweeping
- C. Maintenance of Storm Water System
- D. Training of Municipal Employees

Public Education and Outreach (MCM #1) 2008-2013

The target audience is everyone living, working, recreating and doing business in the City of Arnold. These groups will be reached through the City of Arnold Newsletter, informational handouts at public facilities, and the City of Arnold Webpage. Success of each subsection activity will be measured against the objectives established.

The Director of Public Works is responsible for this MCM.

1A. Distribution of Educational Materials

1A.1. Previously developed brochures available at public facilities

1A.2-5. Brochures updated annually

Measure of Success (MOS): Brochures available and updated annually

1B. Web page devoted to Clean Water information and Storm Water Management Plan

1B.1. Link from City of Arnold webpage to storm water brochure and Q&A sheet dealing with the Arnold Watershed Stewardship Program

1B.2. Development of new webpage in conjunction with the City of Arnold's new webpage

1B.3-5. Web page updated bi-annually

MOS: Maintain link, develop new web page (year 2), web page updated bi-annually (year 3-5)

1C. News releases in City of Arnold Newsletter and local newspapers

1C.1. Two storm water related informational releases will be published in the City of Arnold Newsletter each calendar year

1C.1. Two storm water related informational releases will be supplied to the Jefferson County Journal and the Jefferson County Leader each calendar year

1C.2-5. Continuation of releases in subsequent years

MOS: Number of releases published annually

1D. Cross-departmental education (Parks, Com. Dev., Storm Water, Streets, Sewer)

1D.1. Identify potential training programs for City of Arnold employees

1D.2-5. Provide for continuing education on an annual basis

MOS: Identify training programs (year 1), annual training (years 2-5)

1E. Annual report to City Council

1E.1-5. Submit year-end report to City Council summarizing activities of the Storm Water Department

MOS: Submission of report to City Council each January

Public Involvement (MCM #2) 2008-2013

The City of Arnold has a history of strong public involvement with respect to pollution clean-up and prevention. The City of Arnold intends to build on this history through continued clean-up programs and development of volunteers to assist in detecting illicit discharges. Success of each subsection activity will be measured against the objectives established.

The Director of Public Works is responsible for this MCM.

2A. Clean Stream Activities

2A.1-5. Continue support (manpower & equipment) of a minimum of two clean-up events annually

2A.2. Recruit and train volunteers to assist in the detection of illicit discharges

MOS: Support two events annually, recruit/train 5 volunteers (year 2)

2B. Complaint Notification Procedures

2B.1-5. Continue to utilize the “Mayor’s Hotline” as a means for citizen notification of potential storm water issues. The new website being developed by the City of Arnold has a capability of allowing citizens to submit concerns via email. This new technology will also be utilized as a source of notification of storm water issues. Work orders will be generated utilizing computer software and resolved issues will be tabulated.

MOS: Maintain use of the “Hotline” and new website

2C. Stenciling Programs – Several storm water inlets have previously been stenciled by various groups

2C.1-5. Continue stenciling projects throughout the City utilizing civic and service organizations

MOS: Stencil a minimum of 25 inlets per year

Illicit Discharge Detection & Elimination (MCM #3) 2008-2013

The City of Arnold has implemented a GIS system with drainage ways identified. The City has also established a Storm Water Utility that currently employs 2 individuals. Success of each subsection activity will be measured against the objectives established.

The Director of Public Works is responsible for this MCM.

3A. GIS Mapping

3A.1-5. The City will continue developing/updating the GIS database, adding existing and new storm water facilities

MOS: Complete GIS database by year 4

3B. Ordinance Update & Adoption

3B.1. Review of existing ordinances

3B.2. Adoption of updated ordinances (if required)

3B.3-5. Annual review & update of ordinances

MOS: Required Ordinance adoption in year 2

3C. City-Wide Sewerage Program (currently there are 300 residential properties that are not connected to a centralized sewer system)

3C.1-5. Create sanitary sewer sub-districts, authorize engineering design, authorize construction (it is estimated that 30% of un-sewered properties will be connected in this 5 year period)

MOS: 90 residences connected to central sewer system by 2013

3D. Management, Operation and Maintenance of Existing Sanitary Sewer System

3D1-5. Scheduled maintenance, inspection and repair of the sanitary sewer collection system

MOS: Reduce SSO's to zero

3E. Inspection/Enforcement

3E.1-5. Utilize storm water utility employees to inspect private & public storm water facilities and confirm that any needed repairs are completed

3E.1-5. Utilize storm water utility employees and volunteers (see 2A.2) to monitor outfalls for illicit discharges

MOS: Inspect storm water facilities annually, monitor outfalls monthly

3F. Suspected Illicit Discharge Reporting Procedures

3F.1-5. Utilization of the "Mayor's Hotline" & new city website (currently under development) as a means of reporting suspected illicit discharges

MOS: Maintain "hotline" and website

Construction Site Storm Water Runoff Control (MCM #4) 2008-2013

The City of Arnold has an existing Storm Water & Erosion Control Ordinance (adopted November 1997). The City is currently reviewing the Metropolitan St. Louis Sewer District (MSD) 2006 Rules & Regulations and intends to present to City Council for adoption. The 2006 Version includes updated design criteria for both storm water volume and quality, and will also include acceptable BMP's. Success of each subsection activity will be measured against the objectives established.

