

# CITY OF ANNISTON STORMWATER MANAGEMENT PROGRAM PLAN (SWMPP)

National Pollutant Discharge Elimination System  
(NPDES) Phase II Municipal Separate Storm Sewer  
System (MS4) Permit ALR040050

*Submitted To:*

Alabama Department of Environmental Management  
Stormwater Management Branch  
Water Division  
1400 Coliseum Boulevard  
Montgomery, Alabama 36110-2400  
March 2022

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## Plan Review and Revision

This Stormwater Management Program Plan (SWMPP) is reviewed regularly, at least annually, to determine if the City of Anniston needs to replace ineffective or infeasible Best Management Practices (BMPs), improve stormwater control measures, and to ensure compliance with the City of Anniston (City) National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer System (MS4) Permit ALR040050. Revisions, if needed will be submitted to the Alabama Department of Environmental Management (ADEM) at the time the revisions were made for Department review. Plan revisions and their submittals to ADEM will be documented in the log below.

DATE OF PLAN REVISION	DESCRIPTION OF PLAN REVISIONS
March 2014	SWMPP submitted to ADEM in response to a Consent Order issued in draft on October 7, 2013.
September 2015	SWMPP preparation and submission to ADEM for approval to meet compliance with Phase II Stormwater Permit ALR040004.
March 2016	Revisions to BMP 1.D (Classroom Education), 2.A (City Clean Up), and 2.B (Storm Drain Marking). Changes detailed in March 31, 2016 Annual Report and revised SWMPP submitted with Annual Report.
December 2016	SWMPP revised and re-submitted to ADEM as required by the re-issued Phase II Stormwater Permit ALR040050, which took effect on October 1, 2016. BMG 1.G (educational signage) was added.
January 2017	SWMPP revised to include information requested by ADEM based on their review of the December 2016 SWMPP. SWMPP was re-formatted and Table 1 (Compliance Matrix) was developed to include w/in the plan. BMP 1.G was amended and SOPs were added for Municipal Good Housekeeping Operations (BMP 5.B City Employee Training) plus other minor changes to match new permit.
May 2017	Table 1 of SWMPP revised and submitted with the 2016-2017 Annual Report. Reporting mechanisms for BMPs 1.F, 1.G, and 5.D were amended. See annual report for details. Full plan was not amended/submitted.
May 2018	Minor edits to BMP 1.A and 3.C. BMP 1.A was expanded to include various media outlets, including social media, radio, etc. BMP 3.C was revised to include the City's new E&S inspection checklist used to document construction site inspections (no longer ADEM 500). Table 1/full plan was not re-submitted with the Annual Report due to minor changes.
May 2019	The City updated its SWMPP and Table 1 Compliance Matrix based on program improvements and included new appendices. The full SWMPP and all appendices were submitted to ADEM. This included changes to BMPs 1.F, 1.G, and 5.D noted in the 2016- 2017 AR and BMPs 1.A and 3.C noted in the 2017-2018 AR. A number of other changes were made to BMPs , including but not limited to: 1.C (changed to utility header only); 1.E (added statement that cleanups may be conducted in different areas and altered BMP name); 1.F (expanded target audience); 2.A (updated to reflect the addition of new IDDE Plan in Appendix D); 2.C (updated); 2.D & 3.D (revised BMP name); 2.G (included offsite training); 4.D (noted developers/owners/operators may also conduct annual site inspections and that annual inventory updates will be conducted); and deletion of BMP 5.F (Water Quality Impact Statement). An Impaired Waters Plan was inserted in Appendix F. Several of the reporting mechanisms (documents to be submitted in the Annual Report) were also updated in Table 1.
May 2020	BMP 1.F Storm Drain Marking was replaced with "Public Information Booth" BMP. Full SWMPP not submitted to ADEM. BMP was changed, cover page date updated to reflect the revision date, and City submitted the relevant pages from the SWMPP and Matrix with the 2019 – 2020 Annual Report.



March 2022	SWMPP revised and re-submitted to ADEM as required by the re-issued Phase II Stormwater Permit ALR040050, which took effect on October 1, 2021. Public Education and Public Involvement BMPs reduced from eight (8) to the required minimum amount four (4); BMP 1.C-1.E and 1.G removed from previous BMPs. Added BMP 3.C Construction Stormwater Sites. UT to Choccolocco Creek sampling was added to Impaired Waters Plan (BMP 6.A). Language added throughout to actively encourage LID/GI where feasible.
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## Responsible Party and Plan Certification

### Responsible Party

The City's Stormwater Management Program (SWMP) is composed of several programs operating under various departments within the City's organization. Components of the SWMP are implemented as described below:

**Engineering Department:** The Engineering Department staff manages the SWMPP implementation and compliance with the City's Phase II Stormwater Permit. They monitor residential and commercial construction and conduct erosion and sediment control inspections. They manage the Illicit Discharge and Detection (IDDE) program and assists the Public Works Department with annual detention pond inspections, city facility inspections, and review of capital drainage improvement projects. The Engineering Department also provides assistance with various public education and public involvement activities.

**Public Works Department/Engineering Department:** Public Works staff perform maintenance of stormwater infrastructure, operate the used oil recycling program, and implement the street sweeping program.

**Planning and Inspections Department:** Staff of the Planning and Inspections Department review development plans for compliance with the City's Stormwater Ordinances.

The following individuals are responsible for the management, coordination, and implementation of the SWMP and for preparation of this SWMPP:

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### Certifying Official

All notices of intent, reports, certifications, or information submitted to the Department, or other information, should be signed and certified in accordance with Part VII.G of the facility's Phase II Stormwater Permit. The certifying official for this SWMPP and a Principal Executive Officer for the City of Anniston is as follows:

Mayor Jack Draper  
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### Plan Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations.



Mayor Jack Draper  
Anniston, Alabama

3-28-22

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Date

## Introduction

### Background

In 1987, amendments to the Clean Water Act (CWA) established a legal framework and requirements for the United States Environmental Protection Agency (USEPA) to develop a comprehensive, phased program for regulating municipal and industrial stormwater discharges under the NPDES permit program. In response, the USEPA instituted Phase I of the NPDES Stormwater Program in November 1990. The Phase I program required medium to large communities with populations of at least 100,000 people and with MS4s to develop programs to address the quality of their stormwater discharges. These amendments to the CWA also placed stormwater management requirements on many industries based upon standard industrial classification codes, including stormwater permitting requirements on construction activities that disturbed five or more acres of land.

The NPDES Phase II Stormwater regulations were established in December 1999. The Phase II stormwater requirements affect smaller communities with MS4s serving populations of less than 100,000 people, as well as construction activities that disturb one or more acres of land. Only those small MS4s located in “urbanized areas”, as defined by the U.S. Bureau of the Census, are currently required to apply for a stormwater NPDES permit and develop a SWMP. ADEM is the designated Stormwater Phase II permitting authority in the State of Alabama.

The City of Anniston was designated by ADEM as a City that must seek coverage under the Phase II MS4 regulations. As part of this permitting process, the City prepared a SWMPP that was submitted and approved by ADEM in March 2014 in accordance with the provisions of Permit ALR040004, which expired on January 31, 2016. ADEM re-issued the permit in 2016, and again on October 1, 2021. As required, the City is revising the SWMPP to incorporate the changes required by the new permit and to reflect the current status of the City’s SWMP. A copy of the City’s current permit is included in Appendix A of this SWMPP.

### Site Description

The City of Anniston is located in northeast Alabama and is the county seat of Calhoun County. Anniston is roughly 45 square miles, which equates to 29,000 acres. The City is located on the north side of Interstate 20 and falls about halfway between Atlanta, Georgia to the east and Birmingham, Alabama to the west. The MS4 boundary is the urbanized areas of incorporated areas of Anniston minus the right-of-way of ALDOT maintained highways, which are AL Hwy 21, AL Hwy 202, U.S. Hwy 431 and U.S. Hwy 78.

### Stormwater Management Program Components

The Phase II stormwater regulations require operators of small MS4s in urbanized areas to develop and implement stormwater management programs employing BMPs to adequately address five minimum stormwater control measures (MCMs).

The MCMs and their corresponding permit citations include:

- 1.0 Public Education and Public Involvement on Storm Water Impacts (Part III.B.1)
- 2.0 Illicit Discharge Detection and Elimination (IDDE) Program (Part III.B.2)
- 3.0 Construction Site Stormwater Runoff Control (Part III.B.3)
- 4.0 Post-Construction Stormwater Management in New Development and Redevelopment (Part III.B.4)
- 5.0 Pollution Prevention/Good Housekeeping for Municipal Operations (Part III.B.5)

ADEM also requires operators to expand the SWMPP to include BMPs and stormwater pollution prevention strategies if the Permittee discharges stormwater directly or indirectly through its MS4 to a waterbody that is listed on the State's 303(d) list or designated by ADEM as impaired.

The remainder of this Plan describes the objective of each MCM and the corresponding BMPs that will be used to implement appropriate stormwater control measures. This Plan also addresses measures the City will take to reduce any potential impacts to impaired streams. Measurable goals, responsible parties, implementation schedules, and reporting mechanisms for each BMP are identified in the MCM Compliance Matrix (Table 1).

There are also other permit requirements within the MS4 Phase II General Permit that must be adhered to and it is the responsibility of the City to comply with all the permit requirements.

### Target Audience and Pollutant Sources

It is the City's goal to reach the majority of the City's population with at least one outreach method over the course of the permit term. The City's target audience and potential pollutants sources include the following:

**GENERAL PUBLIC** (homeowners/citizens, and students): Potential contributors of stormwater pollution through activities such as illicit discharges, car washing/oil changes, pet wastes, and over-fertilization of lawns. The primary pollutants potentially contributed by this target audience are nutrients and pathogens.

While students are not necessarily a big source of stormwater pollution, they are one of the most effective means for spreading an educational message. If the City educates children about stormwater issues, the children will in turn educate their parents, who are members of the other audiences described above. Older students can take a more active role in helping the City implement its stormwater management program through such activities as storm drain marking.

**LOCAL BUSINESSES AND MUNICIPAL STAFF/OPERATIONS** (restaurants, car washes, vets/kennels, landscape and pest control companies, auto repair facilities): Potential contributors of stormwater pollution through activities such as illicit discharges and daily business activities. The primary pollutants contributed by this target audience are excess nutrients, pathogens, biological oxygen demand, and pesticides.

**ENGINEERS, DEVELOPERS, CONTRACTORS, LAND USE PLANNERS:** Potential contributors of stormwater pollution through development and construction activities as well as engineering design of stormwater pollution prevention BMPs. The primary pollutant potentially contributed by this target audience is sediment.

### Program Effectiveness

To ensure that the BMPs in this Plan are effective, the City will review the BMPs each year. As part of this annual assessment, the City will evaluate program goals such as:

- Is the BMP achieving the desired goal?

- Is the BMP reaching the targeted audience(s)/ addressing the targeted pollutant source, if applicable?
- Is the frequency/extent of the measurable goal effective and/or does it need altered?
- Has the “responsible department” at the City changed due to staffing changes, interdepartmental agreements, etc.?

If the City determines that any of the BMPs are ineffective, the SWMPP will be updated and submitted to ADEM for review.

## MCM 1.0 Public Education and Public Involvement

### Program Objective

The City of Anniston has developed a comprehensive Public Education and Public Involvement Program to educate a wide audience that includes the general public, local businesses, and developers and contractors (hereafter referred to generally as the “public”) about the impacts of stormwater pollution and the steps they can take to prevent it. A variety of educational outreach efforts are used to encourage the public to change their activities and habits that can contribute to non-point source pollution.

The City of Anniston also involves the public in the implementation of its stormwater management program by providing a variety of activities and opportunities related to stormwater pollution prevention in which the public may participate.

### Best Management Practices

Specific activities included within the Public Education and Involvement Program will consist of the BMPs discussed below. Measurable goals, responsible parties, implementation schedules, and reporting mechanisms for each BMP to be provided in the City’s Annual Report are identified in the MCM Compliance Matrix (Table 1) of this SWMPP.

#### BMP 1.A Public Service Announcement (PSA)

The City will issue one (1) PSA per year via social media, radio, newspaper, or other media outlet that informs the public about relevant stormwater issues and/or provides an educational message. The PSA may include such topics as the impact of stormwater runoff; steps citizens and businesses can take to prevent stormwater pollution; the importance of litter prevention; how to identify and report an illicit discharge or illegal dumping; or information regarding opportunities to get involved in stormwater program activities such as the Annual Cleanup or Storm Drain Marking. PSAs may also provide information about site design that addresses runoff reduction techniques such as protection of vegetation and trees and the use of low impact development/green infrastructure (LID/GI) strategies and maintenance of LID/GI structures. Over the course of the permit term, different PSAs will be issued to ensure the City reaches a wide audience, including residents, civic groups, businesses, and contractors/developers / land use planners, and to target different pollutant sources that may impact water quality.

#### BMP 1.B Stormwater Webpage

The City of Anniston will continue to maintain and update a stormwater webpage that is accessible from the City’s homepage to promote its public education and involvement activities. The City will include a counter on the webpage to record the number of views and advertise the webpage address in promotional and education materials, when appropriate, to encourage the public to visit the City’s webpage. This webpage will be updated annually to include brochures, fact sheets, and general information about stormwater issues that may include the information listed below. Over the course of

the permit term, different educational materials will be added to the City's webpage to ensure the City reaches a wide audience, including students, residents, civic groups, businesses, and contractors/developers /land use planners, and to target different pollutant sources that may impact water quality.

- Tips to prevent stormwater pollution/illicit discharges from homeowners and citizens. This may include tips for how to properly maintain and wash vehicles, store and dispose of household chemicals, manage pet wastes, and perform lawn care.
- BMPs and guidance for local business such as landscapers, pest control companies, restaurants, and auto repair facilities to prevent stormwater pollution
- The importance of proper site design that emphasizes runoff reduction techniques, such as protection of vegetation and trees and incorporation of LID/GI techniques as well as maintenance practices for LID/GI structures, including educational websites: <http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf>; <http://epa.gov/nps/lid>
- Standards for construction site sediment and erosion control
- An email link and a phone number for citizens to report illicit dumping, illicit discharges, and erosion and sediment control violations
- A copy of the City's most recent SWMPP, Annual Report, and other related documents

#### BMP 1.C Public Information & Activity Booth

The City will host a Public Information Booth at a festival or other public event held within the City of Anniston. Stormwater education materials will be handed out at the Information Booth that promote litter reduction, proper stormwater management practices, and/or educate the general public about other relevant stormwater-related information, including the importance of LID/GI practices and strategies. The City will also educate the public about how they (the public) can be active participants in implementing the stormwater program (such as reporting illicit discharges, helping pick up litter, etc.

The City will also provide a hands-on activity as part of this event to encourage active participation in program implementation (such as public comment cards soliciting feedback on the City's program and suggestions for improvement; collecting recyclables or nonhazardous household wastes [printer ink cartridges, batteries, etc.]; information about advisory groups and/or other program activities that the general public can join, etc.

#### BMP 1.D Public Input on SWMPP and Annual Report

The City will invite the public to provide annual input on the SWMPP by posting a copy of the most recent SWMPP and Annual Report on the City's Stormwater Webpage and making them available at City Hall for residents to view. The City will advertise the City's Stormwater webpage to encourage the general public to provide comments and be actively engaged in the development and administration of the stormwater program.

## MCM 2.0 Illicit Discharge Detection and Elimination

### Program Objective

The City has developed and implemented an IDDE program to identify and eliminate illicit discharges (i.e., non-storm discharges) to the City's MS4. This program is intended to prohibit the discharge, spilling or intentional dumping of pollutants into the MS4. It also provides the City of Anniston with the authority and procedures to follow for enforcing the prohibition on illicit discharges. As part of this program, the City has developed and implemented dry weather inspection and screening procedures to identify potential illicit discharges and source tracing procedures to conduct follow up investigative and enforcement procedures.

### Best Management Practices

Specific activities included within the IDDE program will consist of the BMPs discussed below. Measurable goals, responsible parties, implementation schedules, and reporting mechanisms for each BMP to be provided in the City's Annual Report are identified in Table 1 of this SWMPP.

#### BMP 2.A IDDE Plan/Dry Weather Screening

The City of Anniston has developed an IDDE Plan to describe its dry weather screening and inspection procedures for MS4 outfalls to determine if upstream facilities/connections are discharging non-stormwater flows to the drainage system and a methodology for how identified illicit discharges will be eliminated. The IDDE Plan is included in Appendix D.

The City will perform inspections and/or dry weather screening of the MS4 outfalls within its current inventory such that 100% of all identified outfalls will be screened within the 5-year permit period. The City will screen on average 20% of identified outfalls each year. The City will investigate any potential illicit discharges. Suspect or obvious illicit discharges will require follow-up actions and activities, as specified in the IDDE Plan to determine the specific source(s) of contamination. Should the City positively identify any illicit discharges, the City will perform enforcement actions as dictated by the Illicit Discharge Ordinance and the IDDE Plan. If an illicit discharge is suspected from an adjacent MS4, the City will contact the MS4 to work with them directly to identify and stop the illicit discharge. If the City is unable to resolve the issue with the MS4, the City will notify ADEM in writing of the suspect illicit discharge and steps taken by the City to address the issue.

#### BMP 2.B Used Oil Recycling

In an effort to prevent used motor oil from being dumped or spilled into the City's MS4 by residents and businesses, the City will continue to offer a used oil recycling program. Residents and business owners within the City of Anniston may bring their used motor oil to the City Public Works Facility where it will be collected for recycling. The City will contract with a used oil recycler to ensure that oil collected is properly handled and recycled.

#### BMP 2.C Citizen Complaint Program

The City of Anniston has established a program for addressing citizen complaints about water quality, including reports of illicit discharges/illegal dumping and complaints regarding discharges from construction sites. City administrative staff are responsible for receiving citizen complaint calls. Calls that require investigation are passed along to Public Works staff, which is responsible for taking action to address citizen complaints that relate to water quality. Public Works staff record actions taken to address potential illicit discharges, illegal dumping, and other water quality violations in a database. The number to call to report illicit discharges is publicized on the City Stormwater Webpage and included in educational outreach materials, as appropriate.



The City will continue to implement an ongoing citizen complaint program as described above for water quality-related complaints. The City will promote the phone number and Stormwater webpage to encourage the public to report illicit discharges. Water quality-related complaints will be investigated, and actions taken to address the complaints will be recorded in a database.

#### BMP 2.D MS4 Outfall Map

The City has developed a map showing the location of all currently-identified outfalls from the MS4, the names and location of all waters of the State that receive discharges from those outfalls, the latitude and longitude of all known outfalls, and structural BMPs owned, operated or maintained by the City (to include detention ponds, infiltration basins, etc.). This map will be a tool to help the City identify and eliminate illicit discharges from the MS4 to local waterways. A copy of the most recent MS4 Outfall Map is included in Appendix B.

The City will continue to update the map on an annual basis as additional GIS field mapping is occurring, new development occurs, and new outfalls are identified added to the system.

#### BMP 2.E Illicit Discharge Ordinance Enforcement

The City has adopted an Illicit Discharge Ordinance to prohibit illicit discharges, dumping and illegal connections to the MS4 and provides the City with the necessary authority to require commercial and industrial facilities to install BMPs if they are suspected of illicit discharges. It also provides the City with the authority to enforce that prohibition through an escalating system of notices of violation, cease and desist orders, and fines.

Illicit Discharges are covered in Section 8 of the City's Stormwater Management Regulations (Chapter 29 1/2.8). A copy of the current ordinance is included in Appendix A. This section prohibits the discharge of pollutants to the MS4 as follows:

"29 1/2.8 (2): Prohibition of illicit discharges. No person shall introduce or cause to be introduced into the municipal separate storm sewer system any discharge that is not composed entirely of stormwater. The commencement, conduct or continuance of any non-stormwater discharge to the municipal separate storm sewer system is prohibited..."

These regulations also prohibit illicit connections, require reduction of stormwater pollutants by use of BMPs, and requires notification to the City of spills that occur. Section 29 1/2.9 includes an escalating enforcement procedures if the ordinance is violated.

