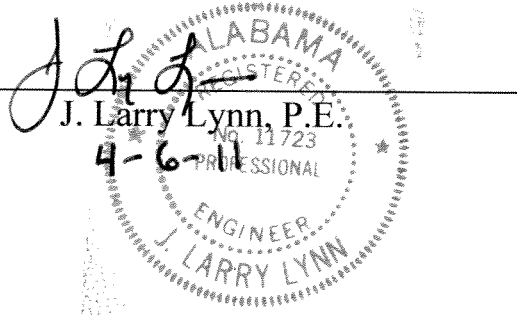


**STORMWATER MANAGEMENT PLAN
FOR
THE CITY OF TUSCUMBIA
2011 – 2015**

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TABLE OF CONTENTS

	TITLE	PAGE
Section 1	Executive Summary	
	-Introduction	1-4
	-Regulation of Stormwater Collection Systems in the United States	1-4
	-Current Extent of the National Stormwater Program	1-5
	-Legal Basis for Stormwater Regulations	1-7
	-The Role of State Governments in Stormwater Permitting	1-8
	-Role of Local Governments in Stormwater Regulation	1-9
	-Technology Based Requirements of Stormwater Discharge Permits	1-10
	-Stormwater Discharge Permits and State Water Quality Standards	1-11
	-Municipal Stormwater Discharge Permit Requirements	1-12
	-Types of Permits Required for Municipal Discharges	1-13
Section 2	Stormwater Management Program (SWMP) for Tuscumbia	
	-Requirements for the SWMP	2-1
	-Minimum Control Measures	2-6
	-Public Education and Outreach on Stormwater Impacts	2-6
	-Public Involvement / Participation	2-10
	-Illicit Discharge Detection and Elimination	2-12
	-Construction Site Stormwater Runoff Control	2-15
	-Post Construction Stormwater Management in New Development and Redevelopment	2-18
	-Pollution Prevention / Good Housekeeping for Municipal Operations	2-21
Appendix		
	- Subdivision Regulations (BMP Section)	1
	- # A-238: Ordinance for illicit discharge and connection to the storm water system.	1-9
	- # A-239: Ordinance for stormwater operation and maintenance	1-4
	- # A-240: Ordinance for erosion and sediment control	1-9
	- Definitions and Acronyms	1-5
	- Inspection Forms	1
	- Permit Forms	1
	-Regulations for Municipal Operations and Stormwater Quality	1
	-ADEM Listed 303 (d) Streams	1-5
	- NPDES Permit for 2011	1-42

Section 1

Executive Summary

The U.S. Environmental Protection Agency has published final regulations for Phase II Stormwater Permitting (40 CFR parts 122 and 123) after signing on October 29, 1999. Included in the Federal Register is a listing of municipalities, including the City of Tuscumbia, which are required to comply with the regulations. A Notice of Intent (NOI) was filed with ADEM and the permit was issued in January 2011 for 2011-2015. The permit will give direction for the City's compliance efforts for a period of up to five years following issuance, at which time permit renewal will be required. The expiration date is January 31, 2016. Application for the next permit will be due 90 days prior to January 31, 2016. The application for a general permit includes the NOI and the Stormwater Management Program. To address the Phase II regulations, the City of Tuscumbia has prepared this document to address the proposed regulatory requirements. This document and an NOI will be required on November 1, 2015 for extending permit coverage. The requirements include six minimum control measures designed for municipal stormwater management:

1. Public Education and Outreach on Stormwater Impacts
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management in New Development and Redevelopment

6. Pollution Prevention and Good Housekeeping for Municipal Operations.

There are a few components that are deemed desirable by the USEPA and would require voluntary actions on the part of the City. These six minimum control measures are final for the present time, but may be modified by the Federal Government or the State permitting authority in the future.

The regulations also specify requirements for record keeping, and for allowing citizen access to records. Annual reporting must be filed with the State, documenting efforts in stormwater management related to the six minimum control measures and other permitting requirements during the five years of the permit. Reports will be due each year.

This document was developed for the City by comparing mandatory components with existing and planned City stormwater activities. The results of this comparison were used to develop a listing of needed activities that will be considered by the City.

The City has made progress in developing the stormwater management program. These include requirements for developers to include erosion control measures in their plans, and other stormwater management actions that are either already in place or planned for implementation in the near future. The City plans to implement the mandatory components which have not been addressed prior to the end of year 2015

It should be noted that these mandatory components are not required to be implemented by the date of permit application, but during the 5-year permit cycle.