The Director of Community Development and the Director of Public Works share responsibility for this MCM.

4A. Ordinance Review

- 4A.1. The Community Development Department will review the MSD 2006 Rules & Regulations for Phase II compliance and forward the document to the City Council for adoption and enactment
- 4A.2. The Community Development Department will draft a "Grading, Tree & Soil Preservation, and Revegetation" ordinance for submittal to the City Council for adoption and enactment

MOS: Adoption of MSD 2006 Rules & Regulations (year 1), draft ordinance of Grading, Tree & Soil Preservation, and Revegetation to Council (year 2)

4B. Inspection/Enforcement

- 4B.1. A construction site inspection checklist will be developed and Community Development & Storm Water Utility employees will receive available training on construction site inspections
- 4B.1-5. Continued enforcement of the Storm Water & Erosion Control ordinance

MOS: Develop checklist/receive training (year 1), uniform enforcement (years 1-5)

4C. BMP Identification

- 4C.1. Development of a master BMP list in conjunction with the adoption of 2006 MSD Rules & Regulations
- 4C.1-5. BMP list will be distributed to all contractors when obtaining a City License or requesting a grading permit

MOS: Develop BMP's (year 1), distribution of BMP's as set forth in 4C.1-5

*Need
inspection
Committee*

Post-Construction Storm Water Runoff Control (MCM #5) 2008-2013

The purpose of this program is to prevent pollution of natural waters and control storm water runoff from a site once it is no longer under construction. The target audience is developers, homeowner associations and individual homeowners. Success of each subsection activity will be measured against the objectives established.

The Director of Community Development and the Public Works Director share responsibility for this MCM.

5A. Ordinance Review

5A.1. The Community Development Department will evaluate the MSD 2006 Rules & Regulations as they pertain to Post-Construction Storm Water Runoff Control and draft any required modifications needed to obtain Phase II compliance

5A.2. While drafting the "Grading, Tree & Soil Preservation, and Revegetation" Ordinance, the Community Development Department will identify BMP's appropriate for controlling Post-Construction Runoff

MOS: Adoption of MSD 2006 Rules & Regulations (year 1), draft ordinance of Grading, Tree & Soil Preservation, and Revegetation to Council (year 2)

*Not same
construction
side*

5B. Inspection/Enforcement

5B.1-5. Utilize Storm Water Utility employees to inspect Post-Construction storm water control methods for compliance with adopted ordinances

MOS: Annual inspection of control facilities

5C. BMP Identification

5C.2. In conjunction with 5A.2 develop a list of BMP's for controlling storm water runoff, encourage such methods as filter strips, grassed swales and other natural methods

MOS: Identify BMP's (year 2)



Good Housekeeping (MCM #6) 2008-2013

This MCM requires the development and implementation of a cost-effective operation, maintenance and training program to prevent or reduce pollutant runoff from municipal operations. Success of each subsection activity will be measured directly against the objectives established.

The Director of Public Works is responsible for this MCM.

6A. Facility Operations

6A.1. Inventory storage, use and disposal methods of all goods & materials used by the City of Arnold operations. Inventory to include chemicals, paints, fuels, oils, fertilizers, deicing materials, aggregate and all other materials purchased and used on a regular basis.

6A.2. Develop BMP's for storage, use and disposal of above identified materials.

6A.3-5. Annually review and update inventory and BMP's.

MOS: Inventory completed (year 1), BMP's developed (year 2), annual review of BMP's (years 3-5)

6B. Street Sweeping

6B.1-5. Continue contracted street sweeping service until funding is available to implement an in-house program.

MOS: Funds budgeted for 25 days of sweeping annually

6C. Maintenance of Storm Water System

6C.1-5. Utilize Storm Water Utility employees for on-going maintenance, repair and upgrade of the existing storm water system.

MOS: Maintain existing system, make required repairs & upgrades

6D. Training of Municipal Employees

6D.1. Identify and/or develop a training program for City employees addressing pollution prevention

6D.2-5. Deliver training to employees on a quarterly basis

MOS: Develop training program (year 1), present 4 training sessions annually (year 2-5)