The City's List of Incidental, Allowable, Non-Stormwater Discharges is as follows:

- Water Line Flushing
- Landscape Irrigation
- Diverted Stream Flows
- Rising Ground Waters
- Uncontaminated Groundwater Infiltration
- Uncontaminated Pumped Groundwater
- Discharges from Potable Water Sources
- Foundation Drains
- Air Conditioning Condensation

- Irrigation Water
- Springs
- Water from Crawl Space Pumps
- Footing Drains
- Lawn Watering
- Individual Residential Car Washing or Charity Car Washes
- Flows from Riparian Habitats and Wetlands
- De-chlorinated Swimming Pool Discharges

The City will continue to implement and enforce the Illicit Discharge Ordinance by investigating suspect illicit discharges and requiring corrective actions when needed. Enforcement actions will be taken when needed as specified by the City's ordinance.

#### BMP 2.F      Illicit Discharge Ordinance Review

The City will annually evaluate its Illicit Discharge Ordinance to determine if modifications are required. If changes are made, the City will provide an updated copy of the revised ordinance to ADEM in the Annual Report.

#### BMP 2.G      IDDE Training

The City of Anniston will conduct annual employee training for applicable staff. The training will provide information on how to identify, investigate, and correct illicit discharges. The training program will also cover SOPs that discuss good housekeeping practices to be employed at City municipal facilities and during municipal operations as discussed more in BMP 5.B to prevent stormwater pollution. The City will identify appropriate materials, including, but necessarily limited to brochures, training videos, and outside training courses. The City will then initiate an annual training session to be held in association with other Public Works training or as a separate training event. Alternatively, the City may opt to send employees to another applicable training program, conference or seminar.

## MCM 3.0 Construction Site Stormwater Runoff Control

### Program Objective

The City has implemented a program reduce, to the maximum extent practicable, pollutants in storm water runoff to the MS4 from qualifying construction activities. This program mainly targets construction sites for erosion and sediment control. The City employs a variety of strategies to implement an effective erosion and sediment control program that includes:

- a) an ordinance that requires appropriate erosion and sediment controls at qualifying construction sites
- b) staff training
- c) site plan review
- d) inspections of erosion and sediment controls
- e) ongoing ordinance enforcement and tracking of violations

### Best Management Practices

Specific activities included within the Construction Site Stormwater Runoff Control program will consist of the BMPs discussed below. Measurable goals, responsible parties, implementation schedules, and reporting mechanisms for each BMP to be provided in the City's Annual Report are identified in the MCM Compliance Matrix (Table 1) of this SWMPP.

#### BMP 3.A Erosion and Sedimentation Controls Regulations

The City has adopted regulations for erosion and sediment control that apply to contractors, developers and engineers performing work in the City. These regulations are covered in Section 5 of the City's Stormwater Management Ordinance (Chapter 29 1/2.5). A copy of the current ordinance is included in Appendix A.

The City's code requires that all qualified construction projects implement appropriate erosion and sediment controls in accordance with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas (hereafter referred to as the "Alabama Handbook"). The ordinance includes the standard that all land disturbing activities a) with a total land disturbance of greater than or equal to one acre, 2) that disturb less than one acre, but are part of a larger common plan of development or sale that would disturb one acre or more, or 3) that occur within the CBD-1 zone or are in an area of special flood hazard are required to apply for a Land Disturbance Permit (LDP) and are required to meet applicable Erosion and Sedimentation Control requirements. The ordinance requires all applicable development projects undertaken within the City to submit an erosion and sediment control plan (ESCP) designed by a qualified credentialed professional (QCP). Components of the plan have to meet and/or exceed the requirements of the Alabama Handbook. The ordinance provides the City with the authority to conduct site plan review, to perform site inspections, and to take enforcement measures including written warning letters and stop work orders.

The City will continue to implement and enforce Erosion and Sediment Control Regulations, and take enforcement actions when needed. The City will annually evaluate these regulations determine if modifications are required. If changes are made, the City will provide an updated copy of the revised Ordinance to ADEM in the Annual Report.

### BMP 3.B Qualified Credentialed Inspector (QCI) Program & Training

City employees receive proper training on how to identify appropriate construction best management practices per the applicable design standards. The City continues to invest time and resources to ensure that inspectors receive the proper training to receive and annually renew their QCI certification during this permit cycle.

All inspectors performing erosion and sediment control inspections or reviewing site plans in the City of Anniston will be required to attend a QCI training program to receive the QCI certification. Inspectors will also take an annual refresher course at the required frequency to maintain their QCI certification. This allows staff to be aware of any changes occurring in the state's program from year to year and also provides an opportunity to educate the City's inspectors on proper erosion and sediment control BMPs. Alternatively, erosion and sediment control inspections will be performed by a staff member that has been designated as a Qualified Credentialed Professional (QCP).

### BMP 3.C Construction Stormwater Sites Inventory

The City will develop and thereafter annually maintain an inventory of qualifying construction stormwaters sites with relevant contact information for each site, the size of the construction site, whether the construction site has submitted for coverage under ADEM's Construction General Permit ALR100000, and the date the MS4 Permittee approved the site construction plan. A copy of the inventory will be provided to ADEM.

### BMP 3.D Erosion and Sediment Control Inspections

The City, in an effort to monitor the management of erosion and sediment control measures on active construction sites, has established a construction site inspection program. The inspection program will allow City staff to identify deficiencies in erosion and sediment control on active construction sites and initiate appropriate corrective actions. The City's inspection program for construction sites meets the standards set forth in the City's Erosion & Sediment Control regulations.

The City has developed an MS4 Compliance Form, a copy of which is provided in Appendix C, to record the results of each erosion and sediment control inspection. Priority sites will be inspected monthly and non-priority sites will be inspected monthly and/or quarterly. Sites will be prioritized for inspection if there is a demonstrated lack of BMP compliance/maintenance or sediment release. During the site visit, all discharge points will be inspected and the site conditions will be compared to the approved erosion and sediment control plan. Any deficiencies that are noted will be reported to the site manager and/or the developer. The developer will be given a schedule to correct deficiencies noted during the inspection or face a stop work order until they are corrected. For sites determined to have ineffective BMPs, a follow-up inspection shall be conducted and appropriately documented. The City will not "close out" a development permit or issue a Certificate of Occupancy until all areas are permanently stabilized, all construction debris removed, and temporary sediment control structures removed. A final inspection is required prior to release from the permit.

Enforcement actions will be coordinated with ADEM and will vary based on the severity of the deficiencies. As outlined in the Stormwater Ordinance and in BMP 3.F, the City has an escalating series of enforcement actions ranging from written warnings to stop work orders.

When an erosion or sediment control complaint regarding a construction site is received, immediate action will be taken by the City to inspect, document and resolve the compliance issue using enforcement if needed. The complaints will be recorded in the Citizen Complaint database outlined in BMP 2.C.

### BMP 3.E Erosion and Sediment Control Plan (ESCP) Review

The City has established construction site plan review procedures for developments in the City that meet the qualifying criteria. These procedures create a process for QCP/QCI staff or consultants at the City to review Erosion & Sediment Control BMPs in the ESCPs and ensure that they meet the requirements of the Alabama Handbook prior to issuance of a LDP or at the start of land disturbing activities.

The City's Stormwater Management Ordinance requires all applicants for LDPs to submit an ESCP. The ESCP must accurately describe the potential for soil erosion and sedimentation problems resulting from land disturbance activities and shall explain and illustrate the measures that will be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for offsite discharge and/or damage. The plan must be designed by an approved professional. The plan must also conform to the requirements found in the Alabama Handbook. The City will not issue development permits until it establishes that the ESCP is consistent with these requirements.

QCP/QCI staff or consultants at the City will continue to review ESCPs and ensure that they meet the requirements of the Alabama Handbook as described above.

### BMP 3.F ADEM Notification

The City has procedures in place to ensure that ADEM is aware of all non-compliant construction sites so that they can initiate enforcement actions, as appropriate, to bring the site into compliance. Possible violations could include, but are not limited to: releases of sediment to a Water of the State/U.S. and/or failure to adhere to the City's corrective action request following an inspection.

The City will notify ADEM, by phone and/or email, of qualified, permitted construction sites where a severe violation of the Clean Water Act has occurred. The Notification will include the location of the construction project, the name and contact information for the property owner, and a summary of site deficiencies. Upon request, the City will forward a copy of the inspection checklist to ADEM.

### BMP 3.G Enforcement

The City's Erosion and Sediment Control regulations provide the City with the authority to take escalating enforcement measures, including written warning letters and stop work orders, if construction sites do not comply with the requirements of the Alabama Handbook. Enforcement procedures will vary based on the severity of the deficiencies. Minor concerns may receive a written or verbal warning requiring action. If not corrected in the allotted timeframe, or if there are major deficiencies, the City will then issue a stop work order on the construction site. Stop work orders will typically be issued on sites with active construction while BMP deficiencies still exist. Should deficiencies still remain, the City will notify ADEM per the program outlined in BMP 3.E ADEM Notification.

### BMP 3.H Enforcement Tracking Database

The City will maintain a database of all enforcement actions taken at all qualifying construction sites. This database will include the location and contact information for the site, types of enforcement actions taken, date of action, recommended remediation measures, and dates of any follow-up inspections.

### BMP 3.I Construction Site Pollution Control

The City's Erosion and Sediment Control Regulations require applicants to provide an ESCP that includes a description of onsite measures to control waste such as discarded building materials, concrete truck

washout, chemicals, litter, and sanitary waste at the construction site. The City will ensure that construction site operators are properly managing wastes during Erosion and Sediment Control inspections and plan reviews to identify potential violations.

## MCM 4.0 Post-Construction Storm Water Management in New Development and Redevelopment

### Program Objective

The City has implemented a variety of BMPs to address post construction stormwater runoff. Potential benefits of effectively controlling post-construction stormwater runoff include: water quality improvements, minimization of stream erosion and effective control of potential flooding impacts.

The City's post-construction stormwater management program is primarily designed to address stormwater pollution from nutrients, sediments, pathogens and other various pollutants. The City will continue to implement their post construction program that includes:

- a) an ordinance that requires a stormwater management plan for new development and redevelopment
- b) site plan review for stormwater management plans
- c) maintenance agreements for stormwater structural BMPs
- d) inspections of stormwater structural BMPs
- e) actively encouraging landowners and developers to incorporate the use of LID/GI where feasible through public education (BMP 1.C)

The City has also implemented non-structural BMPs in the program including:

- Policies and ordinances to provide requirements and standards to direct growth to identified areas, protect sensitive areas, maintain and/or increase open space, provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation.
- Policies and ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure.
- Education programs for developers and the public about project designs that minimize water quality impacts.

The City has an Urban Revitalization Ordinance that provides a procedure and adopts a plan to encourage redevelopment and infill development in blighted areas of the City. By encouraging redevelopment of previously developed areas, the City is able ensure that post-construction stormwater runoff is addressed per current standards. Furthermore, the City is encouraging redevelopment of already urbanized areas as opposed to the development of land in its natural conditions. The City also has a Flood Damage Prevention Ordinance which limits development in the floodplains, which are typically the riparian areas of local waterways.

### Best Management Practices

Specific activities included within the Post-Construction Stormwater Management in New Development and Redevelopment program will consist of the BMPs discussed below. Measurable goals, responsible parties, implementation schedules, and reporting mechanisms for each BMP to be provided in the City's Annual Report are identified in Table 1 of this SWMPP.

#### BMP 4.A Stormwater Management Ordinance

The City has adopted Post Construction Stormwater Controls within its Stormwater Management Ordinance (Chapter 29 ½.6) to ensure that new construction or re-development projects for a site do not adversely impact the hydrology of the watershed. A copy of the Ordinance is provided in Appendix A.

The City's Stormwater Management Ordinance requires all development projects and re-development projects where total land disturbance is greater than or equal to one acre or where land disturbance disturbs less than one acre, but is part of a larger common plan of development, or sale that would disturb one acre or more, to apply for an LDP and to meet applicable Post Construction Stormwater Control requirements. Requirements include the development and submittal of a Stormwater Management Plan that illustrates how stormwater will be managed on-site, post-development. The ordinance adopts the Alabama Handbook as its stormwater design and BMP manual, establishes the required performance criteria for post-development peak flows and stream channel protection, and includes special requirements for sensitive areas and pollutant hot spot areas. The ordinance requires Maintenance Agreements for post construction stormwater control BMPs and establishes the site plan review and enforcement process.

The City will review its current Stormwater Management Ordinance, including Post Construction Stormwater Controls, annually to determine if revisions are needed to ensure that the City's ordinance continues to meet the requirements of the NPDES Phase II MS4 permit. If changes are made, the City will provide an updated copy of the revised ordinance to ADEM in the Annual Report.

The City is required to review its codes and ordinances to ensure that they actively encourage the use of green infrastructure practices such as infiltration, stormwater reuse, and evapotranspiration. The City's Stormwater Management Ordinance already encourages green infrastructure techniques by having requirements for infiltration and stormwater volume control; however, other City codes may have requirements that work against this approach.

The City will review and revise, where necessary, building codes, ordinances, and other regulations to ensure they do not prohibit or impede the use of GI/LID practices, including infiltration, reuse, and evapotranspiration. The City completed the initial evaluation in 2016 and will submit a copy of the review to ADEM with each annual report.

#### BMP 4.B Stormwater Design Manual

The City has adopted the Alabama Handbook as its stormwater design and BMP manual. The handbook is incorporated by reference into the City's Stormwater Management Ordinance, a copy of which is provided in Appendix A. The City's Stormwater Management Ordinance also includes general performance criteria for stormwater management that specifies "All site designs shall control the peak flow rates of stormwater discharge associated with design storms of 2-year, 5-year, 10-year, 25-year, 50-year and 100-year intensity and reduce the generation of post construction stormwater runoff to pre-construction levels."

This manual includes a list of acceptable BMPs including the specific design performance criteria and operation and maintenance requirements for each stormwater practice. The manual may be updated and expanded from time to time, based on improvements in engineering, science, monitoring and local maintenance experience. Stormwater facilities that are designed, constructed and maintained in accordance with these BMP criteria are presumed to meet the minimum water quality performance standards.



The City will review its current Stormwater Management Ordinance annually to determine if revisions to the City's Stormwater Design Manual are required. This will include ensuring that City has adopted the most recent version of the Alabama Handbook. If changes are made, the City will provide an updated copy of the revised ordinance to ADEM in the Annual Report.

#### BMP 4.C Site Plan Review

The City requires that all qualifying development projects prepare a stormwater management plan consistent with the specifications recommended in the City's Stormwater Ordinance. The City's Ordinance establishes a process for the City to review the stormwater management plans to ensure their consistency with local and State post construction requirements.

The City will perform a site plan review of the stormwater management plans for all development and redevelopment projects that apply for an LDP. This review will ensure that new construction or redevelopment projects install post-construction BMPs as recommended in the Alabama Handbook to protect the hydrology and water quality of local waterways. The stormwater management plans must include the information and materials required by the City's Stormwater Management Ordinance. Development projects will not be allowed to proceed until the stormwater management plan is approved and the LDP has been approved.

#### BMP 4.D Privately-Owned Structural BMP Inspection and Maintenance Program

The City has developed a program to ensure that privately-owned structural BMPs (such as detention and retention ponds), designed and constructed in accordance with the requirements of the Stormwater Management Ordinance and Alabama Handbook, continue to function as designed and properly handle and treat post construction stormwater runoff flows. The City has the authority to inspect structural BMPs and to enforce the requirements of the Stormwater Management Ordinance and Alabama Handbook, if necessary.

Section 29 1/2.5 4 (g) of the City Stormwater Management Ordinance requires the owner of a property to be served by an onsite stormwater management facility to execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owner and all subsequent property owners. The Maintenance Agreement assigns responsibility for the maintenance and repair of the stormwater facility to the owner of the property and stipulates that the property owner should arrange for periodic inspections by a registered professional engineer licensed to practice in Alabama to document maintenance and repair needs and ensure compliance. The Maintenance Agreement grants permission to the City to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained. If maintenance is not conducted per the plan set forth in the agreement, and the standards in the Handbook, the City is granted the right to perform the necessary maintenance and recoup the money from the property owner. This requirement applies to all structures built after the adoption of this ordinance.

The City has developed an inventory of privately-owned structural BMPs that includes structures constructed after February 21, 2013 (the date that post construction standards became effective). The City will update the inventory annually, and where applicable will list which controls are considered LID/GI. The City will perform or require annual inspections of the structures listed on the inventory to confirm that post-construction BMPs are functioning as designed. A sample inspection checklist that the City will use to document inspections is included in Appendix C. The City will maintain or require the developer/owner/operator to keep records of post-construction inspections, and maintenance activities.

#### BMP 4.E City-Owned Structural BMP Inspection and Maintenance Program

The City will implement an annual inspection and maintenance program for city-owned structural BMPs (such as detention and retention ponds) to ensure that on-site stormwater management facilities, owned or operated by the City, are being maintained according to the recommendations in the Alabama Handbook. If deficiencies are noted during the inspection, the City will initiate maintenance procedures. The City will maintain records of the inspection and maintenance activities.

## MCM 5.0 Pollution Prevention/Good Housekeeping for Municipal Operations

### Program Objective

The City has implemented a program intended to reduce stormwater pollution and promote good housekeeping measures in municipal operations. Potential benefits from an effective pollution prevention/good housekeeping program for municipal operations include reduced stormwater pollution from municipal operations and increased employee awareness regarding the effect of their daily activities on stormwater quality and quantity.

### Best Management Practices

Specific activities included within the Pollution Prevention and Good Housekeeping program for municipal operations will consist of the BMPs discussed below. Measurable goals, responsible parties, implementation schedules, and reporting mechanisms for each BMP to be provided in the City's Annual Report are identified in Table 1 of this SWMPP.

#### BMP 5.A Municipal Facility Inventory and Inspections

The City will maintain an inventory of municipal facilities (including both the name and location of the facility) that have the potential to pollute stormwater (hereafter referred to as Municipal Facilities). City staff or a designated representative will perform an annual inspection of Municipal Facilities listed on the inventory. A city staff member will visit the site and assess the condition and presence of pollutants of the areas listed below. A Stormwater Inspection checklist, a copy of which is provided in Appendix C, will be used to record the inspection results.

- Areas around machinery and/or equipment
- Areas prone to leaks and spills
- Outdoor sediment and materials storage and handling areas
- Waste generation, storage, treatment and disposal areas
- Vehicle wash-down areas
- Fueling areas
- Loading and unloading areas

#### BMP 5.B Employee Good Housekeeping Education

The City of Anniston will conduct annual employee training for applicable staff. The training program will cover SOPs that discuss good housekeeping practices to be employed at City municipal facilities and during municipal operations. These SOPs provide operational BMPs developed to control pollutant discharges by providing guidance on activities that should, and should not, be undertaken during the following municipal operations; they include:

- Building Maintenance
- Asphalt Program
- Chemical Application
- Detention Pond Maintenance
- Drainage Way Maintenance
- Equipment Storage
- Good Housekeeping

- Landscape Chemical Application
- Parking Lot Maintenance
- Spill Control
- Street Sweeping
- Vehicle Maintenance
- Vehicle Washing

An informational flier for each SOP is included in Appendix E of this SWMPP and will be covered during the facility's annual employee training event as appropriate depending on assigned staff responsibilities. The training will also provide information on how to identify, investigate, and correct illicit discharges as discussed more in BMP 2.G. The City will identify appropriate materials, including, but necessarily limited to brochures, training videos, and outside training courses. The City will then initiate an annual training session to be held in association with other Public Works training or as a separate training event. Alternatively, the City may opt to send employees to another applicable training program, conference or seminar.