The SWMP addresses the applicable requirements of the City of Tuscumbia NPDES Permit for the year 2011 – 2015. Each of the six minimum control measures are outlined with a general scope, documentation, rationale, proposed BMP's, measurable goals and schedules for achieving those goals. The BMP's and the rationale will be included in the annual reports which are due March 31 each year.

The City of Tuscumbia is intent on complying with the NPDES Permit requirements and will make every effort possible to achieve that goal.

A handwritten signature in black ink, appearing to read "Billy S. Shoemaker", written over a horizontal line.

Mayor Billy Shoemaker

Introduction

The City of Tuscumbia is currently permitted to discharge to waters of the state. A part of this permit is a Stormwater Management Program. This program is to address issues of concern raised by *National Pollutant Discharge Elimination System (NPDES) Regulations for the Water and Pollution Control Program Addressing Stormwater Discharges*. The proposed regulations, generally referred to as Phase II Stormwater Permitting Requirements, were initially published as 40 CFR Parts 122 and 123 in the Federal Register on January 9, 1998.

The purpose of this program is to provide minimum Stormwater Run off control measures that can be enforced by Subdivision Regulations, Building Codes and Ordinances. The program also serves as a logical basis for recording detailed information that may be required to support the City's NPDES Phase II Permit process.

Regulation of Stormwater Collection Systems in the United States

Municipal stormwater collection systems experience the discharge of many substances as well as water. As stormwater flows over pavements, lawns, driveways, parking lots and industrial sites, it often picks up pollutants, such as oil and grease, fertilizers, pesticides, metals and paper and plastic. Erosion and

sediment from active construction sites discharges into storm drainage systems unless there is adequate prevention.

Private discharges from residential areas may contribute to stormwater pollution by improper disposal of lawn clippings, leaves, used oil and household chemicals as well as improper use of pesticides. Industrial and commercial facilities may discharge pollutants via overland flow into stormwater collection systems through cross-connection of storm drains and sanitary sewers. Floor drains are sometimes connected directly into the storm drainage system.

Because of the pollution resulting from these sources, the federal government has created the National Stormwater Program for regulating stormwater discharges throughout the United States. This program and its effects on state and local government agencies and those involved in industrial and construction activities is addressed in the SWMP.

Current Extent of the National Stormwater Program

The National Stormwater Program originated with the federal government and is directed by the U.S. Environmental Protection Agency (EPA). The voluntary cooperation of authorized states and mandatory participation of many local government agencies will be required to implement a successful program. The program was implemented in two major phases, with effective dates of October 1992 and March 2003, respectively. The first phase included discharges

associated with industrial activity (including construction activity) and discharges from all public stormwater collection systems serving urban populations of 100,000 or more. The second phase includes all other public stormwater collection systems within urbanized areas plus other small public stormwater collection systems meeting EPA or state criteria for designation.

Outside urbanized areas, all stormwater collection systems serving a population center of at least 10,000 people with a population density of at least 1,000 people per square mile are included in the National Stormwater Program after the full implementation of Phase II. Within urbanized areas, almost all stormwater collection systems, as well as those serving a population of fewer than 10,000 people, are included in the program.

The second phase of the National Stormwater Program also reduced the minimum size of construction projects requiring permit coverage. Whereas the minimum amount of soil disturbance that would trigger a permit requirement under Phase I was 5 acres, this minimum has been reduced to 1 acre in Phase II, for most cases.

The EPA has the authority to require stormwater discharge permits from any discharge that contributes to a violation of a water quality standard or that contributes a substantial load of pollutants to the waters of the United States. The EPA could exercise this authority to extend the National Stormwater Program as needed in the future.

Return flows from irrigated agriculture, agricultural stormwater runoff, and discharges from non-point silvicultural activities are exempt from *National Pollutant Discharge Elimination Systems* (NPDES permit requirements (40 Code of Federal Regulation (CFR) 122.2; 40 CFR 122.3 (e) and (f)).

Legal Basis For Stormwater Regulations

The EPA developed the National Stormwater Program in response to legislation passed by Congress. The most important item of legislation was the *Federal Clean Water Act of 1972* (CWA) (Public Law 92-500), which established the NPDES. The CWA has been amended several times. One important set of amendments was the *Water Quality Act of 1987* (Public Law 100-4) that established the phased approach for stormwater discharge regulation in the United States.

The CWA has been setting the direction of water pollution control in the United States since 1972. The CWA is built on the premise that no one has a right to pollute the waters of the United States. Anyone wishing to discharge pollutants must obtain a permit to do so, and the permit must limit the composition of the discharge and the concentrations of the pollutants in it. Some permit conditions require specified levels of control based on a consideration of technology and cost, regardless of the receiving water's ability to purify naturally.