#### BMP 5.C De-icing Program

De-icing is not a significant activity in this region, and the City of Anniston does not stockpile large quantities of materials for de-icing. Any bulk material, such as sand and aggregate, is protected onsite by a three (3) foot retaining wall with sediment ponds installed to allow for settling of any materials that may inadvertently enter the stormwater system. When de-icing is necessary, the City attempts to limit the use of road salts and use a sand/calcium chloride mixture, when possible. Calcium Chloride is in #50 sealed bags inside the City's warehouse. Any excess materials that may accumulate in any part of the stormwater system as a result of de-icing activities will be removed during the associated routine maintenance program.

The City will continue to implement the good housekeeping procedures for de-icing materials described above.

#### BMP 5.D Street Sweeping

The City has developed a street sweeping program to keep litter and debris from being washed from the City's roadways into the MS4 and to reduce polluted runoff. Street sweeping is performed within residential and commercial areas that have curb and gutter. The City performs street sweeping on a continuous (typically daily) basis and reaches all City streets with curb and gutter every year.

The City will continue to operate its street sweeping program and sweep all City streets with curb and gutter each year.

#### BMP 5.E MS4 Maintenance Program

The City performs the following maintenance functions to ensure proper functioning of the MS4:

- Right-Of-Way (ROW) Maintenance: The City has a crew dedicated to maintenance of the City ROWs. This includes removal of debris and sediment from catch basins, inlets, and ditches; removal of litter and mowing in the ROWs; grading of ditches; and condition assessments of drainage structures. Structures that need repair or replacement are entered into the work order database system or otherwise documented. The crew maintains all ROWs in the City at least once per year. Debris removed from the MS4 is properly disposed of and sediment is repurposed after any trash or litter is removed.

- Leaf removal: The City has a dedicated crew for leaf removal that is continuously operating during the months of October to April. This crew operates leaf vacuum machines that remove leaves from the MS4 including storm drains, inlets, ditches, etc. The City crews addresses the entire MS4 approximately three (3) times per year.

The City will continue to conduct MS4 maintenance, including ROW maintenance and leaf removal, as needed and properly dispose of any debris that is collected from maintenance activities.

## 6.0 Impaired Waters Monitoring Plan

### Program Objective

MS4 operators must identify if any impaired waters on the State's latest approved 303(d) list of streams/coastal streams are located within its permitted area and, if so, develop an Impaired Waters Monitoring Plan if they have direct or indirect stormwater discharges to the listed waters.

Based on the Final 2020 and Draft 2022 303(d) lists developed by the ADEM, there currently are two impaired stream segments, Cane Creek and UT to Choccolocco Creek, within the City's MS4 (i.e., the urbanized areas of incorporated areas of Anniston). Therefore, the City has developed an Impaired Waters Monitoring, a copy of which is included in Appendix F, that includes the following:

- A list of the impaired water(s) on the State's current 303(d) list and the associated POC
- A map showing the location of impaired waters and proposed sampling locations
- Water quality sampling procedures, including water collection procedures and water quality assessment criteria

The City will submit a copy of the newly-developed Impaired Waters Monitoring Plan with the 2021-2022 Annual Report.

### Best Management Practices

#### BMP 6.A Water Quality Sampling

The City of Anniston will annually conduct water quality sampling as outlined in the Impaired Waters Monitoring Plan and submit the results with the subsequent Annual Report. Monitoring information required by the City's permit will be included, including the name of the person conducting the sampling; the date, location and time of sampling; the date of the analysis; the analytical techniques used; and the analytical results.

#### BMP 6.B Impaired Waters Review

The City will annually review ADEM's latest approved 303(d) list to determine if any additional impaired waters are located with the jurisdictional boundaries of the City and/or if any regulatory changes have been made that affect the City's sampling protocols and require additional BMPs (such as the development of a Total Maximum Daily Load [TMDL]). If any additional stream segments within the jurisdictional boundaries are listed and/or the City needs to revise its sampling procedures or otherwise meet new/amended regulatory requirements, the City will revise the Impaired Waters Plan for all listed waters.

## Table 1: City of Anniston MCM Compliance Matrix

The following table includes a summary of the MCMs and the BMPs identified by the City in compliance with the requirements of the NPDES Phase II MS4 Permit. The table below includes the responsible BMP description, associated measurable goal, schedule, responsible party, and information to be included in the Annual Report. This is intended to be a tool for City staff to implement this SMWPP and for ADEM staff to review Annual Reports.

Table 1: Minimum Control Measure (MCM) Compliance Matrix - City of Anniston, Alabama Last Update: March 2022						
MCM	BMP			Implementation Date	Responsible Department	Reporting Mechanisms
	Description	Measurable Goal/Frequency	Target Audience			
MCM #1  Public Education and Public Involvement  Part III.B.1	1.A Public Service Annoucement	Air PSA once/year through social media or other media outlet (radio/newspaper, etc.)	City residents, civic groups, local businesses, and contractors / developers / land use planners	Previous permit cycle and annually thereafter	Public Works	Date the PSA was aired
						Summary of information covered in PSA. Note: PSAs should target different audiences and pollutants over course of permit
	1.B Stormwater Webpage	Update webpage once/year to include new educational materials and include links to latest SWMPP and Annual Report for public comment. Advertise webpage address to encourage use	Students, city residents, civic groups, local businesses, and contractors / developers / land use planners	Previous permit cycle and annually thereafter	Public Works	Copy or summary of new information posted on webpage. Note: Educational materials should target different audiences and pollutant sources over the course of the permit.
						Number of webpage views
	1.C Public Information & Activity Booth	Host Public Information Booth once/year within City of Anniston & encourage general public to participate in program implentation activities and provide feedback	Students, civic organizations, residents, and contractors/developers	Previous permit cycle and annually thereafter	Public Works	Copy and number of educational materials distributed at event and information about strategies that encourage the general public to be involved with stormwater program implementation / encourage feedback (see BMP write up on the accompanying narrative
	1.D Public Input on SWMPP and Annual Report	Post most recent SWMPP and latest Annual Report on website and make available at City Hall for public comment. Advertise City Stormwater webpage to solicit program feedback	City residents, civic groups, local businesses, and contractors / developers	Previous permit cycle and annually thereafter	Public Works	Screenshot of webpage where SWMPP and Annual Report are posted
						Copy of citizen comments submitted regarding the SWMPP or Annual Report
MCM #2  IDDE Program	2.A IDDE Plan/Dry Weather Screening	Dry weather Screen 100% of identified outfalls during 5-yr permit period (20% outfalls screened annually)/perform source tracing if needed/enforce Stormwater Ordinance	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Copy of of completed ORI forms for all MS4 Outfalls screened and records of any source tracing or enforcement activities
	2.B Used Oil Recycling	Coordinate used oil recycling program for residents/businesses	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Documentation of oil recycling activities, including the amount of used oil recycled
	2.C Citizen Complaint Program	Ongoing-Investigate water quality complaints and record in database. Promote phone #/webpage to report complaints to City.	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Copy/summary of the Citizen Complaint database used to track complaints/resolutions about water quality issues and illegal dumping/illicit discharges
	2.D MS4 Outfall Map	Update Outfall Map annually as new structures are mapped, added or built	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Updated map. State in Annual Report if there are no changes to map.



Table 1: Minimum Control Measure (MCM) Compliance Matrix - City of Anniston, Alabama Last Update: March 2022						
MCM	BMP			Implementation Date	Responsible Department	Reporting Mechanisms
	Description	Measurable Goal/Frequency	Target Audience			
Part III.B.2	2.E Illicit Discharge Ordinance Enforcement	Ongoing-Enforce Illicit Discharge ordinance	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Summary of investigative and enforcement actions taken related to illicit discharges, including information about the nature of the complaint and any follow-up activities performed to investigate and address the issue
	2.F Illicit Discharge Regulations Review	Review ordinance once/year to determine if any revisions are needed	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Copy of Illicit Discharge Ordinance if updated
	2.G IDDE Training	Provide annual training for applicable Public Works employees, including training about how to identify, investigate, and correct illicit discharges. Coordinate with Good Housekeeping Training-see BMP 5.B.	City staff	Previous permit cycle and annually thereafter	Public Works	Name and number of employees trained Copy or summary of training materials
MCM #3  Construction Site Stormwater Runoff Control  Part III.B.3	3.A Erosion and Sedimentation Control Regulations	Enforce Regulations/review annually to determinine if revisions are needed	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Copy of ordinance, if updated
	3.B Qualified Credentialed Inspector (QCI) Program & Training	Provide applicable staff with QCI certification training/annual refreshers to review site plans and perform inspections/alternatively, QCP may perform site inspections	City staff	Previous permit cycle and annually thereafter	Public Works	Copies of employee certification(s) for initial training or annual refresher course
	3.C Construction Stormwater Site Inventory	Maintain an inventory of qualifying construction stormwaters sites with relevant contact information for each site, the size of the construction site, whether the construction site has submitted for coverage under ADEM’s Construction General Permit ALR100000, and the date the MS4 Permittee approved the site construction plan	Engineers, contractors, developers & land use planners	Initial implementation in RY 2022 - 2023 and annuall thereafter	Public Works	Copy of inventory database
	3.D Erosion and Sediment Control Inspections	Conduct monthly or quarterly E&S inspections, complete inspection checklist and for sites determined to have ineffective BMPs, and conduct follow-up inspection (if BMPs were deemed ineffective)	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Copies of the inspection checklists or summary database
	3.E ESCP Review	Review ESCP for every qualifying construction project prior to issuance of an LDP	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Number of site plans reviewed and development permits issued
	3.F ADEM Notification	Notify ADEM whenever a violation is noted at a qualifying construction site	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Copies/records of any communications with ADEM

Table 1: Minimum Control Measure (MCM) Compliance Matrix - City of Anniston, Alabama Last Update: March 2022						
MCM	BMP			Implementation Date	Responsible Department	Reporting Mechanisms
	Description	Measurable Goal/Frequency	Target Audience			
MCM #3 (Continued)	3.G Enforcement	Ongoing-Enforce Erosion and Sedimentation Control Regulations	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Summary of investigative and enforcement actions taken related to E&S violations, including information about violation and any follow-up activities performed to investigate and address issue
	3.H Enforcement Tracking Database	Record enforcement actions as they occur and maintain copies of all enforcement documentation in the database	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Copy of Enforcement Tracking Database entries for the reporting period
	3.I Construction Site Pollution Control	Ensure construction site debris/wastes are properly managed during site inspections and plan reviews to identify potential violations	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Copy of the adopted Ordinance with applicable language, if updated
MCM #4  Post-Construction Storm Water Management in New Development and Redevelopment  Part III.B.4	4.A Stormwater Management Ordinance (including Post-Construction Stormwater Controls)	Review ordinance annually and update it as necessary	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Copy of ordinance, if updated
	4.B Stormwater Design Manual	Review ordinance annually to determine if revisions to the City’s Stormwater Design Manual are required and ensure the City has adopted the most recent version of the Alabama Handbook as its Design Manual	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Copy of Stormwater Management Ordinance, if updated
	4.C Site Plan Review	Perform site plan reviews of the stormwater management plans for all development and redevelopment projects that submit an application for a LDP Permit	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	The number of sites plans reviewed and approved during the permit period
	4.D Privately-Owned Structural BMP Inspection and Maintenance Program	Develop and annually update inventory of private detention/retention ponds. City will conduct, or require the developer/owner/operator to conduct annual inspections. Where applicable, list which controls are considered LID/green infrastructure	Engineers, contractors, developers & land use planners	Previous permit cycle and annually thereafter	Public Works	Updated inventory
						Copies of any inspection reports for BMPs and documentation of follow-up corrective actions
	4.E City Owned/Operated Structural BMP Maintenance	Inspect City-owned post construction BMPs (detention/retention ponds) annually and maintain as needed. Document maintainance	City operations & facilities	Previous permit cycle and annually thereafter	Public Works	Copy of the inspection checklists and records of any maintenance activities that are performed

Table 1: Minimum Control Measure (MCM) Compliance Matrix - City of Anniston, Alabama Last Update: March 2022						
MCM	BMP			Implementation Date	Responsible Department	Reporting Mechanisms
	Description	Measurable Goal/Frequency	Target Audience			
MCM #5  Pollution Prevention/Good Housekeeping for Municipal Operations  Part III.B.5	5.A Municipal Facility Inventory and Inspections	Maintain inventory of City-owned properties (name & location) that have the potential to pollute and annually inspect these facilities	City operations & facilities	Previous permit cycle and annually thereafter	Public Works	Inspection checklists
	5.B Employee Good Housekeeping Education	Provide annual training for applicable Public Works employees, including Standard Operating Practices for municipal operations and facilities. Coordinate with IDDE training- see BMP 2.G.	City staff	Previous permit cycle and annually thereafter	Public Works	Name and number of employees trained
						Copy or summary of training materials
	5.C De-Icing Program	Reduce road salt use when feasible. Properly remove and dispose of excess de-icing materials	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	List of weather events where de-icing was necessary
						Description of activities to reduce chlorides
	5.D Street Sweeping	Sweep all curb and gutter streets annually	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Hours worked by the dedicated employee(s) operating the street sweeper
6.0 Imaired Waters Monitoring Plan	5.E MS4 Maintenance Program	Remove sediment, debris and litter from the MS4 once per year. TRemove leaves from the MS4 three times per year	City residents and local businesses	Previous permit cycle and annually thereafter	Public Works	Records of any maintenance that has occurred in the MS4 and/or a summary of maintenance activities.
	6.A Water Quality Sampling	Conduct semi-annual sampling at 2 locations. (May-Oct and Nov-April)	City residents and local businesses	Plan developed and submitted with 2018-2019 AR; updated and new BMPs implemented in 2022- 2023 Reporting Year	Public Works	Name of the person conducting the sampling; the date, location and time of sampling; the date of the analysis; the analytical techniques used; and the analytical results.
	6.B Impaired Waters Review	Annually review ADEM’s latest approved 303(d) list to determine if any additional impaired waters are located within the City and/or if any regulatory changes have been made that affect the City’s sampling protocols and require additional BMPs (such as the development of a Total Maximum Daily Load [TMDL]). Revise Plan if needed	City residents and local businesses	Previous permit cycle and annually thereafter	Public Workds	Copy of revised Impaired Waters Monitoring Plan

## Appendix A: Regulatory Documents

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT

**DISCHARGE AUTHORIZED:** STORMWATER DISCHARGES FROM REGULATED SMALL  
MUNICIPAL SEPARATE STORM SEWER SYSTEMS

**AREA OF COVERAGE:** THE STATE OF ALABAMA

**PERMIT NUMBER:** ALR040050

**RECEIVING WATERS:** ALL WATERS OF THE STATE OF ALABAMA

*In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (the "FWPCA"), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the "AWPCA"), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-15, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.*

**ISSUANCE DATE:** September 16, 2021

**EFFECTIVE DATE:** October 1, 2021

**EXPIRATION DATE:** September 30, 2026

  
Alabama Department of Environmental Management

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## **PART I: COVERAGE UNDER THIS GENERAL PERMIT**

### **A. PERMIT COVERAGE**

This permit covers the urbanized areas designated as a Phase II Municipal Separate Storm Sewer System (MS4) within the State of Alabama.

### **B. AUTHORIZED DISCHARGES**

1. This permit authorizes discharges of storm water from small MS4s, as defined in 40 CFR Part 122.26(b)(16). An entity may discharge under the terms and conditions of this general permit if the entity:
  - a. Owns or operates a small MS4 within the permit area described in Section A;
  - b. Is not a "large" or "medium" MS4 as described in 40 CFR Part 122.26(b)(4) or (7);
  - c. Submits a Notice of Intent (NOI) in accordance with Part II of this General Permit; and
  - d. Either:
    - i. Is located fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census, or
    - ii. Is designated for permit authorization by the Department pursuant to 40 CFR Part 122.32(a)(2).
2. This permit authorizes the following non-storm water discharges provided that they do not cause or contribute to a violation of water quality standards and that they have been determined not to be substantial contributors of pollutants to a particular small MS4 applying for coverage under this permit and that is implementing the Storm Water Management Program (SWMP) set forth in this permit:
  - a. Water line flushing
  - b. Landscape irrigation
  - c. Diverted stream flows
  - d. Uncontaminated ground water infiltration
  - e. Uncontaminated pumped groundwater
  - f. Discharges from potable water sources
  - g. Foundation drains
  - h. Air conditioning condensate
  - i. Irrigation water (not consisting of treated, or untreated, wastewater)
  - j. Rising ground water
  - k. Springs
  - l. Water from crawl space pumps
  - m. Footing drains
  - n. Lawn watering runoff
  - o. Individual residential car washing, to include charitable carwashes
  - p. Residual street wash water
  - q. Discharge or flows from firefighting activities (including fire hydrant flushing)
  - r. Flows from riparian habitats and wetlands



- s. Dechlorinated swimming pool discharges, and
- t. Discharges authorized and in compliance with a separate NPDES permit.

### **C. PROHIBITED DISCHARGES**

The following discharges are not authorized by this permit:

1. Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are:
  - a. In compliance with a separate NPDES permit; or
  - b. Determined by the Department not to be a significant contributor of pollutants to waters of the State;
2. Storm water discharges associated with industrial activity as defined in 40 CFR Part 122.26(b)(14)(i)-(ix) and (xi);
3. Storm water discharges associated with construction activity as defined in 40 CFR Part 122.26(b)(14)(x) or 40 CFR 122.26(b)(15) and subject to Alabama Department of Environmental Management (ADEM) Code r. 335-6-12;
4. Storm water discharges currently covered under another NPDES permit;
5. Discharges to territorial seas, contiguous zone, and the oceans unless such discharges are in compliance with the ocean discharge criteria of 40 CFR Part 125, Subpart M;
6. Discharges that would cause or contribute to instream exceedances of water quality standards; Your SWMPP must include a description of the Best Management Practices (BMPs) that you will be using to ensure that this will not occur. The Department may require corrective action or an application for an individual permit or alternative general permit if an MS4 is determined to cause an instream exceedance of water quality standards;
7. Discharges of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been approved or developed by EPA unless your discharge is consistent with the TMDL; This eligibility condition applies at the time you submit a NOI for coverage. If conditions change after you have permit coverage, you may remain covered by the permit provided you comply with the applicable requirements of Part V. You must incorporate any limitations, conditions and requirements applicable to your discharges, including monitoring frequency and reporting required, into your SWMPP in order to be eligible for permit coverage. For discharges not eligible for coverage under this permit, you must apply for and receive an individual or other applicable general NPDES permit prior to discharging;
8. This permit does not relieve entities that cause illicit discharges, including spills, of oils or hazardous substances, from responsibilities and liabilities under State and federal law and regulations pertaining to those discharges.
9. The discharge of sanitary wastewater through cross connections or other illicit discharges through the MS4 is prohibited.

### **D. OBTAINING AUTHORIZATION**

1. To be authorized to discharge storm water from small MS4s, you must submit a Notice of Intent (NOI) and a description of your SWMP) in accordance with the deadlines presented in Part II of this permit.
2. You must submit the information required in Part II on the latest version of the NOI form. Your NOI must be signed and dated in accordance with Part VII of this permit.
3. No discharge under the general permit may commence until the discharger receives the Department's acknowledgement of the NOI and approval of the coverage of the discharge by the general permit. The Department may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI.
4. Where the operator changes, or where a new operator is added after submittal of an NOI under Part II, a new NOI must be submitted in accordance with Part II within thirty (30) days of the change or addition.

5. For areas extended within your MS4 by the latest census or annexed into your MS4 area after you received coverage under this general permit, the first annual report submitted after the annexation must include the updates to your SWMP, as appropriate.

## **E. IMPLEMENTATION**

1. This permit requires implementation of the MS4 program under the State and federal NPDES Regulations. MS4s shall modify their programs if and when water quality considerations warrant greater attention or prescriptiveness in specific components of the municipal program.
2. If a small MS4 operator implements the minimum control measures in 40 CFR 122.34(b) and the discharges are determined to cause or contribute to non-attainment of an applicable water quality standard as evidenced by the State of Alabama's 303(d) list or an EPA-approved or developed TMDL, the operator must tailor its BMPs within the scope of the six minimum control measures to address the pollutants of concern and implement permit requirements outlined in Part IV.D. and Part V of this permit.
3. Existing MS4s, unless otherwise stated within this permit, shall implement each of the minimum control measures outlined in Part III.B. of this permit immediately upon the effective date of coverage. Newly designated MS4s, unless otherwise stated in this permit, shall implement the minimum control measures outlined in Part III.B. of this permit within 365 days of the effective date of coverage. However, for newly designated MS4s, where new or revised ordinances are required to implement any of the minimum control measures, such ordinances shall be enacted within 730 days from the effective date of coverage.

## **PART II: NOTICE OF INTENT (NOI) REQUIREMENTS**

### **A. DEADLINES OF APPLICATIONS**

1. If you are automatically designated under 40 CFR Part 122.32(a)(1) or designated by the Department, then to request recoverage, you are required to submit an NOI or an application for an individual permit and a description of your SWMP at least 90 days before the expiration of this permit.
2. If you are designated by the Department after the date of permit issuance, then you are required to submit an NOI or an application for an individual permit and a description of your SWMP within 180 days upon notification. Within six months of initial issuance, the operator of the regulated small MS4 shall submit a SWMPP to the Department for review. A SWMPP shall be submitted electronically as described in Part II.D of this permit.
3. You are not prohibited from submitting an NOI after the dates provided in Part II.A.1-2. If a NOI is submitted after the dates provided in Part II.A.1-2., your authorization is only for discharges that occur after permit coverage is granted. The Department reserves the right to take appropriate enforcement actions for any unpermitted discharges.
4. Within six months of the date of re-issuance of coverage under this permit, all operators of regulated small MS4s shall submit a revised SWMPP to the Department for review.

### **B. CONTINUATION OF THE EXPIRED GENERAL PERMIT**

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the ADEM Code r. 335-6-6 and remain in force and effect if the Permittee re-applies for coverage as required under Part II of this permit. Any Permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

1. Reissuance or replacement of this permit, at which time you must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge; or
2. Issuance of an individual permit for your discharges; or
3. A formal permit decision by the Department not to reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit.

### **C. CONTENTS OF THE NOTICE OF INTENT (NOI)**

The Notice of Intent must be signed in accordance with Part VII.G of this permit and must include the following information:

1. The correct fee pursuant to ADEM Admin. Code R.335-1, Fee Schedule D.
2. Information on the Permittee:
  - a. The name of the regulated entity, specifying the contact person and responsible official, mailing address, telephone number and email address; and
  - b. An indication of whether you are a federal, State, county, municipal or other public entity.
3. Information on the MS4:
  - a. The name of your organization, county, city, or town and the latitude/longitude of the center or the MS4 location;
  - b. The name of the major receiving water(s) and an indication of whether any of your receiving waters are included on the latest 303(d) list, included in an EPA-approved and/or EPA developed TMDL or otherwise designated by the Department as being impaired. If you have discharges to 303(d) or TMDL waters, a certification that your SWMPP complies with the requirements of Part V;

- c. If you are relying on another governmental entity, regulated under the storm water regulations (40 CFR Part 122.26 & 122.32) to satisfy one or more of your permit obligations (see Part III), the identity of that entity(ies) and the elements(s) they will be implementing. The Permittee remains responsible for compliance if the other entity fails to fully perform the permit obligation, and may be subject to enforcement action if neither the Permittee nor the other entity fully performs the permit obligation; and
  - d. Must include if you are relying on the Department for enforcement of erosion and sediment controls on qualifying construction sites in accordance with Part III.B.3.b.
4. Include a brief summary of the BMPs for the minimum control measures in Part III of this permit (i.e. a brief summary of the MS4's SWMPP), a timeframe for implementing new or additional BMPs, and the person or persons responsible for implementing or coordinating your SWMPP.

#### **D. WHERE TO SUBMIT MS4 DOCUMENTS**

The Permittee must complete and submit its NOI or individual application electronically, and a description of your SWMP as allowed under Part II.A., signed in accordance with the signatory requirements of Section VII of this permit, to the Department via the Alabama Environmental Permitting and Compliance System (AEPACS) unless the Permittee submits in writing valid justification as to why the electronic submittal cannot be utilized and the Department approves in writing the utilization of hard copy submittals. The AEPACS can be accessed at the following link: <https://adem.alabama.gov/AEPACS>. Permit requests for initial issuance and modifications of the existing permit shall all be submitted through the AEPACS.

Requests as to why AEPACS cannot be utilized shall be addressed to:

**Alabama Department of Environmental Management  
Water Division  
Storm Water Management Branch  
Post Office Box 301463  
Montgomery, Alabama 36130-1463**

## **PART III: STORM WATER POLLUTION PREVENTION AND MANAGEMENT PROGRAM**

### **A. STORM WATER MANAGEMENT PROGRAM (SWMP)**

1. The Permittee is required to develop, revise, implement, maintain and enforce a SWMP which shall include controls necessary to reduce the discharge of pollutants from its MS4 consistent with Section 402(p)(3)(B) of the Clean Water Act and 40 CFR Parts 122.30-122.37. These requirements shall be met by the development and implementation of a SWMPP which addresses the BMPs, control techniques and systems, design and engineering methods, public participation and education, monitoring, and other appropriate provisions designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP).
2. The Permittee shall provide and maintain adequate finance, staff, equipment, and support capabilities necessary to implement the SWMPP and comply with the requirements of this permit.
3. The SWMPP must address the minimum storm water control measures referenced in Part III.B. to include the following:
  - a. A map of the Permittee's MS4 urbanized areas;
  - b. The BMPs that will be implemented for each control measure. Low impact development/green infrastructure shall be considered and actively encouraged where feasible. Information on LID/Green Infrastructure is available on the following websites: <http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf> and <https://epa.gov/nps/urban-runoff-low-impact-development>;
  - c. The measureable goals for each of the minimum controls outlined in Part III.B.;
  - d. The proposed schedule—including interim milestones, as appropriate, inspections, and the frequency of actions needed to fully implement each minimum control; and
  - e. The person and/or persons responsible for implementing or coordination the BMPs for each separate minimum control measure.
4. Unless otherwise specified in this permit, the Permittee shall be in compliance with the conditions of this permit by the effective date of coverage.

### **B. MINIMUM STORM WATER CONTROL MEASURES**

#### **1. Public Education and Public Involvement on Storm Water Impacts**

- a. The Permittee must develop and implement a public education and outreach program to inform the public about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff to the MEP. The Permittee shall continuously implement this program in the areas served by the MS4. The Permittee shall also comply, at a minimum, with applicable State and local public notice requirements when implementing a public involvement/participation program. Each year, the Permittee shall implement a minimum of four BMPs, with two BMP emphasizing public education and two BMP emphasizing public involvement.
- b. The Permittee shall include within the SWMPP the following information:
  - i. Annually, seek and consider public input in the development, revision, and implementation of the SWMPP, that may include, but is not limited to publishing in local newspaper, posting on the Permittee's website, etc.;
  - ii. Address in its public education program, the targeted pollutant sources to include, at a minimum the land development community (i.e., construction contractors/developers);
  - iii. Specifically address the reduction of litter, floatables and debris from entering the MS4, that may include, but is not limited to:

- (1) Establishing a program to support volunteer groups for labeling storm drain inlets and catch basins with "no dumping" message; post and
  - (2) Posting signs referencing local codes that prohibit littering and illegal dumping at selected designated public access points to open channels, creeks, and other relevant waterbodies;
- iv. Inform and involve individuals and households about the steps they can take to reduce storm water pollution;
- v. Plans to inform and involve individuals and groups on how to participate in the storm water program (with activities that may include, but not limited to, local stream and lake restoration activities, storm water stenciling, advisory councils, watershed associations, committees, participation on rate structures, stewardship programs and environmental related activities, outreach on LID/GI). The target audiences and subject areas for the education program that are likely to have significant storm water impacts should include, but is not limited to, the following:
  - (1) General Public
    - (a) General impacts litter has on water bodies, how trash is delivered to streams via the MS4 and ways to reduce the litter;
    - (b) General impacts of storm water flows into surface water from impervious surface; and
    - (c) Source control BMPs in areas of pet waste, vehicle maintenance, landscaping and rain water reuse.
  - (2) General Public, Businesses, Including Home-Based and Mobile Businesses
    - (a) BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials; and
    - (b) Impacts of illicit discharges and how to report them.
  - (3) Homeowners, Landscapers, and Property Managers
    - (a) Yard care techniques that protect water quality;
    - (b) BMPs for use and storage of pesticides and fertilizers;
    - (c) BMPs for carpet cleaning and auto repair and maintenance;
    - (d) Runoff reduction techniques, which may include but not limited to site design, pervious paving, retention of forests, mature trees, and maintenance required for LID/GI; and
    - (e) Storm water pond maintenance.
  - (4) Engineers, Contractors, Developers, Review Staff and Land Use Planners
    - (a) Technical standards for construction site sediment and erosion control;
    - (b) Storm water treatment and flow control BMPs;
    - (c) Impacts of increased storm water flows into receiving water bodies; and
    - (d) Run-off reduction techniques and low impact development (LID)/green infrastructure (GI) practices that may include, but not limited to, site design, pervious pavement, alternative parking lot design, retention of forests and mature trees to assist in storm water treatment and flow control BMPs, and maintenance required for LID/GI.
- vi. Evaluate the effectiveness of the public education and public involvement program. If the Permittee determines any portion of the program (including BMPs) to be ineffective, then the Permittee shall update the SWMPP to address the ineffectiveness.

- c. The Permittee shall report each year in the annual report the following information:
  - i. A description of the method used to seek and consider input from the public in the development, revision, and implementation of the SWMPP;
  - ii. A description of the activities used to involve groups and/or individuals in the development, revision, and implementation of the SWMPP;
  - iii. A description of the targeted pollutant sources the public education and public involvement program addressed;
  - iv. A description of the individuals and groups targeted and how many groups and/or individuals participated in the programs;
  - v. A description of the activities used to address the reduction of litter, floatables and debris from entering the MS4 as required in Part III.B.1.b.iii.;
  - vi. A description of the communication mechanism(s) or advertisement(s) used to inform individuals, households, public and/or groups as well as the quantity that were distributed (i.e. number of printed brochures, copies of newspapers, workshops, public service announcements, etc.); and
  - vii. Results of the evaluation of the public education and public involvement program as required in Part III.B.1.b.vi.
- d. The Permittee shall make their SWMPP and their annual reports required under this permit available to the public when requested. The current SWMPP and the latest annual report should be posted on the Permittee's website, if available, and within 30 days of submittal of the SWMPP to the Department.

## **2. Illicit Discharge Detection and Elimination (IDDE) Program**

- a. The Permittee shall implement an ongoing program to detect and eliminate illicit discharges into the MS4, to the maximum extent practicable. The program shall include, at a minimum, the following:
  - i. An initial map shall be provided in the SWMPP with updates, if any, provided each year in the annual report. The map shall include, at a minimum:
    - (1) The latitude/longitude of all known outfalls;
    - (2) The names of all waters of the State that receive discharges from these outfalls; and,
    - (3) Structural BMPs owned, operated, or maintained by the Permittee, if applicable.
  - ii. To the extent allowable under State law, an ordinance or other regulatory mechanism that effectively prohibits non-storm water discharges to the MS4. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary and shall:
    - (1) Include escalating enforcement procedures and actions; and
    - (2) Require the removal of illicit discharges and the immediate cessation of improper disposal practices upon identification of responsible parties. Where the removal of illicit discharge within ten (10) working days is not possible, the ordinance shall require an expeditious schedule for removal of the discharge. In the interim, the ordinance shall require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4.
  - iii. A dry weather screening program designed to detect and address non-storm water discharges to the MS4. This program must address, at a minimum, dry weather screening of fifteen percent (15%) of the outfalls once per year with all (100 percent) screened at least once per five years. Priority areas, as described by the Permittee in the SWMPP, will be dry weather screened on a more frequent schedule as outlined in the SWMPP. If any indication of a suspected illicit discharge, from an unidentified source, is observed during the dry weather screening, then the Permittee shall follow the screening protocol as outlined in the SWMPP.

- iv. Procedures for tracing the source of a suspect illicit discharge as outlined in the SWMPP. At a minimum, these procedures will be followed to investigate portions of the MS4 that, based on the results of the field screening or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water.
  - v. Procedures for eliminating an illicit discharge as outlined in the SWMPP;
  - vi. Procedures to notify ADEM of a suspect illicit discharge entering the Permittee's MS4 from an adjacent MS4 as outlined in the SWMPP;
  - vii. A mechanism for the public to report illicit discharges discovered within the Permittee's MS4 and procedures for appropriate investigation of such reports;
  - viii. A training program for appropriate personnel to be trained on identification, reporting, and corrective action of illicit discharges, at a minimum of at least once per five years;
  - ix. Address the following categories of non-storm discharges or flows (i.e., illicit discharges) only if the Permittee or the Department identifies them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering run-off, individual residential car washing, flows from riparian habitats and wetlands, discharge or flows from firefighting activities (to include fire hydrant flushing); dechlorinated swimming pool discharges, and residual street wash water, discharge authorized by and in compliance with a separate NPDES permit; and
  - x. The Permittee may also develop a list of other similar occasional incidental non- storm water discharges (e.g. non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non- storm water discharges must not be reasonably expected (based on information available to the Permittees) to be significant sources of pollutants to the municipal separate storm sewer system, because of either the nature of the discharges or conditions you have established for allowing these discharges to your MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to impaired waterbodies, BMPs on the wash water, etc.). You must document in your SWMPP any local controls or conditions placed on the discharges. The Permittee must include a provision prohibiting any individual non- storm water discharge that is determined to be contributing significant amounts of pollutants to your MS4.
- b. The Permittee shall report each year in the annual report the following information:
- i. List of outfalls observed in the annual reporting year to demonstrate that 100% of outfalls are screened at least once per five years during the dry weather screening;
  - ii. Updated MS4 map(s) as required by Part III.B.2.a.i. unless there are no changes to the map that was previously submitted. When there are no changes to the map, the annual report must state this;
  - iii. Copies of, or a link to, the IDDE ordinance or other regulatory mechanism as required by Part III.B.2.a.ii. When there are no changes to the ordinance or other regulatory mechanism, the annual report should state this;
  - iv. Date(s) of training conducted for appropriate personnel; and
  - v. The number of illicit discharges investigated, the screening results, and the summary of corrective actions taken to include dates and timeframe of response.



### 3. Construction Site Storm Water Runoff Control

- a. The Permittee must develop/revise, implement and enforce an ongoing program to reduce, to the maximum extent practicable, the pollutants in any storm water runoff to the MS4 from qualifying construction sites. The program shall include the following at a minimum:
  - i. Specific procedures for construction site plan (including erosion prevention and sediment controls) review and approval: The MS4 procedures must include an evaluation of plan completeness and overall BMP effectiveness;
  - ii. To the extent allowable under State law, an ordinance or other regulatory mechanism to require erosion and sediment controls, sanctions to ensure compliance, and to provide all other authorities needed to implement the requirements of Part III.B.3 of this permit. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary;
  - iii. A training program for MS4 site inspection staff in the identification of appropriate construction BMPs (example: QCI training in accordance with ADEM Admin Code. R. 335-6-12 or the Alabama Construction Site General Permit). Applicable MS4 site inspection staff shall be trained at least once per year;
  - iv. Within 365 days of the effective date of the permit, develop and implement a construction site inspection form to include at least the items listed in Parts III.B.3.d.i.
  - v. Within 365 days of the effective date of the permit, maintain an inventory of qualifying construction sites containing relevant contact information for each construction site (i.e., tracking number and construction site contact name, address, phone number, etc.), the size of the construction site, whether the construction site has submitted for permit coverage under ADEM's Construction General Permit ALR100000, and the date the MS4 Permittee approved the site construction plan. The MS4 Permittee must make the inventory available upon the Department's request.
  - vi. Procedures for the inspection of qualifying construction sites to verify the use of appropriate erosion and sediment control practices that are consistent with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas published by the Alabama Soil and Water Conservation Committee (hereinafter the "Alabama Handbook"). The frequency and prioritization of inspection activities shall be documented in the SWMPP. Inspection of construction sites to verify use and proper maintenance of appropriate BMPs shall be performed in accordance with the frequency specified in the table below:

Site	Inspection Frequency
Priority Construction Sites (defined in Part VII.W.)	At a minimum, inspections must occur monthly.
Other sites determined by the Permittee or Permitting Authority to be a significant threat to water quality.*	
All qualifying construction sites not meeting the criteria specified above.	At a minimum, inspections must occur every three months.

\*In evaluating the threat to water quality, the following factors must be considered, if applicable:

- Soil erosion potential;
- Site slope;
- Project size and type;
- Sensitivity of receiving waterbodies including 303d or TMDL status;
- Proximity to receiving waterbodies;
- Non-storm water discharges;
- Past record of non-compliance by the operators of the construction site; and
- Other factors deemed relevant to the MS4.

- vii. For sites determined to have ineffective BMPs, a follow-up inspection shall be conducted and appropriately documented as outlined in Part III.B.3.d.i.
  - viii. Procedures, as outlined in the SWMPP, to notify ADEM of construction sites that do not have a NPDES permit or ineffective BMPs that are discovered during the periodic inspections. The notification must provide, at a minimum, the specific location of the construction project, the name and contact information from the owner or operator, and a summary of the site deficiencies; and
  - ix. A mechanism for the public to report complaints regarding discharges from qualifying construction sites.
- b. ADEM implements a State-wide NPDES construction storm water regulatory program. As provided by 40 CFR Part 122.35(b), the Permittee may rely on ADEM for the setting of standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls, and must document this in its SWMPP. If the Permittee elects not to rely on ADEM's program, then the Permittee must include the following, at a minimum, in its SWMPP:
- i. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs consistent with the Alabama Handbook for Erosion Control, Sediment Control, And Stormwater Management on Construction Sites and Urban Areas published by the Alabama Soil and Water Conservation Committee (hereinafter the "Alabama Handbook");
  - ii. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
  - iii. Development and implementation of an enforcement strategy that includes escalating enforcement remedies to respond to issues of non-compliance;
  - iv. An enforcement tracking system designed to record instances of non-compliance and the MS4's responding actions. The enforcement case documentation should include:
    - (1) Name of owner/operator
    - (2) Location of construction project or industrial facility
    - (3) Description of violations
    - (4) Required schedule for returning to compliance
    - (5) Description of enforcement response used, including escalated responses if repeat violation occur or violations are not resolved in a timely manner;
    - (6) Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violation, etc.);
    - (7) Any referrals to different departments or agencies; and
    - (8) Date violation was resolved
  - v. The Permittee must keep records of all inspections (i.e. inspection reports) and employee training required by Part III.B.3.a.
- c. The Permittee shall include within the SWMPP the following information:
- i. Procedures for site plan reviews as required by Part III.B.3.a.i;
  - ii. A copy or link of the ordinance or other regulatory mechanism required by Part III.B.3.a.ii.;
  - iii. Plans for the training of MS4 site inspection staff as required by Part III.B.3.a.iii; and
  - iv. A copy of the construction site inspection form meeting the requirements of Part III.B.3.a.iv.