However, tighter limits may be imposed, if necessary, to preserve or restore the quality of the water body that receives the discharge.

The Role of State Governments in Stormwater Permitting

The CWA allows states to request EPA authorization to administer the NPDES program within their borders. The EPA must approve a state's request to operate the permit program once the EPA determines that the state has adequate legal authorities, procedures and the ability to administer the program. The EPA is also obligated to adopt standard requirements for state NPDES programs, including guidelines on monitoring, reporting, enforcement, personnel, and funding. At all times following authorization, state NPDES programs must be consistent with minimum federal requirements, although the programs could be more stringent.

At present, most states have chosen to assume at least some stormwater permitting authority. Within these authorized states, all permit submissions are made to the state agency that administers and enforces the stormwater program. In non-authorized states, the appropriate EPA regional office is responsible for permitting and permit enforcement.

All states are required to develop water quality standards for waters of the United States within their boundaries. States are required to review their water quality

standards at least once every 5 years and, if appropriate, revise or adopt new standards. The minimum elements that must be included in a state's water quality standards include the use designation for all water bodies in the state, water quality criteria sufficient to protect those use designations, and an anti-degradation policy consistent with EPA's water quality standards (40 CFR 131.6)

Role of Local Governments in Stormwater Regulation

The role of local governments in the National Stormwater Program has become very significant. As stated previously, the first phase of the program involved only municipal entities serving urban populations of 100,000 or more. The total number of Phase I municipal permits was fewer than 300. However, Phase II required several thousand additional municipal permits to be issued. Many of the Phase II municipal discharges are small government agencies with limited technical resources.

Municipal discharges have a very broad set of requirements under the National Stormwater Program. **First**, they are responsible for obtaining permit coverage for the discharges from their own stormwater collection system, and in meeting various requirements regarding the operation and overseeing that system. **Second**, they are responsible for obtaining permit coverage for any industrial facilities or construction sites that they own. **Finally**, they are also responsible for recordkeeping, inspection, and enforcement of stormwater permit requirements

for construction activities and certain types of industrial operations within their jurisdiction.

The two primary types of public stormwater collection systems in the United States are separate systems and combined systems. Most cities use separate systems which are designed to carry only stormwater runoff and other wet weather flows. However, over 30 of the oldest cities in the United States rely on *Combined Sewer Systems (CSS)*. A CSS carries sanitary sewage under dry weather conditions, but is surcharged with runoff under storm conditions.

Technology Based Requirements of Stormwater Discharge Permits

Stormwater permits are intended to achieve improvements in water quality by reducing or eliminating pollutant loadings from stormwater sources. The exact requirements for attaining this goal depend upon the type of permit, the type of discharge and the characteristics of the body of water that receives the discharge.

Technology based requirements represent the minimum level of control that must be imposed by an NPDES permit. The *best conventional technology (BCT)* standard applies to the control of conventional pollutants, while the *best available technology (BAT)* standard applies to the control of all toxic pollutants and all pollutants that are neither toxic nor conventional pollutants. BCT and BAT standards are generally applied to stormwater discharges associated with

industrial or construction activity. These requirements are met by the development and implementation of *Best Management Practices* (BMPs) and pollution prevention measures as a part of a stormwater pollution prevention plan for the industrial facility or construction site.

Two technology based standards have been established for discharges from public stormwater collection systems. The first standard provides that municipal permits must contain a requirement to effectively prohibit illicit non-stormwater discharges into the system. The other standard requires that permits for discharges from public stormwater collection systems reduce the discharge of pollutants to the *maximum extent practicable* (MEP), including management practices, control techniques, system design and engineering methods.

Stormwater Discharge Permits and State Water Quality Standards

In addition to technology based controls, *NPDES permits* must include any conditions more stringent than technology based controls necessary to meet state water quality standards. *Water quality standards* establish the “goals for a water body”. The CWA states the national goal of achieving “water quality which provides for the protection and propagation of fish, shellfish, wildlife and recreation in and on the water,” wherever attainable. These national goals are commonly referred to as the fishable / swimmable goals of the CWA. The EPA

requires that water quality standards provide for fishable / swimmable uses, unless those uses have been shown to be unattainable.