- d. The Permittee shall maintain the following information and make it available upon request:
  - i. Documentation of all inspections conducted of qualifying construction sites as required by Part III.B.3.a.vi. The inspection documentation shall include, at a minimum, the following:
    - (1) Facility type;
    - (2) Inspection date;
    - (3) Name and signature of inspector;
    - (4) Location of construction project;
    - (5) Owner/operator information (name, address, phone number, email);
    - (6) Description of the storm water BMP condition that may include, but not limited to, the quality of vegetation and soils, inlet and outlet channels and structures, embankments, slopes and safety benches, spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures; and
    - (7) Photographic documentation of any issues and/or concerns.
  - ii. Documentation of referrals of noncompliant construction sites and/or enforcement actions taken at construction sites to include, at a minimum, the following:
    - (1) Name of owner/operator
    - (2) Location of construction project;
    - (3) Description of violation;
    - (4) Required schedule for returning to compliance;
    - (5) Description of enforcement response used, including escalated responses if repeat violations occur; and
    - (6) Accompanying documentation of enforcement responses (e.g. notices of non-compliance, notices of violations, etc.).
  - iii. Records of public complaints including:
    - (1) Date, time and description of the complaint;
    - (2) Location of subject construction sites; and
    - (3) Identification of any actions taken (e.g. inspections, enforcement, corrections). Identifying information must be sufficient to cross-reference inspection and enforcement records.
- e. The Permittee shall report each year in the annual report the following information:
  - i. A description of any completed or planned revisions to the ordinance or regulatory mechanism required by Part III.B.3.a.ii. and the most recent copy, or a link to the ordinance; and
  - ii. List of all active construction sites within the MS4 to include the following summary:
    - (1) Number of construction site inspections;
    - (2) Number of non-compliant construction site referrals and/or enforcement actions and description of violations;
    - (3) Number of construction site runoff complaints received; and
    - (4) Number of MS4 staff/inspectors trained. Include copies of certifications or attendance records for those MS4 staff/inspectors.

#### 4. Post-Construction Storm Water Management in New Development and Redevelopment

- a. Post-construction storm water management refers to the activities that take place after construction occurs, and includes structural and non-structural controls including low-impact development and green infrastructure practices to obtain permanent storm water management over the life of the property's use. These post construction controls should be considered during the initial site development planning phase.
- i. The Permittee must develop/revise, implement, and enforce a program to address storm water runoff from qualifying new development and redevelopment projects, to the maximum extent practicable. This program shall ensure that controls are in place to prevent or minimize water quality impacts. Specifically, the Permittee shall:
  - (1) Develop/revise and outline in the SWMPP procedures for the site-plan review and approval process and a required re-approval process when changes to post-construction controls are required; and
  - (2) Develop/revise and outline in the SWMPP procedures for a post-construction process to demonstrate and document that post-construction storm water measures have been installed per design specifications, which includes enforceable procedures for bringing noncompliant projects into compliance.
- ii. The Permittee must develop and implement strategies which may include a combination of structural and/or non-structural BMPs designed to ensure, to the maximum extent practicable, that the post construction runoff mimics pre-construction hydrology. A design rainfall event with an intensity up to that of a 2yr-24hr storm event shall be the basis for the design and implementation of post- construction BMPs.
- iii. Encourage and educate landowners and developers to incorporate the use of low impact development (LID)/green infrastructure where feasible. Information on low impact development (LID)/green infrastructure is available on the following websites: <http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf>; <http://epa.gov/nps/lid>. The Permittee shall include a narrative description in the SWMPP as to the means that will be taken to implement the requirement to encourage landowners and developers to incorporate the use of low impact development (LID)/green infrastructure;
- iv. To the extent allowable under State law, the Permittee must develop and institute the use of an ordinance or other regulatory mechanism to address post-construction runoff from qualifying new development and redevelopment projects. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary;
- v. The Permittee must require adequate long-term operation and maintenance of BMPs. One or more of the following as applicable:
  - (1) The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; and/or
  - (2) Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; and/or
  - (3) Written conditions in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association, or other appropriate group, for maintenance of structural and treatment control management practices; and/or
  - (4) Any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control management practices.
- vi. The Permittee shall perform or require the performance of post-construction inspections, at a minimum of once per year, to confirm that post-construction BMP's are functioning as designed. The Permittee shall include an inspection schedule, to include inspection frequency, within the SWMPP. The Permittee shall document or require documentation of the post-construction inspection. Such documentation shall include, at a minimum:

- (1) Facility type
  - (2) Inspection date
  - (3) Name and signature of inspector
  - (4) Site location
  - (5) Owner information (name, address, phone number, fax, and email)
  - (6) Description of the storm water BMP condition that may include the quality of: vegetation and soils, inlet and outlet channels and structures, embankments, slopes, and safety benches; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures;
  - (7) Photographic documentation of all critical storm water BMP components;
  - (8) Specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP; and
  - (9) Maintenance agreements for long-term BMP operation and maintenance.
- vii. The Permittee shall maintain or require the developer/owner/operator to keep records of post-construction inspections, maintenance activities and make them available to the Department upon request and require corrective actions to poorly functioning or inadequately maintained post-construction BMP's.
- b. The Permittee shall report each year in the annual report the following information:
- i. Copies of, or link to, the ordinance or other regulatory mechanism required by Part III.B.4.a.iv.;
  - ii. A list of the post-construction structural controls installed and inspected during the permit year. The list shall include which post-construction structural controls installed are considered low impact development (LID)/green infrastructure, if applicable;
  - iii. Updated inventory of post-construction structural controls including those owned by the Permittee;
  - iv. Number of inspections performed on post-construction structural controls; and,
  - v. Summary of enforcement actions, if applicable.

## **5. Pollution Prevention/Good Housekeeping for Municipal Operations**

- a. The Permittee shall develop, implement, and maintain a program that will prevent or reduce the discharge of pollutants in storm water run-off from municipal operations to the maximum extent practicable. The program elements shall include, at a minimum, the following:
- i. An inventory (to include name and location) of all municipal facilities. Evaluate and determine which municipal facilities have the potential to discharge pollutants via storm water runoff;
  - ii. Strategies for the implementation of BMPs to reduce litter, floatables and debris from entering the MS4 and evaluate those BMPs annually to determine their effectiveness. If a BMP is determined to be ineffective or infeasible, then an alternate BMP must be implemented. The Permittee shall also develop a plan to remove litter, floatable and debris material from the MS4, including proper disposal of waste removed from the system;
  - iii. Standard Operating Procedures (SOPs) detailing good housekeeping practices to be employed at municipal facilities (that have the potential to discharge pollutants via stormwater runoff) and during municipal operations that may include, but not limited to, the following:
    - (1) Equipment washing;
    - (2) Street sweeping;

- (3) Maintenance of municipal roads including public streets, roads, and highways, including but not limited to unpaved roads, owned, operated, or under the responsibility of the Permittee;
  - (4) Storage, use, and disposal of chemicals, Pesticide, Herbicide and Fertilizers (PHFs) and waste materials;
  - (5) Vegetation control, cutting, removal, and disposal of the cuttings;
  - (6) Vehicle fleets/equipment maintenance and repair;
  - (7) External Building maintenance; and
  - (8) Materials storage facilities and storage yards.
- iv. A program for inspecting municipal facilities for good housekeeping practices, including BMPs. The program shall include checklists and procedures for correcting noted deficiencies;
- v. A training program for municipal facility staff in good housekeeping practices as outlined in the SOP developed pursuant to Part III.B.5.a.iii; and
- b. The Permittee shall include within the SWMPP the following information:
  - i. The inventory of municipal facilities required by Part III.B.5.a.i;
  - ii. Evaluate and include a discussion of how effectiveness is measured for Part III.B.5.a.ii;
  - iii. Schedule for developing the SOP of good housekeeping practices required by Part III.B.5.a.iii;
  - iv. An inspection plan and schedule to include inspection frequency, checklists, and any other materials needed to comply with Part III.B.5.a.iv; and
  - v. A description of the training program and training schedule to include training frequency required by Part III.B.5.a.v.
- c. The Permittee shall report each year in the annual report the following information:
  - i. Any updates to the municipal facility inventory;
  - ii. An estimated amount of floatable material collected from the MS4 as required by Part III.B.5.a.ii;
  - iii. Any updates to the inspection plan
  - iv. The number of inspections conducted; and
  - v. Any updates to the SOP of good housekeeping practices.
- d. The Permittee shall maintain the following information and make it available upon request:
  - i. Records of inspections and corrective actions, if any; and
  - ii. Training records including the dates of each training activities and names of personnel in attendance.

## **PART IV: SPECIAL CONDITIONS**

### **A. RESPONSIBILITIES OF THE PERMITTEE**

1. If the Permittee is relying on another entity to satisfy one or more requirements of this permit, then the Permittee must note that fact in the SWMPP. The Permittee remains responsible for compliance with all requirements of this permit, except as provided by Part III.B.3.b and reliance on another entity will not be a defense or justification for non-compliance if the entity fails to implement the permit requirements.
2. If the Permittee is relying on the Department for the enforcement of erosion and sediment controls on qualifying construction sites and has included that information in the SWMPP as required by Part III.B.3.b., the Permittee is not responsible for implementing the requirements of Part III.B.3.b of this permit as long as the Department receives notification of non-compliant qualifying constructions sites from the Permittee as required by Part III.B.3.a.viii.

### **B. SWMPP PLAN REVIEW AND MODIFICATION**

1. The Permittee shall submit a SWMPP and/or revised SWMPP to the Department as required by Part II.A of the permit. The Permittee shall implement plans to seek and consider public input in the development, revision and implementation of this SWMPP, as required by Part III.B.1.b.i. Thereafter, the Permittee shall perform an annual review of the current SWMPP and must revise the SWMPP, as necessary, to maintain compliance with the permit. Any revisions to the SWMPP shall be submitted to the Department at the time a revision is made for the Department review and the Permittee's website shall be updated with the revised version of the SWMPP. Revisions made to the SWMPP may include, but are not limited to, the replacement of ineffective or infeasible BMPs or the addition of components, controls and requirements; and
2. The Permittee shall implement the SWMPP on all new areas added to their municipal separate storm sewer system (or for which they become responsible for implementation of storm water quality controls) as soon as practicable, but not later than one (1) year from addition of the new areas. Implementation of the program in any new area shall consider the plans of the SWMPP of the previous MS4 ownership, if any.

### **C. DISCHARGE COMPLIANCE WITH WATER QUALITY STANDARDS**

This general permit requires, at a minimum, that the Permittee develop, implement and enforce a Storm Water Management Program designed to reduce the discharge of pollutants to the maximum extent practicable. Full implementation of BMPs, using all known, available, and reasonable methods of prevention, control and treatment to prevent and control storm water pollution from entering waters of the State of Alabama is considered an acceptable effort to reduce pollutants from the municipal storm drain system to be the maximum extent practicable.

### **D. IMPAIRED WATERS AND TOTAL MAXIMUM DAILY LOADS (TMDLs)**

1. The Permittee must determine whether the discharge from any part of the MS4 contributes directly or indirectly to a waterbody that is included on the latest §303(d) list or designated by the Department as impaired;
2. If the Permittee's MS4 discharges to a waterbody included on the latest §303(d) or designated by the Department as impaired, it must demonstrate the discharges, as controlled by the Permittee, do not cause or contribute to the impairment. The SWMPP must detail the BMPs that are being utilized to control discharges of pollutants associated with the impairment. If existing BMPs are not sufficient to achieve this demonstration, the Permittee must, within six (6) months following the publication of the latest final §303(d) list, Department designation, or the effective date of this permit, submit a revised SWMPP detailing new or modified BMPs. The SWMPP must be revised as directed by the Department and the new or modified BMPs must be implemented within one year from the publication of the latest final §303(d) list or Department designation.
3. Permittees discharging from MS4s into waters with EPA-Approved TMDLs and/or EPA-Established TMDLs
  - a. The Permittee must determine whether its MS4 discharges to a waterbody for which a TMDL has been established or approved by EPA. If an MS4 discharges into a water body with an EPA approved or established TMDL, then the SWMPP must include BMPs targeted to meet the assumptions and

requirements of the TMDL. If additional BMPs will be necessary to meet the requirements of the TMDL, the SWMPP must include a schedule for installation and/or implementation of such BMPs. A monitoring component to assess the effectiveness of the BMPs in achieving the TMDL requirements must also be included in the SWMPP. Monitoring can entail a number of activities including, but not limited to: outfall monitoring, in-stream monitoring, and/or modeling. Monitoring data, along with an analysis of this data, shall be included in the Annual Report.

- b. If, during this permit cycle, a TMDL is approved by EPA or a TMDL is established by EPA for any waterbody into which an MS4 discharges, the Permittee must review the applicable TMDL to see if it includes requirements for control of storm water discharges from the MS4.
- i. If it is found that the Permittee must implement specific allocations of the TMDL, it must assess whether the assumptions and requirements of the TMDL are being met through implementation of existing BMPs or if additional BMPs are necessary. The SWMPP must include BMPs targeted to meet the assumptions and requirements of the TMDL. If existing BMPs are not sufficient, the Permittee must, within six (6) months following the approval or establishment of the TMDL by EPA, submit a revised SWMPP detailing new or modified BMPs to be utilized along with a schedule of installation and/or implementation of such BMPs. Any new or modified BMPs must be implemented within one year, unless an alternate date is approved by the Department, from the establishment or approval of the TMDL by EPA. A monitoring component to assess the effectiveness of the BMPs in achieving the TMDL requirements must also be included in the SWMPP. Monitoring can entail a number of activities including, but not limited to: outfall monitoring, in-stream monitoring, and/or modeling. Monitoring data, along with an analysis of this data, shall be included in the Annual Report.

#### **E. REQUIRING AN INDIVIDUAL PERMIT**

The Department may require any person authorized by this permit to apply for and/or obtain an individual NPDES permit. When the Department requires application for an individual NPDES permit, the Department will notify the Permittee in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form and a statement setting a deadline for the Permittee to file the application.



## **PART V: MONITORING AND REPORTING**

### **A. MONITORING REQUIREMENTS**

1. If there are no 303(d) listed or TMDL waters located within the Permittee's MS4 area, no monitoring shall be required. The SWMPP shall include a determination stating if monitoring is required.
2. If a waterbody within the MS4 jurisdiction is listed on the latest final §303(d) list, or otherwise designated impaired by the Department, or for which a TMDL is approved or established by EPA, during this permit cycle, then the Permittee must implement a monitoring program, within 6 months, to include monitoring that addresses the impairment or TMDL. A monitoring plan shall be included with the SWMPP and any revisions to the monitoring program shall be documented in the SWMPP and Annual Report.
3. Proposed monitoring locations, and monitoring frequency shall be described in the monitoring plan with actual locations described in the annual report;
4. The Permittee must include in the monitoring program any parameters attributed with the latest final §303(d) list or otherwise designated by the Department as impaired or are included in an EPA-approved or EPA-established TMDL.
5. Analysis and collection of samples shall be done in accordance with the methods specified at 40 CFR Part 136. Where an approved 40 CFR Part 136 does not exist, then a Department approved alternative method may be used.
6. If the Permittee is unable to collect samples due to adverse conditions, the Permittee must submit a description of why samples could not be collected, including available documentation of the event. An adverse climatic condition which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

### **B. REPORTING OF MONITORING RESULTS**

Monitoring results must be reported with the subsequent Annual Report and shall include the following monitoring information:

1. The date, latitude/longitude of location, and time of sampling;
2. The name(s) of the individual(s) who performed the sampling;
3. The date(s) analysis were performed;
4. The name(s) of individuals who performed the analysis;
5. The analytical techniques or methods used; and
6. The results of such analysis.

## **PART VI: ANNUAL REPORTING REQUIREMENTS**

### **A. ANNUAL REPORT SUBMITTAL**

1. The Permittee shall submit to the Department an annual report and all other information and documents via the AEPACS system no later than May 31st of each year. The AEPACS system can be accessed at the following link: <https://adem.alabama.gov/AEPACS>. The annual report shall cover the previous April 1 to March 31. If an entity comes under coverage for the first time after the issuance of this permit, then the first annual report should cover the time coverage begins until March 31<sup>st</sup> of subsequent year.
2. The Permittee shall sign and certify the annual report in accordance with Part VII.G. If the Responsible Official has designated a duly authorized representative in accordance with Part VII.G. to sign the annual report, then include a copy of the written designation with the annual report.

### **B. ANNUAL REPORT CONTENTS**

The annual report shall include the following information, at a minimum, and in addition to those requirements referenced in Part III-V:

1. A list of contacts and responsible parties (e.g.: agency, name, phone number, address, & email address) who had input to and are responsible for the preparation of the annual report;
2. Overall evaluation of the SWMP developments and progress for the following:
  - a. Major accomplishments;
  - b. Overall program strengths/weaknesses;
  - c. Future direction of the program;
  - d. Overall determination of the effectiveness of the SWMPP taking into account water quality/watershed improvements;
  - e. Measureable goals that were not performed and reasons why the goals were not accomplished; and
  - f. If monitoring is required, evaluation of the monitoring data.
3. Narrative report of all minimum storm water control measures referenced in Part III.B of this permit. The activities shall be discussed as follows:
  - a. Minimum control measures completed and in progress;
  - b. Assessment of the controls; and
  - c. Discussion of proposed BMP revisions or any identified measureable goals that apply to the minimum storm water control measures.
4. Summary table of the storm water controls that are planned/scheduled for the next reporting cycle;
5. Results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP.
6. Notice of reliance on another entity to satisfy some of your permit obligations;
7. Results of the evaluation to determine whether discharges from any part of the MS4 contributes directly or indirectly to a waterbody that is included on the latest §303(d) list (or designated by the Department as impaired) or for which a TMDL has been established or approved by EPA; and
8. If monitoring is required, all monitoring results collected during the previous year in accordance with Part V, if applicable. The monitoring results shall be submitted in a format acceptable to the Department.

## **PART VII: STANDARD AND GENERAL PERMIT CONDITIONS**

### **A. DUTY TO COMPLY**

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

### **B. CONTINUATION OF THE EXPIRED GENERAL PERMIT**

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the ADEM Code r. 335-6-6 and remain in force and effect if the Permittee re-applies for coverage as required under Part II of this Permit. Any Permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:

1. Reissuance or replacement of this permit, at which time you must comply with the Notice of Intent conditions of the new permit to maintain authorization to discharge; or
2. Issuance of an individual permit for your discharges; or
3. A formal permit decision by the Department not to reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit.

### **C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE**

It shall not be a defense for you in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### **D. DUTY TO MITIGATE**

You must take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

### **E. DUTY TO PROVIDE INFORMATION**

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, suspending, or terminating the permit or to determine compliance with the permit. The Permittee shall also furnish to the Director upon request, copies of records required to be kept by the permit.

### **F. OTHER INFORMATION**

If you become aware that you have failed to submit any relevant facts in your Notice of Intent or submitted incorrect information in the Notice of Intent or in any other report to the Department, you must promptly submit such facts or information.

### **G. SIGNATORY REQUIREMENTS**

All Notices of Intent, reports, certifications, or information submitted to the Department, or that this permit requires be maintained by you shall be signed and certified as follows:

#### **1. Notice of Intent.**

All Notices of Intent shall be signed by a responsible official as set forth in ADEM Admin. Code r. 335-6-6-.09.

#### **2. Reports and other information.**

All reports required by the permit and other information requested by the Department or authorized representative of the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. Signed authorization. The authorization is made in writing by a person described above and submitted to the Department.
- b. Authorization with specified responsibility. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility for environmental matters for the regulated entity.

### 3. Changes to authorization.

If an authorization is no longer accurate because a different operator has the responsibility for the overall operation of the MS4, a new authorization satisfying the requirement of Part VII.G.2.b. above must be submitted to the Department prior to or together with any reports or information, and to be signed by an authorized representative.

### 4. Certification.

Any person signing documents under Part VII.G.1-2. above shall make the following certification:

*"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

## H. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor it does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of federal, State or local laws or regulations.

## I. PROPER OPERATION AND MAINTENANCE

You must at all time properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by you to achieve compliance with the conditions of this permit and with the conditions of your SWMPP. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by you only when the operation is necessary to achieve compliance with the conditions of the permit.

## J. INSPECTION AND ENTRY

You must allow the Department or an authorized representative upon the presentation of credentials and other documents as may be required by law, to do any of the following:

1. Enter your premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment) practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

## **K. PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

## **L. PERMIT TRANSFERS**

This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Act.

## **M. ANTICIPATED NONCOMPLIANCE**

You must give advance notice to the Department of any planned changes in the permitted small MS4 or activity which may result in noncompliance with this permit.

## **N. COMPLIANCE WITH STATUTES AND RULES**

1. The permit is issued under ADEM Admin. Code r. 335-6-6. All provisions of this chapter that are applicable to this permit are hereby made a part of this permit.
2. This permit does not authorize the noncompliance with or violation of any laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws.