Scientific studies are performed to establish the *Total Maximum Daily Load* (TMDL) of a particular pollutant that is allowable without violation of the water quality standard. If TMDL studies indicate that too much of a particular pollutant is entering the stream system, then any discharge permit within that stream system may be subject to revision in order to lower the pollutant levels to the TMDL value. The City of Tuscumbia has received no notification as to any pollutant level being exceeded and has no streams on the 303 (d) list. (See appendix for listing of streams)

Municipal Stormwater Discharge Permit Requirements

The EPA has identified six minimum control measures that are always necessary for municipal stormwater discharges to comply with the statutory requirements of eliminating illicit non-stormwater discharges and reducing pollutant loading to the maximum extent possible:

1. Public education and outreach on stormwater impacts
2. Public involvement and participation
3. Illicit discharge detection and elimination
4. Construction site stormwater runoff control

5. Post-construction stormwater management in areas of new development and re-development
6. Pollution prevention and good housekeeping for municipal operations.

Additional requirements are often imposed for larger systems. These include spill prevention and response, monitoring of wet weather flows and dry weather flows, and special inspection and enforcement requirements for high-risk industrial discharges that contribute flows to the public drainage system.

Judgment is required in order to determine the best combination of control measures for a particular municipal stormwater collection system. The selection of control measures should consider such factors as the conditions of receiving waters, specific local concerns, and other aspects included in a comprehensive watershed plan. Various municipal entities may choose to cooperate in the development and implementation of the minimum control measures.

Types of Permits Required for Municipal Discharges

Separate types of stormwater discharge permits are used for municipal stormwater discharges, for construction stormwater discharges, and for industrial stormwater discharges.

Therefore, industrial facilities or construction sites that discharge into the Tuscumbia municipal separate storm sewer system are still required to obtain EPA or state permit coverage for the facility's discharge. This is true even if the industrial facility or construction site is operated by the same agency that operated the public drainage system. Therefore, many local and state government agencies should obtain two or three different types of stormwater discharge permits: one for the public drainage system as a whole, and separate permits for each industrial facility and construction site operated by the city. If Tuscumbia initiates a construction project which disturbs more than one acre, a general permit from ADEM will be required.

Section 2

Storm Water Management Program (SWMP) for Tuscumbia

A. Requirements for the SWMP

1. The City of Tuscumbia hereby implements and enforces a SWMP designed to reduce the discharge of pollutants from Tuscumbia to the maximum extent practicable (MEP) to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act. The SWMP includes management practices, control techniques and system design, engineering methods; and such other provisions as the ADEM permit for MS4's may determine appropriate for the control of such pollutants all as follows:
 - a. The BMP's that Tuscumbia will implement for each of the storm water minimum control measures have been prepared by a professional engineer registered in Alabama.
 - b. Permittee shall begin implementation of the terms and conditions of this permit as soon as the effective date of permit coverage, and shall meet the deadlines and schedules established in the Permit and in SWMP;
 - c. Coordination among entities covered under this small MS4 permit may be necessary to comply with the conditions of the SWMP. The SWMP shall include, where applicable, condition mechanisms among entities covered under the permit to encourage coordinated storm water related policies, programs, and projects within adjoining or shared areas. Entities covered

under the small MS4 permit may include: municipalities, counties, colleges and hospitals.

- d. The measurable goals for each of the BMP's including, as appropriate, the months and years in which the city will undertake required actions, including interim milestones and the frequency of the action will be described herein. Such measurable goals, including the deadlines and interim milestones, shall be enforceable requirements of the permit. The city understands that extensions of milestones may be granted for good cause shown and failure to implement effective BMP's is not good cause to extend milestones.
- e. The person responsible for implementing or coordinating the BMPs for the city's SWMP is the chief official of the building department.

- 2. The city will review and revise its relevant ordinances, or adopt any new ordinances or other regulatory mechanisms as allowed in accordance with 40 CFR 122.34(b)(3)(ii)(B), that provide it with adequate legal authority to control pollutant discharges into and from its MS4, and to implement and enforce its SWMP.

This legal authority will, at a minimum, authorize the City to:

- (a) Prohibit Non-Storm water Discharges unless otherwise authorized in Part I.B of the permit or unless such storm water discharges are in compliance with a separate NPDES permit, or determined by the Department not to be a significant contributor of pollutants to waters of the State.

- (b) Prohibit Illicit Discharges – Prohibit and eliminate illicit connections or discharges to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4. Illicit discharges include those prohibited discharges listed in Part I.C. of the permit and any other discharge not authorized under a regulatory mechanism.

- (c) Prohibit Spills or Other Releases – Control the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4.