## **O. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall be affected thereby.

## **P. BYPASS PROHIBITION**

Bypass (see 40 CFR 122.41(m)) is prohibited and enforcement action may be taken against a regulated entity for a bypass; unless:

1. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during the normal periods of equipment downtime. This condition is not satisfied if the regulated entity should, in the exercise of reasonable engineering judgment, have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance.
3. The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days prior to the anticipated bypass (if possible), the Permittee is granted such authorization, and the Permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.

The Permittee has the burden of establishing that each of the conditions of Part VII.P. have been met to qualify for an exception to the general prohibition against bypassing and an exemption, where applicable, from the discharge specified in this permit.

## **Q. UPSET CONDITIONS**

An upset (see 40 CFR 122.41(n)) constitutes an affirmative defense to an action brought for noncompliance with technology-based permit limitations if a regulated entity shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

1. An upset occurred and the Permittee can identify the specific cause(s) of the upset;
2. The Permittee's facility was being properly operated at the time of the upset; and

3. The Permittee promptly took all reasonable steps to minimize any adverse impact on human health or the environment resulting from the upset.

The Permittee has the burden of establishing that each of the conditions of Part VII.Q. of this permit have been met to qualify for an exemption from the discharge specified in this permit.

## **R. PROCEDURES FOR MODIFICATION OR REVOCATION**

Permit modification or revocation will be conducted according to ADEM Admin. Code r. 335-6-6-.17.

## **S. RE-OPENER CLAUSE**

If there is evidence indicating potential or realized impacts on water quality due to storm water discharge covered by this permit, the regulated entity may be required to obtain an individual permit or an alternative general permit or the permit may be modified to include different limitations and/or requirements.

## **T. RETENTION OF RECORDS**

1. The Permittee shall retain the storm water quality management program developed in accordance with Part III-V of this permit until at least five years after coverage under this permit terminates.
2. The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of reports required by this permit, and records of all data used to complete the application of this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended at the request of the Director at any time.

## **U. MONITORING METHODS**

1. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
2. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

## **V. ADDITIONAL MONITORING BY THE PERMITTEE**

If the Permittee monitors more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the monitoring report. Such increased monitoring frequency shall also be indicated on the monitoring report.

## **W. DEFINITIONS**

1. Alabama Handbook means the latest edition of the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas, Alabama Soil and Water Conservation Committee (ASWCC) published at the time permit is effective.
2. AWPCA means Code of Alabama 1975, Title 22, the Alabama Water Pollution Control Act, as amended.
3. Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
4. Control Measure as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.
5. CWA or The Act means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et. seq.

6. Department means the Alabama Department of Environmental Management or an authorized representative.
7. Discharge, when used without a qualifier, refers to “discharge of a pollutant” as defined as ADEM Admin. Code r. 335-6-6-.02(m).
8. Green Infrastructure refers to systems and practices that use or mimic natural processes to infiltrate, evapotranspire (the return of water to the atmosphere either through evaporation or by plants), or reuse storm water or runoff on the site where it is generated.
9. Hydrology refers to the physical characteristics of storm water discharge, including the magnitude, duration, frequency, and timing of discharge.
10. Illicit Connection means any man-made conveyance connecting an illicit discharge directly to municipal separate storm sewer.
11. Illicit Discharge is defined at 40 CFR Part 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities.
12. Indian Country, as defined in 18 USC 1151, means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.
13. Infiltration means water other than wastewater that enters a sewer system, including foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
14. Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.
15. Large municipal separate storm sewer system means all municipal separate storm sewers that are either:
  - a. Located in an incorporated place (city) with a population of 250,000 or more as determined by the latest decennial census; or
  - b. Located in counties (these counties are listed in Appendix H of 40 CFR Part 122, except municipal storm sewers that are located in the incorporated places, townships or towns within such counties; or
  - c. Owned or operated by a municipality other than those described in Part VII.W.15.a. or b. and that are designated by the Director as part of the large or medium municipal separate storm sewer system; or
  - d. The Director may designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in Part VII.W.15.a., b. or c.).
16. Low Impact Development (LID) is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product.
17. Medium municipal separate storm sewer system means all municipal separate storm sewers that are either:
  - a. Located in an incorporated place (city) with a population of 100,000 or more but less than 250,000 as determined by the latest decennial census; or

- b. Located in counties (these counties are listed in Appendix I of 40 CFR Part 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
  - c. Owned or operated by a municipality other than those described in Parts VII.W.17.a. and b. and that are designated by the Director as part of the large or medium municipal separate storm sewer system; or
  - d. The Director may designate as a medium municipal separate storm sewer system, municipal storm sewers located within the boundaries of a region defined by a stormwater management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems as described in Parts VII.W.17.a., b. or c.
18. MEP is an acronym for “Maximum Extent Practicable,” the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA Section 402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR Part 122.34.
19. MS4 is an acronym for “Municipal Separate Storm Sewer System” and is used to refer to either a large, medium, or small municipal separate storm sewer system. The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities.
20. Municipal Separate Storm System is defined at 40 CFR Part 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined in ADEM Admin. Code r. 335-6-6-.02(nn).
21. NOI is an acronym for “Notice of Intent” to be covered by this permit and is the mechanism used to “register” for coverage under a general permit.
22. Permittee means each individual co-applicant for an NPDES permit who is only responsible for permit conditions relating to the discharge that they own or operate.
23. Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.
24. Priority construction site means any qualifying construction site in an area where the MS4 discharges to a waterbody which is listed on the most recently approved 303(d) list of impaired waters for turbidity, siltation, or sedimentation, any waterbody for which a TMDL has been finalized or approved by EPA for turbidity, siltation, or sedimentation, and any waterbody assigned specific water quality criteria, such as Outstanding Alabama Water use classification, in accordance with ADEM Admin. Code r. 335-6-10-.09 and any waterbody assigned a special designation in accordance with ADEM Admin. Code r. 335-6-10-.10.
25. Qualifying Construction Site means any construction activity that results in a total land disturbance of one or more acres and activities that disturb less than one acre but are part of a larger common plan of development or sale that would disturb one or more acres. Qualifying construction sites do not include land disturbance conducted by entities under the jurisdiction and supervision of the Alabama Public Service Commission.
26. Qualifying New Development and Redevelopment means any site that results from the disturbance of one acre or more of land or the disturbance of less than one acre of land if part of a larger common plan of development or sale that is greater than one acre. Qualifying new development and redevelopment does



not include land disturbances conducted by entities under the jurisdiction and supervision of the Alabama Public Service Commission.

27. Small municipal separate storm sewer system is defined at 40 CFR Part 122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to water of the United States, but is not defined as "large" or "medium" municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.
28. Storm water is defined at 40 CFR Part 122.26(b) (13) and means storm water runoff, snow melt runoff, and surface runoff and drainage.
29. Storm Water Management Program (SWMP) refers to a comprehensive program to manage the quality of storm water discharged from the municipal separate storm sewer system.
30. SWMP is an acronym for "Storm Water Management Program."
31. Total Maximum Daily Load (TMDL) means the calculated maximum permissible pollutant loading to a waterbody at which water quality standards can be maintained. The sum of wasteload allocations (WLAs) and load allocations (LAs) for any given pollutant.
32. You and Your as used in this permit is intended to refer to the Permittee, the operator, or the discharger as the context indicates and that party's responsibilities (e.g., the city, the country, the flood control district, the U.S. Air Force, etc.).

## Chapter 29½ - STORMWATER MANAGEMENT<sup>[1]</sup>

Footnotes:

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**Editor's note**— Ord. No. 14-O-17, § 1, adopted July 14, 2014, amended the title of Ch. 29½.

## ARTICLE I. - STORMWATER MANAGEMENT REGULATION<sup>[2]</sup>

Footnotes:

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**Editor's note**— Ord. No. 14-O-17, § 1, adopted July 14, 2014, added the designation of "Article I" to §§ 29½.1—29½.11.

### Sec. 29½.1. - General provisions.

(1) *Purpose.* It is the purpose of this chapter to:

- (a) Protect, maintain, and enhance the environment of the city and the public health, safety and the general welfare of the citizens of the city, by controlling discharges of pollutants to the city's stormwater system and to maintain and improve the quality of the receiving waters into which the stormwater outfalls flow, including, without limitation, lakes, rivers, streams, ponds, wetlands, and groundwater of the city.
- (b) Enable the city to comply with the National Pollution Discharge Elimination System (NPDES) permit and applicable regulations, 40 CFR § 122.26, for stormwater discharges.
- (c) Allow the city to exercise the powers granted in Code of Ala. 1975, §§ 11-89C-1 et seq., pursuant to Act No. 97-931.

(2) *Administering entity.* The departments and engineering and public works of the city shall administer the provisions of this chapter.

(Ord. No. 08-O-1, § 1, 1-22-2008)

### Sec. 29½.2. - Definitions.

For the purpose of this chapter, the following definitions shall apply. Words used in the singular shall include the plural, and the plural shall include the singular. Words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined in this section shall be construed to have the meaning given by common and ordinary use.

*As built plans* means drawings depicting conditions as they were actually constructed.

*Best management practices* or *BMPs* are physical, structural, and/or managerial practices that, when used singly or in combination, prevent or reduce pollution of water, that have been approved by the city, and that have been incorporated by reference into this chapter as if fully set out therein.

*Channel* means a natural or artificial watercourse with a definite bed and banks that conducts flowing water continuously or periodically.

*Community water* means any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wetlands, wells and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the city.

*Contaminant* means any physical, chemical, biological, or radiological substance or matter in water.

*Design storm event* means a hypothetical storm event, of a given frequency interval and duration, used in the analysis and design of a stormwater facility.

*Discharge* means dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the municipal separate storm sewer system.

*Easement* means an acquired privilege or right of use or enjoyment that a person, party, firm, corporation, city or other legal entity has in the land of another.

*Erosion* means the removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by anthropogenic activities or effects.

*Erosion and sediment control plan* means a written plan (including drawings or other graphic representations) that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

*Hot spot (priority area)* means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

*Illicit connection* means illegal and/or unauthorized connections to the municipal separate stormwater system whether or not such connections result in discharges into that system.

*Illicit discharge* means any discharge to the municipal separate storm sewer system that is not composed entirely of stormwater and not specifically exempted under.

*Land-disturbing activity* means any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) and/or the existing soil topography on property. Land-disturbing activities include, but are not limited to, development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, and excavation.

*Maintenance* means any activity that is necessary to keep a stormwater facility in good working order so as to function as designed. Maintenance shall include complete reconstruction of a stormwater facility if reconstruction is needed in order to restore the facility to its original operational design parameters. Maintenance shall also include the correction of any problem on the site property that may directly impair the functions of the stormwater facility.

*Maintenance agreement* means a document recorded in the land records that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

*Municipal separate storm sewer system (MS4) (Municipal separate stormwater system)* means the conveyances owned or operated by the city for the collection and transportation of stormwater, including the roads and streets and their drainage systems, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.

*National Pollutant Discharge Elimination System permit or NPDES permit* means a permit issued pursuant to 33 U.S. Code §1342.

*Offsite facility* means a structural BMP located outside the subject property boundary described in the permit application for land development activity.

*Onsite facility* means a structural BMP located within the subject property boundary described in the permit application for land development activity.

*Peak flow* means the maximum instantaneous rate of flow of water at a particular point resulting from a storm event.

*Person* means any and all persons, natural or artificial, including any individual, firm or association and any municipal or private corporation organized or existing under the laws of this or any other state or country.

*Priority area* means a hot spot.

*Runoff* means that portion of the precipitation on a drainage area that is discharged from the area into the municipal separate stormwater system.

*Sediment* means solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

*Sedimentation* means soil particles suspended in stormwater that can settle in stream beds and disrupt the natural flow of the stream.

*Soils report* means a study of soils on a subject property with the primary purpose of characterizing and describing the soils. The soils report shall be prepared by a qualified soils engineer, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees.

*Stabilization* means providing adequate measures, vegetative and/or structural, that will prevent erosion from occurring.

*Stormwater* means stormwater runoff, snow melt runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration and drainage.

*Stormwater management* means the programs to maintain quality and quantity of stormwater runoff to predevelopment levels.

*Stormwater management facilities* means the drainage structures, conduits, ditches, combined sewers, sewers, and all device appurtenances by means of which stormwater is collected, transported, pumped, treated or disposed of.

*Stormwater management plan* means the set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, BMPs, concepts and techniques intended to maintain or restore quality and quantity of stormwater runoff to predevelopment levels.

*Stormwater runoff* means flow on the surface of the ground, resulting from precipitation.

*Structural BMPs* means devices that are constructed to provide control of stormwater runoff.

*Surface water* means and includes waters upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other water courses, lakes and reservoirs.

*Watercourse* means a permanent or intermittent stream or other body of water, either natural or manmade, which gathers or carries surface water.

*Watershed* means all the land area that contributes runoff to a particular point along a waterway.

(Ord. No. 08-O-1, § 1, 1-22-2008)

Sec. 29½.3. - Land disturbance permits.

- (1) *When required.* A land disturbance permit is required for all land disturbing activities with a total land disturbance of greater than or equal to one (1) acre and activities that disturb less than one (1) acre, but are part of a larger common plan of development or sale that would disturb one (1) acre or more. A land disturbance permit is also required for all land disturbance activity, regardless of the size of the

area disturbed, which occurs within the CBD-1 zone or in an area of special flood hazard as defined in section 11½ of this Code.

- (2) *Building permit.* No building permit shall be issued until the applicant has obtained a land disturbance permit where the same is required by this chapter.
- (3) *Exemptions.* The following activities are exempt from the permit requirement:
  - (a) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
  - (b) Existing nursery and agricultural operations conducted as a permitted main or accessory use.
  - (c) Any logging or agricultural activity that is consistent with an approved farm conservation plan or a timber management plan prepared or approved by the Environmental Protection Agency or the state department of environmental management.
  - (d) Additions or modifications to existing single family structures.
- (4) *Application for a land disturbance permit.*
  - (a) Each application shall include the following:
    1. Name of applicant;
    2. Business or residence address of applicant;
    3. Name, address and telephone number of the owner of the property of record in the office of the assessor of property;
    4. Address and legal description of subject property including the tax reference number and parcel number of the subject property;
    5. Name, address and telephone number of the contractor and any subcontractor(s) who shall perform the land disturbing activity and who shall implement the erosion and sediment control plan;
    6. A statement indicating the nature, extent and purpose of the land disturbing activity including the size of the area for which the permit shall be applicable and a schedule for the starting and completion dates of the land disturbing activity.
    7. Where the property includes a sinkhole, the applicant shall obtain from the state department of environmental management appropriate permits.
    8. The applicant shall obtain from any other state or federal agency any other appropriate environmental permits that pertain to the property. However, the inclusion of those permits in the application shall not foreclose the city from imposing additional development requirements and conditions, commensurate with this chapter, on the development of property covered by those permits.
  - (b) Each application shall be accompanied by:
    1. A sediment and erosion control plan;
    2. A stormwater management plan;
    3. Each application for a land disturbance permit shall be accompanied by payment of land disturbance permit of twenty-five dollars (\$25.00) and such other stormwater management fees as may be set by resolution.
- (5) *Review and approval of application.*
  - (a) The city will review each application for a land disturbance permit to determine its conformance with the provisions of this chapter. Within thirty (30) days after receiving an application, the city shall provide one (1) of the following responses in writing:

1. Approval of the permit application;
  2. Approval of the permit application, subject to such reasonable conditions as may be necessary to secure substantially the objectives of this chapter, and issue the permit subject to these conditions; or
  3. Denial of the permit application, indicating the reason(s) for the denial.
- (b) If the city has granted conditional approval of the permit, the applicant shall submit a revised plan that conforms to the conditions established by the city. However, the applicant shall be allowed to proceed with his land disturbing activity so long as it conforms to conditions established by the city.
- (c) No development plans will be released until the land disturbance permit has been approved.
- (6) *Permit duration.* Every land disturbance permit shall expire and become null and void if substantial work authorized by such permit has not commenced within one hundred eighty (180) calendar days of issuance, or is not complete within eighteen (18) months from the date of the commencement of construction.
- (7) *Notice of construction.* The applicant must notify the city ten (10) working days in advance of the commencement of construction. Regular monthly inspections of the stormwater management system construction shall be conducted by a QCI (qualified credentialed inspector) provided by the contractor. Erosion control measures shall be inspected according to program requirements after any rainfall event in excess of three-quarters ( $\frac{3}{4}$ ) of an inch during a twenty-four-hour period. All inspections shall be documented and written reports prepared that contain the following information:
1. The date and location of the inspection;
  2. Whether construction is in compliance with the approved stormwater management plan;
  3. Variations from the approved construction specifications;
  4. Any violations that exist.
- (8) *Performance bonds.*
- (a) The city may, at its discretion, require the submittal of a performance security or performance bond prior to issuance of a permit in order to ensure that the stormwater practices are installed by the permit holder as required by the approved stormwater management plan. The amount of the installation performance security or performance bond shall be the total estimated construction cost of the structural BMPs approved under the permit plus any reasonably foreseeable additional related costs, e.g., for damages or enforcement. The performance security shall contain forfeiture provisions for failure to complete work specified in the stormwater management plan. The applicant shall provide an itemized construction cost estimate complete with unit prices which shall be subject to acceptance, amendment or rejection by the city. Alternatively the city shall have the right to calculate the cost of construction cost estimates.
- (b) The performance security or performance bond shall be released in full only upon submission of as-built plans and written certification by a registered professional engineer licensed to practice in Alabama that the structural BMP has been installed in accordance with the approved plan and other applicable provisions of this chapter. The city will make a final inspection of the structural BMP to ensure that it is in compliance with the approved plan and the provisions of this chapter. Provisions for a partial pro-rata release of the performance security or performance bond based on the completion of various development stages can be made at the discretion of the city.

(Ord. No. 08-O-1, § 1, 1-22-2008; Ord. No. 15-O-1, § 1, 2-16-2015)

Sec. 29½.4. - Waivers.

- (1) *General.* Every applicant shall provide for stormwater management as required by this chapter, unless a written request is filed to waive this requirement. Requests to waive the stormwater management plan requirements shall be submitted to the city for approval.
- (2) *Conditions for waiver.* The minimum requirements for stormwater management may be waived in whole or in part upon written request of the applicant, provided that at least one (1) of the following conditions applies:
  - (a) It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this chapter.
  - (b) Alternative minimum requirements for onsite management of stormwater discharges have been established in a stormwater management plan that has been approved by the city.
  - (c) Provisions are made to manage stormwater by an offsite facility. The offsite facility must be in place and designed to provide the level of stormwater control that is equal to or greater than that which would be afforded by onsite practices. Further, the facility must be operated and maintained by an entity that is legally obligated to continue the operation and maintenance of the facility.
- (3) *Downstream damage, etc. prohibited.* In order to receive a waiver, the applicant must demonstrate to the satisfaction of the city that the waiver will not lead to any of the following conditions downstream:
  - (a) Deterioration of existing culverts, bridges, dams, and other structures;
  - (b) Degradation of biological functions or habitat;
  - (c) Accelerated stream bank or streambed erosion or siltation;
  - (d) Increased threat of flood damage to public health, life or property.
- (4) *Land disturbance permit not to be issued where waiver requested.* No land disturbance permit shall be issued where a waiver has been requested until the waiver is granted. If no waiver is granted, the plans must be resubmitted with a stormwater management plan.

(Ord. No. 08-O-1, § 1, 1-22-2008)

Sec. 29½.5. - Stormwater system design and management standards.