- (d) Require Compliance with conditions in the Permittee’s ordinances, permits, contracts or orders. Require Installation, Implementation and Maintenance of Control Measures. Require operators of construction sites and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 to the maximum extent practicable through the installation, implementation and maintenance of storm water control measures.


- (e) Receive and Collect Information – The Permittee must have the authority to request a copy of the applications submitted to ADEM, as well as supporting materials.

- (f) Inspect – The Permittee must have the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations for active or potential polluted storm water discharges, or non-compliance with regulatory requirements established by the MS4 to meet requirements of this permit.
- (h) Require Response to Violations – The Permittee must have the ability to promptly require that dischargers cease and desist discharging and/ or cleanup and abate a discharge.
- (i) Levy Monetary Penalties – The Permittee must have the ability to:
1. Levy citations or administrative fines against responsible parties.
 2. Require recovery and remediation costs from responsible parties.
- (j) Impose Civil / Criminal Penalties – The Permittee must have the ability to impose more substantial civil or criminal sanctions (including referral to a city or district attorney) and escalate the corrective response, consistent with its enforcement response plan developed pursuant to Part III.B.4.d of the permit, for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.
- (k) Control the contribution of pollutants from a portion of the shared MS4 to another portion of MS4 through the interagency agreements among

Permittees. Control of contributions of pollutants to the maximum extent practicable from one portion of the shared MS4 to another portion for the MS4 through interagency agreements with other owners of the MS4 is encouraged.

The City of Tuscumbia has taken the necessary steps to obtain and maintain full legal authority to the extent allowed under State law to implement and enforce each of the requirements contained in this permit. The city will review its ordinances and make any changes or additions that will be necessary for enforcement.

The intent of the City of Tuscumbia is to provide for control of the discharge of storm water run off such that the receiving waters of the state are not adversely effected. The city will enforce the ordinances related to the SWMP documents herein.



Mr. Luster Echols
Coordinator

Minimum Control Measures

I. Public Education and Outreach on storm water impacts.

The City has implemented a public education and outreach program and will continue this program by:

1. Distributing education materials to the community
2. Conducting outreach activities.

These efforts will educate the public as to the impacts of discharges on water bodies and the steps that each person can take to reduce pollution in the storm water runoff.

The effort will be continuous through the permit period. Educational material will be mailed to each home and business up to two times per year.

Literature is available for hand out at schools and a designated person will deliver the documents to the schools at least once per year.

Documentation

The city has developed a documentation method which consists of providing a file which contains copies of mail out material and presentation material. The file will date each action taken. Progress for this program will be provided in each annual report.

Rationale

1. Individual households and businesses will be informed about storm water pollution prevention by mail out material, newspaper ads, billboards, posted signs on travel ways and by website.
2. The city will encourage the public to become involved in the program by providing “Earth Day” or “Earth Month” activities. Earth Day and Earth Month will encourage people to pick up trash by selecting a mile of roadway or a section of a drainage ditch as their responsibility. Littering will be discouraged by appropriate signs on travel ways.
3. The target audiences include the general public, businesses, engineers, architects, contractors, developers and industries. These audiences were selected because collectively they contribute to littering and / or they are active in soil disturbance and there is a possibility of fuel spills or chemical damage from some of these entities.
4. The main sources of pollution that the education program addresses is trash and litter, soil disturbances, fuel and chemical processes and the use of fertilize and pesticide.
5. The outreach to the target audience will be through mail and public announcement methods. The city expects to reach approximately 8,000 people within the permit boundary.
6. Overall management and implementation responsibility of the education and outreach program is the city building official.
7. The success of the program will be measured by keeping track of the number of violations of the permit that we recorded each year and the amount of trash and litter collected each year. Hopefully permit violations and trash collection will decrease due to the efforts of the target audience.

Education and outreach efforts will be prioritized to target the following audiences and subject areas:

A. General Public

1. General impacts of storm water flows into surface waters will be addressed by mailouts twice per year.
2. Impacts from impervious surfaces include flushing of debris and soil during rains. The public will be encouraged to keep parking lots and yards clean.
3. Source control BMP's and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance, and landscaping. Encourage residential neighborhoods to clean up pet waste daily, abstain from changing oil or using fuel without protection for spills. They will be asked to plant bushes and trees to help reduce runoff. They will be reminded to use environmentally friendly fertilizers and pesticides.

B. General Public, Businesses, Including Home-Based and Mobile Businesses

1. BMP's for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
2. Impacts of illicit discharges and how to report them.
3. Citizens will be discouraged in using hazardous materials and if they do see them being used, to report any spills.

C. Homeowners, Landscapers, and Property Managers

1. Yard care techniques that protect water quality.
2. BMP's for use and storage of pesticides and fertilizers.
3. BMP's for carpet cleaning and auto repair and maintenance.

4. Runoff reduction techniques, including site design, pervious paving, retention of forests and mature trees.
5. Storm water pond maintenance.

These items are related to a Section A and will be addressed accordingly.

D. Engineers, Contractors, Developers, Review Staff and Land Use Planners

Design professionals will be required to provide the following in their plans and specifications:

1. Technical standards for construction site sediment and erosion control.
2. Runoff reduction techniques, including site design, pervious paving, alternative parking lot design, retention of forests and mature trees.
3. Storm water treatment and flow control BMP's.
4. Impacts of increased storm water flows into receiving water bodies are to be addressed with storm water detention.
5. Site protection during construction and post construction.
6. Encourage use of low impact development (LID) such as greenways and water detention and pervious pavements.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
Mail out Fliers	To each home and business two times per year	April / September
Run off Reduction Permeable Pavement	Continuous by Ordinance	In progress
Site Protection Increased Vegetation & Green Areas	Continuous by Ordinance	In progress

II. Public Involvement / Participation

The City has implemented a public involvement / participation program and will extend that outreach by:

1. Involving citizens in monitoring and reporting.
2. Hold a public hearing for citizen input. Citizens will be encouraged to participate with ideas and suggestions in the decision making process in the development of the city's overall SWMP. The program will be developed by advertising public hearings.
3. Ask citizens to help educate other people.
4. Storm water structure stenciling.

These efforts will continue through the permit period.

Help in becoming involved will be available from city employees.

Volunteers to carry out this goal will be encouraged to provide ideas and suggestions.

Documentation

As a part of the program, the city will maintain files to document any citizen input or physical efforts made. The file will date each effort and describe the effort.

Progress will be addressed in the annual report.

Rationale

1. The city will involve citizen's participation by contacting environmentally concerned individuals.
2. The citizens will also be asked to look for any possible form of discharge violation and report it to the city.
3. The target audience will be private citizen and environmental groups.
4. A citizen representative will be sought out who would report to the building department and attend the public hearing. Younger citizens will be asked to participate in stenciling and environmental art contests.
5. The person responsible for the control measure is the city building official.
6. Evaluation of this measure will be made from reports obtained from the participants.
7. Results of this effort will be documented by inspection of storm drains and open ditches, detention drains and catch basins. The amount of debris will be collected and weighed. Comparison of each year's collection will be studied to verify any improvements.
8. All SWMP and related documents will be available for public review when requested.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
Public Hearing for public involvement	Every other year	2011, 2013, 2015
Stenciling at storm water inlets	One time per year	2011-2015
Art Contest at Elementary Schools	One time per year	2011-2015

III. Illicit Discharge Detection and Elimination

Documentation

The City will maintain files which verify map updates & inspections and which contain copies of ordinances that address illicit discharge. Maps will be updated as required and ordinances will be reviewed. Stream samples will be taken once a year in industrial and commercial areas. Samples will be tested for contamination and results will be reported in the annual reports and kept on file. Samples will be tested for TSS, oil and grease and pH.

Rationale Statement

The city will provide a program to detect and eliminate illicit discharge. The program will include the following:

1. Update the city's maps annually. If there are no changes, state in the annual report that there are none. Maps include all known outfalls, waters of the state and structural BMPS located in the permit boundary.
2. Existing ordinances shall be reviewed to insure they meet the requirements of the current permit. Ordinances will be updated if necessary. Enforcement of the ordinances will be executed by the city building department personnel.

3. Field inspections will be made on priority outfalls such as industrial, large commercial and construction sites.
4. Inform city employees, businesses and the general public of hazards associated with illegal disposal of waste. Charity car washes are not considered major contributions and thus do not constitute illegal discharges
5. Ordinance has been passed by city council to prohibit illicit discharge. Ordinances were chosen because they are enforceable by city officials.
6. The ordinance is being implemented each time the city performs site inspections and documents the results. These inspections are performed on a routine schedule.
7. Detection of illicit discharges will occur when dry weather spills or discharges are noted during inspections. No field tests will be performed. If discharge is identified, samples will be collected and transported to a lab for testing.

If any on site sewage is detected above ground, in storm pipes or in ditches, the local health department will be notified.

The following areas will be routinely inspected for possible illicit discharges:

1. Areas of older infrastructure
2. Industrial and Commercial Areas
3. Areas with a history of illicit discharge
4. Areas with on site sewage disposal systems
5. Areas upstream of 303(d) or TMDL water bodies

Procedures for tracing the source of illicit discharges will be visual or odor methods in combination with familiarity of the local industrial make up.