- (1) *Stormwater design or BMP manual.*
  - (a) *Adoption.* The city adopts as its stormwater design and best management practices (BMP) manual the 2003 Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas, prepared by the state department of environmental management. The handbook is incorporated by reference in this chapter as if fully set out herein.
  - (b) This manual includes a list of acceptable BMPs including the specific design performance criteria and operation and maintenance requirements for each stormwater practice. The manual may be updated and expanded from time to time, at the discretion of the city council, upon the recommendation of the chief building official, based on improvements in engineering, science, monitoring and local maintenance experience. Stormwater facilities that are designed, constructed and maintained in accordance with these BMP criteria will be presumed to meet the minimum water quality performance standards.
- (2) *General performance criteria for stormwater management.* Unless granted a waiver or judged by the city to be exempt, the following performance criteria shall be addressed for stormwater management at all sites:
  - (a) All site designs shall control the peak flow rates of stormwater discharge associated with design storms of two-year, five-year, ten-year, twenty-five-year, fifty-year and one hundred-year intensity and reduce the generation of post construction stormwater runoff to preconstruction levels. These

practices should seek to utilize pervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.

- (b) To protect stream channels from degradation, specific channel protection criteria shall be provided as prescribed in the BMP manual.
  - (c) Stormwater discharges to critical areas with sensitive resources (i.e., cold water fisheries, shellfish beds, swimming beaches, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.
  - (d) Stormwater discharges from hot spots may require the application of specific structural BMPs and pollution prevention practices.
  - (e) Prior to or during the site design process, applicants for land disturbance permits shall consult with the city to determine if they are subject to additional stormwater design requirements.
  - (f) The calculations for determining peak flows as found in the BMP manual shall be used for sizing all stormwater facilities.
- (3) *Minimum control requirements.*
- (a) Stormwater designs shall meet the multi-stage storm frequency storage requirements as identified in the BMP manual.
  - (b) If hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the city may impose any and all additional requirements deemed necessary to control the volume, timing, and rate of runoff.
- (4) *Stormwater management plan requirements.* The stormwater management plan shall include sufficient information to allow the city to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. To accomplish this goal the stormwater management plan shall include the following:
- (a) *Topographic base map.* A scale no greater than one (1) inch equals one hundred (100) feet topographic base map of the site which extends a minimum of fifty (50) feet beyond the limits of the proposed development and indicates:
    - 1. Existing surface water drainage including streams, ponds, culverts, ditches, sink holes, wetlands; and the type, size, elevation, etc., of nearest upstream and downstream drainage structures;
    - 2. Current land use including all existing structures, locations of utilities, roads, and easements;
    - 3. All other existing significant natural and artificial features;
    - 4. Proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading;
    - 5. Proposed structural BMPs;
    - 6. A written description of the site plan and justification of proposed changes in natural conditions may also be required.
  - (b) *Calculations.* Hydrologic and hydraulic design calculations for the predevelopment and postdevelopment conditions for the design storms specified in the BMP manual. These calculations must show that the proposed stormwater management measures are capable of controlling runoff from the site in compliance with this chapter and the guidelines of the BMP manual. Such calculations shall include:



1. A description of the design storm frequency, duration, and intensity where applicable;
  2. Time of concentration;
  3. Soil curve numbers or runoff coefficients including assumed soil moisture conditions;
  4. Peak runoff rates and total runoff volumes for each watershed area;
  5. Infiltration rates, where applicable;
  6. Culvert, stormwater sewer, ditch and/or other stormwater conveyance capacities;
  7. Flow velocities;
  8. Data on the increase in rate and volume of runoff for the design storms referenced in the BMP manual; and
  9. Documentation of sources for all computation methods and field test results.
- (c) *Soils information.* If a stormwater management control measure depends on the hydrologic properties of soils (e.g., infiltration basins), then a soils report shall be submitted. The soils report shall be based on onsite boring logs or soil pit profiles and soil survey reports. The number and location of required soil borings or soil pits shall be determined based on what is needed to determine the suitability and distribution of soil types present at the location of the control measure.
- (d) *Maintenance and repair plan.* The design and planning of all stormwater management facilities shall include detailed maintenance and repair procedures to ensure their continued performance. These plans will identify the parts or components of a stormwater management facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan. A permanent elevation benchmark shall be identified in the plans to assist in the periodic inspection of the facility.
- (e) *Landscaping plan.* The applicant must present a detailed plan for management of vegetation at the site after construction is finished, including who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved. Where it is required by the BMP, this plan must be prepared by a registered landscape architect licensed in Alabama.
- (f) *Maintenance easements.* The applicant must ensure access to the site for the purpose of inspection and repair by securing all the maintenance easements needed. These easements must be binding on the current property owner and all subsequent owners of the property and must be properly recorded in the land record.
- (g) *Maintenance agreement.*
1. The owner of property to be served by an onsite stormwater management facility must execute an inspection and maintenance agreement that shall operate as a deed restriction binding on the current property owner and all subsequent property owners.
  2. The maintenance agreement shall:
    - a. Assign responsibility for the maintenance and repair of the stormwater facility to the owner of the property upon which the facility is located and be recorded as such on the plat for the property by appropriate notation.
    - b. Provide for a periodic inspection by the property owner for the purpose of documenting maintenance and repair needs and ensure compliance with the purpose and requirements of this chapter. The property owner will arrange for this inspection to be conducted by a registered professional engineer licensed to practice in Alabama who will submit a sealed report of the inspection to the city. It shall also grant permission to the city to enter the property at reasonable times and to inspect the stormwater facility to ensure that it is being properly maintained.

- c. Provide that the minimum maintenance and repair needs include, but are not limited to:
    - i. The removal of silt, litter and other debris, the cutting of grass, grass cuttings and vegetation removal; and
    - ii. The replacement of landscape vegetation, in detention and retention basins, and inlets and drainage pipes and any other stormwater facilities.

It shall also provide that the property owner shall be responsible for additional maintenance and repair needs consistent with the needs and standards outlined in the BMP manual.
  - d. Provide that maintenance needs must be addressed in a timely manner, on a schedule to be determined by the city.
  - e. Provide that if the property is not maintained or repaired within the prescribed schedule, the city shall perform the maintenance and repair at its expense, and bill the same to the property owner. The maintenance agreement shall also provide that the city's cost of performing the maintenance shall be a lien against the property.
3. The city shall have the discretion to accept the dedication of any existing or future stormwater management facility, provided such facility meets the requirements of this chapter, and includes adequate and perpetual access and sufficient areas, by easement or otherwise, for inspection and regular maintenance. Any stormwater facility accepted by the city must also meet the city's construction standards and any other standards and specifications that apply to the particular stormwater facility in question.
- (h) *Sediment and erosion control plans.* The applicant must prepare a sediment and erosion control plan for all construction activities.
- (5) *Sediment and erosion control plan requirements.* The sediment and erosion control plan shall accurately describe the potential for soil erosion and sedimentation problems resulting from land disturbing activity and shall explain and illustrate the measures that are to be taken to control these problems. The length and complexity of the plan is to be commensurate with the size of the project, severity of the site condition, and potential for offsite damage. The plan shall be sealed by a registered professional engineer licensed in the state. The plan shall also conform to the requirements found in the BMP manual, and shall include at least the following:
- (a) *Project description.* Briefly describe the intended project and proposed land disturbing activity including number of units and structures to be constructed and infrastructure required.
  - (b) A topographic map with contour intervals of two (2) feet or less showing present conditions and proposed contours resulting from land disturbing activity.
  - (c) All existing drainage ways, including intermittent and wet-weather. Include any designated floodways or flood plains.
  - (d) A general description of existing land cover. Individual trees and shrubs do not need to be identified.
  - (e) Stands of existing trees as they are to be preserved upon project completion, specifying their general location on the property. Differentiation shall be made between existing trees to be preserved, trees to be removed and proposed planted trees. Tree protection measures must be identified, and the diameter of the area involved must also be identified on the plan and shown to scale. Information shall be supplied concerning the proposed destruction of exceptional and historic trees in setbacks and buffer strips, where they exist. Complete landscape plans may be submitted separately. The plan must include the sequence of implementation for tree protection measures.
  - (f) Approximate limits of proposed clearing, grading and filling.
  - (g) Approximate flows of existing stormwater leaving any portion of the site.

- (h) A general description of existing soil types and characteristics and any anticipated soil erosion and sedimentation problems resulting from existing characteristics.
- (i) Location, size and layout of proposed stormwater and sedimentation control improvements.
- (j) Proposed drainage network.
- (k) Proposed drain tile or waterway sizes.
- (l) Approximate flows leaving site after construction and incorporating water run-off mitigation measures. The evaluation must include projected effects on property adjoining the site and on existing drainage facilities and systems. The plan must address the adequacy of outfalls from the development: when water is concentrated, what is the capacity of waterways, if any, accepting stormwater offsite; and what measures, including infiltration, sheeting into buffers, etc., are going to be used to prevent the scouring of waterways and drainage areas offsite, etc.
- (m) The projected sequence of work represented by the grading, drainage and sedimentation and erosion control plans as related to other major items of construction, beginning with the initiation of excavation and including the construction of any sediment basins or retention facilities or any other structural BMPs.
- (n) Specific remediation measures to prevent erosion and sedimentation run-off. Plans shall include detailed drawings of all control measures used; stabilization measures including vegetation and nonvegetation measures, both temporary and permanent, will be detailed. Detailed construction notes and a maintenance schedule shall be included for all control measures in the plan.
- (o) Specific details for the construction of rock pads, wash down pads, and settling basins for controlling erosion; road access points; eliminating or keeping soil, sediment, and debris on streets and public ways at a level acceptable to the city. Soil, sediment, and debris brought onto streets and public ways must be removed by the end of the workday by machine, broom or shovel to the satisfaction of the city. Failure to remove the sediment, soil or debris shall be deemed a violation of this chapter.
- (p) Proposed structures; location (to the extent possible) and identification of any proposed additional buildings, structures or development on the site.
- (q) A description of onsite measures to be taken to recharge surface water into the ground water system through infiltration.
- (r) A description of onsite measures to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site.

(Ord. No. 08-O-1, § 1, 1-22-2008; Ord. No. 15-O-1, § 1, 2-16-2015)

Sec. 29½.6. - Post construction.

- (1) *As built plans.* All applicants are required to submit actual as built plans for any structures located onsite after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be sealed by a registered professional engineer licensed to practice in the state. A final inspection by the city is required before any performance security or performance bond will be released. The city shall have the discretion to adopt provisions for a partial pro-rata release of the performance security or performance bond on the completion of various stages of development. In addition, occupation permits shall not be granted until corrections to all BMPs have been made and accepted by the city.
- (2) *Landscaping and stabilization requirements.*
  - (a) Any area of land from which the natural vegetative cover has been either partially or wholly cleared by present or past development activities shall be revegetated according to a schedule approved by the city. The following criteria shall apply to revegetation efforts:

1. All sites shall have at least ten (10) percent "green" vegetated areas.
  2. Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety (90) percent of the seeded area.
  3. Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.
  4. Any area of revegetation must exhibit survival of a minimum of seventy-five (75) percent of the cover crop throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy-five (75) percent survival for one (1) year is achieved.
- (b) In addition to the above requirements, a landscaping plan must be submitted with the final design describing the vegetative stabilization and management techniques to be used at a site after construction is completed. This plan will explain not only how the site will be stabilized after construction, but who will be responsible for the maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved.
- (3) *Inspection of stormwater management facilities.* Periodic inspections of facilities shall be performed.
  - (4) *Records of installation and maintenance activities.* Parties responsible for the operation and maintenance of a stormwater management facility shall make records of the installation of the stormwater facility, and of all maintenance and repairs to the facility, and shall retain the records for at least thirteen (13) years after substantial completion of the stormwater facility. These records shall be made available to the city during inspection of the facility and at other reasonable times upon request.
  - (5) *Failure to meet or maintain design or maintenance standards.* If a responsible party fails or refuses to meet the design or maintenance standards required for stormwater facilities under this chapter, the city, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, the city shall notify in writing the party responsible for maintenance of the stormwater management facility. Upon receipt of that notice, the responsible person shall have fourteen (14) calendar days, or such additional time as the city engineer shall determine to be reasonably necessary to complete the action, to effect maintenance and repair of the facility in an approved manner. In the event that corrective action is not undertaken within that time, the city may take necessary corrective action. The cost of any action by the city under this section shall be charged to the responsible party.

(Ord. No. 08-O-1, § 1, 1-22-2008)

Sec. 29½.7. - Existing locations and developments.

- (1) *Requirements for all existing locations and developments.* The following requirements shall apply to all locations and development at which land disturbing activities have occurred subsequent to the enactment of this chapter:
  - (a) Denuded areas must be vegetated or covered under the standards and guidelines specified in the BMP manual and on a schedule acceptable to the city.
  - (b) Cuts and slopes must be properly covered with appropriate vegetation and/or retaining walls constructed.
  - (c) Drainage ways shall be properly covered in vegetation or secured with rip-rap, channel lining, etc., to prevent erosion.
  - (d) Trash, junk, rubbish, etc. shall be cleared from drainage ways.

(e) Stormwater runoff shall be controlled to prevent pollution of local waters. Current control measures may include, but are not limited to, the following:

1. *Ponds:*

- a. Detention pond.
- b. Extended detention pond.
- c. Wet pond.
- d. Alternative storage measures.

2. *Constructed wetlands.*

3. *Infiltration systems:*

- a. Infiltration/percolation trench.
- b. Infiltration basin.
- c. Drainage (recharge) well.
- d. Porous pavement.

4. *Filtering systems:*

- a. Bio-retention area/rain garden.
- b. Catch basin inserts/media filter.
- c. Sand filter.
- d. Filter/absorption bed.
- e. Filter and buffer strips.

5. *Open channel:*

- a. Swale.

(2) *Requirements for existing problem locations.* When the city becomes aware of a problem location, the city shall in writing notify the owners of existing locations and developments of specific drainage, erosion or sediment problem affecting such locations and developments, and the action required to correct those problems. The notice shall also specify a reasonable time for compliance.

(3) *Inspection of existing facilities.* The city may, to the extent authorized by state and federal law, establish inspection programs to verify that all stormwater management facilities, including those built before as well as after the adoption of this chapter, are functioning within design limits. These inspection programs may be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of the city's NPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other BMPs.

(4) *Correction of problems subject to appeal.* Corrective measures imposed by the city under this section are subject to appeal.

(Ord. No. 08-O-1, § 1, 1-22-2008)

Sec. 29½.8. - Illicit discharges.

- (1) *Scope*. This section shall apply to all water generated on developed or undeveloped land entering the city's separate storm sewer system.
- (2) *Prohibition of illicit discharges*. No person shall introduce or cause to be introduced into the municipal separate storm sewer system any discharge that is not composed entirely of stormwater. The commencement, conduct or continuance of any nonstormwater discharge to the municipal separate storm sewer system is prohibited except as described as follows:
  - (a) Uncontaminated discharges from the following sources:
    1. Water line flushing or other potable water sources;
    2. Landscape irrigation or lawn watering with potable water;
    3. Diverted stream flows;
    4. Rising ground water;
    5. Groundwater infiltration to storm drains;
    6. Pumped groundwater;
    7. Foundation or footing drains;
    8. Crawl space pumps;
    9. Air conditioning condensation;
    10. Springs;
    11. Noncommercial washing of vehicles;
    12. Natural riparian habitat or wetland flows;
    13. Swimming pools (if dechlorinated—typically less than one PPM chlorine);
    14. Fire fighting activities; and
    15. Any other uncontaminated water source.
  - (b) Discharges specified in writing by the city as being necessary to protect public health and safety.
  - (c) Dye testing is an allowable discharge if the city has so specified in writing.
- (3) *Prohibition of illicit connections*.
  - (a) The construction, use, maintenance or continued existence of illicit connections to the separate municipal storm sewer system is prohibited.
  - (b) 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.
- (4) *Reduction of stormwater pollutants by the use of best management practices*. Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at the person's expense, the BMPs necessary to prevent the further discharge of pollutants to the municipal separate storm sewer system. 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.
- (5) *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 in, or may result in, illicit discharges or pollutants discharging into stormwater, the municipal separate storm sewer system, the 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 the person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, the person shall notify the city in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the city within three (3) business days of the telephone 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 onsite written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least thirteen (13) years after the release.

(Ord. No. 08-O-1, § 1, 1-22-2008)

Sec. 29½.9. - Enforcement.

- (1) *Enforcement authority.* The departments of planning and engineering of the city shall have the authority to issue notices of violation and citations and to designate those persons who have enforcement authority.
- (2) *Notification of violation.*
  - (a) *Written notice.* Whenever an authorized employee of the city finds that any permittee or any other person discharging stormwater has violated or is violating this chapter or a permit or order issued hereunder, the employee may serve upon such person written notice of the violation. Within ten (10) days of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the departments of planning and engineering. Submission of this plan in no way relieves the discharger of liability for any violations occurring before or after receipt of the notice of violation.
  - (b) *Consent orders.* The authorized employees of the city are empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the person responsible for the noncompliance. Such orders will include specific action to be taken by the person to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to paragraphs (d) and (e) below.
  - (c) *Show cause hearing.* An authorized employee of the city may order any person who violates this chapter or permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the person specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the violator show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing.
  - (d) *Compliance order.* When an authorized employee of the city finds that any person has violated or continues to violate this chapter or a permit or order issued thereunder, he may issue an order to the violator directing that, following a specific time period, adequate structures, devices, be installed or procedures implemented and properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the construction of appropriate structures, installation of devices, self-monitoring, and management practices.
  - (e) *Cease and desist orders.* When an authorized employee of the city finds that any person has violated or continues to violate this chapter or any permit or order issued hereunder, the employee may issue an order to cease and desist all such violations and direct those persons in noncompliance to:
    1. Comply forthwith; or

2. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.
3. *Conflicting standards.* Whenever there is a conflict between any standard contained in this chapter and in the BMP manual adopted by the city under this chapter, the strictest standard shall prevail.

(Ord. No. 08-O-1, § 1, 1-22-2008)

Sec. 29½.10. - Penalties.

- (1) *Violations.* Any person who shall commit any act declared unlawful under this chapter, who violates any provision of this chapter, who violates the provisions of any permit issued pursuant to this chapter, or who fails or refuses to comply with any lawful communication or notice to abate or take corrective action by the city, shall be guilty of a criminal offense.
- (2) *Penalties.* Under the authority provided in Code of Ala., § 11-45-9, the city declares that any person violating the provisions of this chapter may be fined not less than fifty dollars (\$50.00) and not more than five hundred dollars (\$500.00) per day for each day of violation. Each day of violation shall constitute a separate violation.
- (3) *Recovery of damages and costs.* The city may recover:
  - (a) All damages proximately caused by the violator to the city, which may include any reasonable expenses incurred in investigating violations of, and enforcing compliance with, this chapter, or any other actual damages caused by the violation; and
  - (b) The costs of the city's maintenance of stormwater facilities when the user of such facilities fails to maintain them as required by this chapter.
- (4) *Other remedies.* The city may bring legal action to enjoin the continuing violation of this chapter. The existence of any other remedy, at law or equity, shall be no defense to any such actions.
- (5) *Remedies cumulative.* The remedies set forth in this section shall be cumulative, not exclusive. It shall not be a defense to any action, civil or criminal, that one (1) or more of the remedies set forth herein has been sought or granted.

(Ord. No. 08-O-1, § 1, 1-22-2008)

Sec. 29½.11. - Appeals.

Any person aggrieved by the imposition of a civil penalty or damage assessment as provided by this chapter may appeal said penalty or damage assessment to the city council.

- (1) *Appeals to be in writing.* The appeal shall be in writing and filed with the city clerk within fifteen (15) days after the civil penalty and/or damage assessment is served in any manner authorized by law.
- (2) *Public hearing.* Upon receipt of an appeal, the city council shall hold a public hearing within thirty (30) days. Ten-days' prior notice of the time, date, and location of said hearing shall be published in a daily newspaper of general circulation. Ten-days' notice by registered mail shall also be provided to the aggrieved party, such notice to be sent to the address provided by the aggrieved party at the time of appeal. The decision of the city council shall be final.
- (3) *Appealing decisions of the city council.* Any alleged violator may contest a decision of the city council pursuant to the provisions of Alabama law and court rules.