If illicit discharge is verified, the discharger will be notified and required to provide clean up. They will also be required to control the discharge to prevent further contamination.

The program will be evaluated by follow up surveys. These discharges will be included in the inspections permanently. Enforcement procedures will be escalated if necessary due to repeat violations.

8. The city will through its enforcement officer, notify public employees through annual meetings that there are certain hazards associated with illegal discharges and improper disposal of waste. Businesses and general public will be notified by mail out material. This effort will augment the reminders that are posted by department heads for good housekeeping and pollution prevention by city personnel.
9. All responsibility for public outreach, education and for implement action of the BMP's is the city's designated official who is at present the building department official.
10. The success of the minimum measure will be determined by evaluating the decrease in pollution on streets, storm sewers, ditches and creek banks. Photographs will be taken and filed each year so that progress can be verified.
11. The city will provide an ongoing training program for city field personnel. The personnel will receive training in reporting and responding to illicit discharges. Personnel will receive QCI training and will follow up with annual re-certification. Documentation will be kept on file.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
Enforcement personnel To re-certify QCI	One time per year	2011-2015
Site Inspections at industry, commercial and construction sites	12 Times per year	Monthly 2011-2015
Storm water run off sampling and testing	One time per year	February 2011-2015

IV. Construction Site Storm Water Runoff Control

Documentation

The city has an in place program to control storm water runoff from construction sites.

The program addresses pre and post construction.

Procedures for controlling site waste, site plan review, input from the public, enforcement, securing NPDES permits and site inspections are documented in existing ordinances including subdivision regulations. Copies of public input, results of plan review, records of enforcement and copies of permits will be kept on file.

Rationale Statement

The city has chosen to provide erosion and sediment controls at construction sites through subdivision regulations and ordinances. The ordinances are enforceable by city officials and will apply to non-subdivision type construction such as city infrastructure projects and building site development. A copy of the subdivision regulations and all related ordinances is attached in the appendix.

Enforcement procedures are described in the ordinances.

Site operators are required to obtain an NPDES Permit for one acre and larger sites. These permits are provided to the city's review agency. The city will follow up with a site grade permit. The site will be monitored by city personal. Sites will be reported to the operator if they are in violation with discarded materials, chemicals, litter, sanitary waste, concrete wash out, erosion and or sediment buildup.

The city will review pre-construction grade plans and will require proper BMP. A grading permit will be issued for approved BMP's.

Any information from the public is encouraged and will be considered by the building department as to any enforcement issues.

The city will inspect these sites monthly at a minimum. Violations will be reported to the operator with instructions as to clean up. Non-attention to these notices will result in enforcement procedures as outlined in existing ordinances.

Priority for site inspection will be related to sites which have a prior history of violation and / or which threaten the environment most.

The construction site control program is regulated by the city building department.

Success for this minimum control measure will be determined by the number of violations recorded each year.

Inspection Plan - All sites one acre and larger that discharge to a water body will be inspected once per month at a minimum.

Water sampling will occur annually at random sites within the city. These sites are selected based on being industrial or commercial and large construction sites. Further sampling will be done if contamination is discovered during routine sampling or if contamination is discovered at any time. Sampling and reporting will follow ADEM Guidelines.

The city's response plan is outlined in attached ordinances. (See Appendix)

For construction projects or industrial facilities subject to ADEM regulations and permits who have not filed and received permit coverage, the city will within 30 days of discovery notify ADEM.

The City will provide the following documentation of the violation:

1. Construction Site Location
2. Name of Owner / Operator
3. Estimated project size or type of industrial activity including the SIC if known.
4. Record of communication with the owner / operator regarding the violation, including inspection, warning and any responses.

Enforcement will be tracked in hard copy files. The following will be included:

1. Name of Owner / Operator
2. Location of Site
3. Description of violation
4. Required compliance schedule
5. Description of enforcement response including escalated responses and repeat violations.
6. Enforcement Documentation
7. Referrals to different departments or agencies.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
To have all construction sites permitted by city and ADEM	100% of sites permitted	2011-2015
Follow up on inspections if required	Zero follow up	2011-2015
Keep run off sample results at minimum	TSS < 100 ppm Oil and Grease < 0.5 ppm pH 4 – 7	2011-2015

V. Post Construction Storm Water Management in New Development and Redevelopment

The city has a plan for addressing storm water runoff for new and redeveloped sites of one acre or larger or less than one acre if it is a part of a larger development. Existing ordinance addresses these items to the maximum extent practicable.

The city will ensure long term O & M of these BMP's through their bonding program which requires owners – operators to provide a bond which will cover the cost of replacing or establishing BMP's should the owner – operator not provide post construction control .

An agreement will be recorded with the property deed or with the subdivision plat that will transfer by legal document to any new owners/ operators the responsibility for post construction management.

The agreement will include required maintenance provisions, allow inspections by city or state personal and will allow for further lease or deed transfers. The agreement shall be subject to enforcement by the city or ADEM.

The following items will be a part of the agreement:

1. The developer's signed statement accepting responsibility for maintenance until the responsibility is transferred.
2. Written conditions in the sale or lease agreement that require the recipient to assume responsibility for maintenance or written conditions, covenants or restrictions assigning responsibility to an association.

Rationale Statement

The city has no requirement for directing growth to any certain areas other than is allowed by zoning. Sensitive areas in the city will be protected by plan review prior to construction. At that time, open spaces, wetlands etc. will be addressed and protected as directed by city ordinance and the Army Corp. of Engineers. Developers will be encouraged to preserve trees and open spaces as much as is feasible. Regulations are not in effect at present which require minimization of impervious areas, although developers are encouraged to consider pervious pavements.

Ordinances that require infill development are not in the process at present.

Education programs in the form of mail outs will be utilized to inform developers about project designs that will minimize impacts to water quality.

Developers will be encouraged to construct wet ponds to slow run off and allow treatment of sediment.

Grassed swales are encouraged in areas where maintenance is viable and where slopes permit.

There are no plans to require infiltration basins or trenches. However they may be used when other effective BMP's are not possible.

The mechanisms used to address post construction run off are existing ordinances because they are enforceable by city personnel.

Evaluation of the success of this measure will be by visual inspection annually in the city's developing areas.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
To have all post construction sites secured with vegetation and run off control	Each site closed out with City Approval	Continuing 2011-2015
Maintenance agreements, Post Construction	One filed at courthouse for each site	Continuing 2011-2015

VI. Pollution Prevention / Good Housekeeping for Municipal Operations

The city has in place a method of control of run off control for municipal operations.

(See Regulations for Municipal Operations in the Appendix) The method includes in house training, printed material review, and documentation of training sessions, schools and courses taken.

The program will address maintenance activities, maintenance schedules and inspection procedures.

The program will address controls for reducing pollutants such as floatables and other pollutants from roadways, parking lots, maintenance yards, recycling centers and mineral storage areas.

Also addressed will be proper disposal of collected waste.

These SWMPP regulations will be reviewed annually by the city's enforcement personnel. Documentation of the review will address the following:

1. Evaluation of progress toward goals.
2. Identifying any ineffective components.
3. Add new components

The pollution prevention / good housekeeping program for municipal operation was developed after reviewing the responsibilities of department heads and the requirements for equipment maintenance and department duties.

Rationale Statement

The city requires that on all city projects where soil is disturbed, city personnel will prevent soil erosion run off on any site by using wattles or silt fence. On small projects, these BMP's can be portable. Clean up of any soil which erodes is mandatory.

Protection of sites from fuel or oil spills is mandatory. Any spills are to be reported to the cities enforcement personnel immediately.

All operations either by street department, utility department, park and recreation department personnel are required to exhibit responsibility toward this minimum control measure.

City employees attend QCI training each year and will share this training with department heads.

Fleet maintenance requires housed operations for maintenance and cleaning operations.

Sediment, oil and grease are trapped and disposed of in proper facilities.

There are no requirements for providing outreach to the public as these operations do not involve the public.

The city has a series of small detention basins throughout the city. These basins collect floatables during rain events. The floatables are removed by city personnel documented by weight and reported in the annual report.

Solid waste pollutants from streets and parking lots are captured at storm water inlets where possible or are collected at detention basins as mentioned above. Sand and gravel storage is contained at city facilities but are not considered contaminants as they are naturally occurring material.

All solid waste collected in the drainage facility are to be disposed of at the landfill.

New flood management projects are to be protected by collecting solids and disposing of the debris at the landfill. The drainage system is to be assessed each year and if any new water quality protection devices are required, the city will provide such device to the best of their ability.

Success for this control measure is measured visually and by the weight of solids collection each year.

<u>BMP</u>	<u>MEASURABLE GOALS</u>	<u>SCHEDULE</u>
Personnel Training	One time per year	March 2011-2015
Solid Waste Collection from Streets & Drains	Weekly	Continuous