(Ord. No. 08-O-1, § 1, 1-22-2008)

## ARTICLE II. - STORMWATER USER FEE CHARGE

### Sec. 29½.12. - Findings of fact.

In support of establishment of a stormwater user fee charge system, the mayor and city council for the city make the following findings of fact:

- a. The mayor and city council finds and declares that it is in the public interest and the health, safety, and welfare of the citizens of this municipal government to promote effective and efficient compliance with federal and state laws, rules, regulations, and municipal permits relating to stormwater discharges into and from municipal separate storm sewers, and to promote and authorize the discovery, control, and elimination, wherever practicable, of that discharge.
- b. It is the intention of the city by passage of this chapter to implement applicable stormwater laws adopted by the state and the federal government and comply with the same. Failure to implement these laws and effectively manage stormwater runoff may:
  - i. Cause erosion of lands; threaten commercial businesses, residences, and other facilities and properties with water damage; and may environmentally impair the rivers, streams, and other bodies of water within, and downstream of, the city.
  - ii. Adversely affect the operations of the sanitary sewer system operated by the city thereby increasing the likelihood of infiltration and inflow into the sanitary sewer system.
  - iii. Contribute to the potential degradation of the quality of both surface water and groundwater resources.
- c. It is further the intention of the city to adopt policies and procedures pertaining to the city's MS4 permit and to assert the enforcement authority needed in order to satisfy the requirements of stormwater laws, further, to act by resolution or ordinance enforceable in the city's municipal court and by civil procedures in district and circuit courts, including fines, penalties, damages, and injunction as authorized and appropriate.
- d. It is further the intention of the city to establish the financial need to fund the administration, operations, and projects of the stormwater program and the methods to generate and collect the necessary revenue and to utilize the billing, and collection capabilities and the authority of the county tax assessor and tax collector for that purpose.
- e. It is further the intention of the state legislature to limit the jurisdictional scope of the stormwater management program to include only those sites discharging into the MS4 and to limit the substantive scope of the local MS4 permit programs to include only those rules, regulations, and/or aspects that are absolutely required to satisfy the Clean Water Act, as specifically set out in the Code of Federal Regulations.
- f. The purpose of this article is to provide a funding mechanism to aid the city in meeting the financial obligations imposed by the MS4 permit and the required stormwater management plan (SWMP), an unfunded federal mandate, and to limit the expenses of compliance with said permit by setting the strict limitations on the scope of the compliance program to include only those rules, regulations, and/or aspects that are absolutely required to satisfy the Clean Water Act, as specifically set out in the Code of Federal Regulations.
- g. It is further the intention of the city to primarily rely upon ADEM, to the fullest extent allowed by applicable state and federal laws, for the permitting and enforcement of all NPDES sites under the jurisdiction of ADEM rather than subjecting such sites to double regulation.

- h. The city presently owns and operates stormwater management systems and facilities, which have been developed over many years. The future usefulness and operational function of the existing stormwater management systems and facilities owned and operated by the city, and the additions and improvements thereto, rests on the ability of the city to effectively manage, protect, control, regulate, use, and enhance stormwater systems and facilities within the city in concert with the management of other water resources within the city. In order to do so, the city must have both a comprehensive stormwater management program as well as an adequate and stable funding source for implementation of its comprehensive stormwater management program and drainage-related capital improvement needs.
- i. The city is required under federal and state regulations (i.e. the Federal Clean Water Act and the city's MS4 permit) to implement a SWMP to address pollutants which may be discharged from the public MS4 into downstream waterways to the "maximum extent practicable" as required by applicable laws. Therefore, it is appropriate for the city to impose a stormwater user fee charge upon specified, non-exempt properties that may discharge, directly or indirectly, into the public MS4, or receive stormwater services from the city, either directly or indirectly, whether or not the property is private or public in nature.
- j. Given the stormwater management program's needs, goals, priorities and funding strategy identified herein, it is appropriate for the city to authorize the formation of an organizational and accounting entity in the form of a stormwater enterprise fund dedicated specifically to the management, maintenance, protection, control, regulation, and use of stormwater management services, systems and facilities within the city and to assist the city in compliance with applicable state and federal stormwater regulations.
- k. Stormwater management is applicable and needed throughout the incorporated areas of the city. While specific service and facility demands may differ from area to area at any given point in time, a stormwater management system and service area encompassing all lands and water bodies within the incorporated areas of the city is appropriate and in accordance with specific regulatory requirements imposed on the city.
- l. The stormwater management services rendered may differ depending on many factors and considerations, including but not limited to, location, demands and impacts imposed on the stormwater management systems and programs, and risk exposure. It is practical and equitable to allocate the cost of stormwater management to specified, non-exempt properties in general proportion to the demands the properties impose on the city's stormwater management program which results in services being provided to such properties. The fair and equitable apportionment of costs via the user fee charge system detailed in the Act generally correlates to the stormwater management services provided to properties and the runoff demand that those properties impose on the public drainage system and the city's stormwater management program.
- m. The stormwater management needs in the city include, but are not limited to, protection of the public health, safety, and welfare of the community. Provision of stormwater management services renders and/or results in both a service and a benefit to all properties, property owners, businesses, citizens, and residents of the city in a variety of ways even though the benefits may be indirect or immeasurable.
- n. The amount of impervious surface on each property is generally the most important factor influencing stormwater runoff characteristics and these characteristics bear a rational nexus to the cost of the stormwater management services provided by the city to that property. As a result, the amount of impervious surface on each commercial property is therefore the most appropriate parameter for determining the stormwater user fee charge as specified in the Act. Stormwater user fee charges based on the amount of impervious surface present on each property is the most appropriate and equitable means of allocating the cost of stormwater management services throughout the city.
- o. It is imperative that the proceeds from all user fee charges for stormwater management services, systems or facilities, together with any other supplemental revenues raised or otherwise allocated specifically to stormwater management services, systems or facilities, be dedicated solely to

those purposes, and such proceeds of user fee charges and supplemental revenues shall therefore be deposited into the city stormwater enterprise fund and shall remain in that fund and be dispersed only for stormwater management capital, operating and non-operating costs for stormwater management purposes in accordance with applicable laws.

- p. In order to protect the health, safety and welfare of the public, the governing authority of the city hereby exercises its authority to establish stormwater user fee charge rates for the city's use in the implementation of its stormwater management program.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29½.13. - Definitions.

In general conformance with Code of Ala., § 11-89C-2, the following words and phrases shall have the following meanings when used under this article:

- a. *Agricultural land*. Any real property classified or assessed as agricultural or forest land for property tax purposes.
- b. *Class III property*. Per Amendment 325 of Article 217 of Section XI of the Alabama Constitution of 1901, Class III property is defined as all agricultural, forest and single-family, owner-occupied residential property.
- c. *Commercial property*. Any real property that is not residential property, as defined in this section, or has not specifically been exempted from the fee provisions set out in Code of Ala., § 11-89C-9(d)(1).
- d. *Commercial space*. The total area of all impervious surfaces associated with and located on commercial property.
- e. *Developed property*. A parcel of land that has been altered from its natural condition by the acts of man which results in the installation of no less than one thousand (1,000) square feet of impervious surface.
- f. *Governing body*. The governing body of a municipality in the state which is now or may hereafter be specifically designated in 40 C.F.R. Part 122, including, but not limited to, any appendices or revisions promulgated by EPA in conjunction with any expansion of the agency's municipal separate storm sewer system program (e.g. phase III, phase IV, and/or equivalent expansions), or by ADEM pursuant to the authority delegated to it under the Clean Water Act, 33 U.S.C. § 1251 et seq.
- g. *Greenfield*. Any real property not previously developed.
- h. *Historic buildings* (as per Code of Ala., § 40-8-1). Regardless of the use to which such property is put, all buildings or structures (i) determined eligible by the state historic preservation officer for listing on the National Register of Historic Places; or (ii) located in a registered historic district and certified by the United States Secretary of the Interior as being of historic significance to the district.
- i. *Illicit discharge*. Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire-fighting and emergency management activities.
- j. *Impervious surface*. Those areas which prevent or impede the infiltration of stormwater into the soil in the manner in which it entered the soil, in natural conditions, prior to development and causes stormwater runoff to collect, concentrate or flow in a manner materially different from what would occur if the land were in an unaltered natural condition. Common impervious surfaces include, but are not limited to, rooftops, buildings or structures, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, awnings and other fabric or plastic coverings, and other

surfaces which prevent or impede the natural infiltration of rainfall, or stormwater runoff, which existed prior to development.

- k. *Municipal separate storm sewer (MS4)*. A conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains which meets all of the following classifications:
  - i. Owned or operated by the city;
  - ii. Designed or used for collecting or conveying stormwater;
  - iii. Which is not a combined sewer; and
  - iv. Which is not part of a publicly owned treatment works as defined in 40 C.F.R. §122.2.
- l. *Residential property*. Any single-family, owner-occupied residential property, historic buildings, or sites classified or assessed as class III property, pursuant to Section 217 of Article XI of the Constitution of Alabama 1901.
- m. *Rule*. Any public corporation regulation or standard of general applicability that prescribes or recommends law, procedure or policy for its member governing bodies specifically including all pro forma ordinances, regulations, resolutions, rules, procedures or remedies adopted and recommended by a public corporation.
- n. *Stormwater discharge associated with industrial activity*. The discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 C.F.R. Part 122, but shall include discharges from facilities which are included in the categories of industries listed in 40 C.F.R. § 122.26(b)(14)(i) through (xi), inclusive, together with all subsequent categories of industries which may be so designated in 40 C.F.R. § 122.26(b)(14) by EPA.
- o. *Stormwater laws*. Those provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq., together with all other and subsequent applicable federal and state laws, rules, and regulations, as set out in applicable permits, relating specifically to the control discharges to into and from municipal separate storm sewers, but specifically excluding any guidance and/or interpretations of said laws, rules, and/or regulations not promulgated in accordance with the Alabama Administrative Procedure Act or Administrative Procedure Act, 5 U.S.C. §500 et seq. 27 §11-89C-4.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29½.14. - Establishment of stormwater enterprise fund.

- a. There is hereby established the city stormwater management program, which shall be responsible for stormwater management services throughout the incorporated areas of the city, and which shall provide for the management, protection, control, regulation, and use of the city's stormwater management systems and facilities and stormwater management services.
- b. There is hereby established a stormwater enterprise fund in the city budgeting and accounting systems for the purpose of dedicating and protecting all funding applicable to the purposes and responsibilities of the city stormwater management program, including, but not limited to, rates, charges, and fees as may be established by the mayor and city council, and other funds that may be transferred or allocated to the stormwater enterprise fund for the purposes of funding stormwater management services.
- c. All revenues received from the stormwater user fee charge shall be placed in the stormwater enterprise fund in trust and shall be utilized in accordance with applicable provisions as outlined in the city's financial policies. Other forms of revenue and/or financial resources, not accounted for in the stormwater user fee charge revenue, may be allocated by the mayor and city council to provide

supplemental funding to the stormwater management program and for the provision of stormwater management services.

- d. The overall responsibility for the operation, maintenance and regulation of the stormwater management program services performed, owned and operated or maintained by the city, and other related assets, including, but not limited to, properties, other than road rights-of-way, upon which such stormwater management systems and facilities are located, easements, rights-of-entry and access and certain equipment used solely for stormwater management shall rest with the city manager. The city manager is further charged with overall responsibility for the efficient and equitable administration of the stormwater user fee charges authorized by this article, including, but not limited to, the delineation of impervious surfaces and other pertinent factors as may be needed for the fair, reasonable and cost effective calculation, assessment and collection of said fees.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29½.15. - Stormwater management program service area.

- a. There shall be one (1) stormwater management program service area which shall encompass the municipal boundaries of the city. The city has established that all developed parcels within the municipal boundaries receive stormwater management services from the city. Developed parcels within the defined service area will receive a stormwater user fee charge in accordance with applicable provisions of the Act because:
  - (1) They contribute stormwater runoff to the public drainage system;
  - (2) They are directly or indirectly connected to the city's drainage system; and
  - (3) They receive stormwater management services from the city to varying service levels from which they derive some degree of benefit even though the benefit may be indirect or immeasurable.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29½.16. - Stormwater management program scope of responsibility and extent of service.

- a. The stormwater management program shall provide stormwater services for existing and proposed public stormwater management systems and facilities as defined in this article, subject to funding availability and to policy determinations made in the best interest of the public health, welfare and safety and the environment. Additionally, the stormwater management program may accept the responsibility for providing stormwater management services to private stormwater management systems and facilities, acceptance of which conforms to policies established by the mayor and city council, or those persons or entities designated by the mayor and city council to set such policies.
- b. The city owns or has rights established by written agreements which allow it to operate, maintain, improve and access those stormwater management systems and facilities which are located:
  - i. Within public road rights-of-way;
  - ii. On private property but within legally dedicated easements granted to, and accepted by, the city;
  - iii. On private property where the city has been granted, by written agreements, for rights-of-entry, rights-of-access, rights-of-use or other permanent provisions for operation, maintenance, improvement and access to the stormwater management system facilities located thereon;
  - iv. On land dedicated to, and accepted by, the city solely for the operation, maintenance, improvement and access to the stormwater management systems and facilities located thereon;or

- v. On public land which is owned by the city and/or land of another governmental entity upon which the city has agreements providing for the operation, maintenance, improvement and access to the stormwater management systems and facilities located thereon.
- c. Operation, maintenance and/or improvement of stormwater management systems and facilities which are located on private or public property not owned by the city, and for which there has been no written agreement granting easements, rights-of-entry, rights-of-access, rights-of-use or other form of dedication thereof to the city for operation, maintenance, improvement and access of such stormwater management systems and facilities shall be and remain the legal responsibility of the property owner, except as otherwise provided for by the state and federal laws and regulations.
- d. The city may provide stormwater management services to privately owned stormwater management systems and facilities to ascertain that said facilities are functioning as designed and approved. The city may provide for remedial maintenance of said private facilities based upon the severity of stormwater problems and potential hazard to the public health, safety, and welfare and the environment, and in cases where such remedial maintenance is required the city reserves the right to bill the owner or owners of said private facility for the costs of such maintenance.
- e. It is the express intent of this article to protect the public health, safety and welfare of people and property in general, but not to create any special duty or relationship with any individual person, or to any specific property within or outside the municipal boundaries of the city. The city expressly reserves the right to assert all available immunities and defenses in any action seeking to impose monetary damages or equitable remedies upon the city, its elected officials, officers, employees and agents arising out of any alleged failure or breach of duty or relationship.
- f. If any permit, plan approval, inspection or similar act is required by the city as a condition precedent to any activity or change upon property not owned by the city pursuant to this or any other regulatory ordinance, regulation or rule of the city, or under federal or state law, the issuance of such permit, plan approval or inspection shall not be deemed to constitute a warranty, express or implied, nor shall it afford the basis for any action, including any action based on failure to permit, negligent issuance of a permit, negligent plan approval, or negligent maintenance of any permitted stormwater management system or facility not expressly dedicated to and accepted by the city for further maintenance in an action seeking the imposition of money damages or equitable remedies against the city, its council members, the mayor, officers, employees or agents.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29½.17. - Stormwater user fee charge customer classes.

- a. The city shall establish specified customer classes within the service area in accordance with the Act. Publicly owned, developed properties are subject to the user fee charges on the same basis as private properties, unless as otherwise exempted in the Act. The classes will encompass properties as designated by the Act within the city as follows:
  - i. *Exempt class*: The city shall not establish, levy, or impose fees, charges, or assessments from or against entities regulated by the Alabama Public Service Commission, owners of greenfields, and/or owners of agricultural land as per § 11-89C-9(d)(1) of the Act.
  - ii. *Specially-exempt class*: The city shall not establish, levy, or impose fees, charges, or assessments from or against owners of real property who are permanently and totally disabled, who are blind or who are sixty-five (65) years of age or older and who have been exempted from ad valorem taxation under the laws and constitution of the State of Alabama.
  - iii. *Residential class*: The residential class shall be defined as per the definition of residential property provided herein, except that the residential class shall not include agricultural land.
  - iv. *Commercial class*: The commercial class shall be defined as per the definition of commercial property provided herein.

(Ord. No. 14-O-17, § 2, 7-14-2014; Ord. No. 15-O-15, § 1, 11-16-2015)

Sec. 29%.18. - Stormwater user fee charges.

- a. The city shall establish, levy, and impose pursuant to this article, a revenue-raising measure within the jurisdiction, consisting of a system of stormwater user fee charges to comply with applicable stormwater laws. The stormwater user fee charges shall be levied and collected as specified in this article.
- b. It shall be the policy of the city that user fee charges for stormwater management services provided by the city in the designated service area shall be equitably derived through methods which have a demonstrable relationship to the varied demands and impacts imposed on the stormwater management services by individual properties, classes of properties, and/or the level of service rendered by, or resulting from, the provision of stormwater management services by the city.
- c. The basis for calculation of the stormwater user fee charge to developed property within the city is established in this article. The city shall assign or determine the customer class, amount of impervious surfaces and other pertinent factors as may be needed for the fair, reasonable and equitable allocation of the costs to deliver stormwater management services and to calculate the stormwater user fee charges for developed properties in the city.
- d. Stormwater user fee charge rates shall be structured so as to be uniform within the customer class, and the resultant user fee charges shall bear a reasonable connection, or rational nexus, to the cost of providing stormwater management services.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29%.19. - Stormwater user fee charge rates.

- a. The city shall impose a stormwater user fee on developed properties within the service area in a fair and equitable manner. The city shall apportion the cost of delivering stormwater services to developed properties based on the demand the property places on the city's stormwater management program, the stormwater services provided by the city to that property and the benefits derived.
- b. Gravel and compacted soil associated with driveways, parking areas, and other areas that consist of these type surface (or near surface) conditions on developed property will be designated as impervious surface and included in the customer's user fee charge calculation because of the hydrologic response characteristics of these materials.
- c. The periodic stormwater user fee charges imposed on specified, non-exempt properties shall be in accordance with the Act.
  - i. *Residential rate:* The city shall levy an annual flat fee of ten dollars (\$10.00) to owners of residential property as per section 11-89C-9(d)(2) of the Act.
  - ii. *Commercial rate:* The city shall levy an annual fee to owners of commercial property of one-half of one cent (\$0.005) per square foot of commercial space on, or within the property, provided that, regardless of actual square footage of commercial space on, or within the property, no such annual fee, charge, or assessment shall exceed three thousand dollars (\$3,000.00) as per section 11-89C-9(d)(3) of the Act.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29%.20. - Enforcement and inspections.

- a. All property owners of improved property within the incorporated areas of the city shall provide, manage, maintain, and operate on-site stormwater management systems sufficient to collect, convey, detain, and discharge stormwater runoff in a safe manner consistent with applicable city development regulations, ordinances, as well as state and federal laws. Any failure to meet this obligation shall constitute a violation of this article and be subject to citation and prosecution in the municipal court. Each day such violation exists shall constitute a separate offense.
- b. The city shall have the authority as granted in § 11-89C-4(20), § 11-89C-4(21), and § 11-89C-9(a)(6) of the Act to perform inspections and undertake enforcement actions pursuant to compliance with applicable stormwater laws.
- c. The city hereby establishes the necessary measures and procedures for the enforcement of rules, regulations, resolutions, ordinances, or orders through actions before a municipal, district or circuit court of competent jurisdiction, including penalties for violations in accordance with § 11-45-9 of the Act.
- d. The city may institute a civil suit for damages or injunctive relief, except as limited by § 11-89C-11 and § 11-89C-12 of the Act, in any district or circuit court having jurisdiction for a violation of this chapter. Damages may include all costs, expenses, or other losses resulting directly or indirectly from a violation of any rule, regulation, resolution, ordinance, order, or other provision authorized by this chapter, and may include attorney's fees, court costs, and trial expenses.
- e. The city may do any and all things, whether or not specifically or expressly authorized in the Act and/or this article and not otherwise prohibited by law, that are necessary and convenient to do individually, and to aid and cooperate with the city in carrying out the stormwater laws and the purposes and intent of this article.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29½.21. - Billing, collections and delinquencies.

- a. The user fee charges imposed by the city shall be billed and collected and the revenues allocated in accordance with sections §11-89C-10(a)(b)(c) of the Act.
- b. In accordance with the provisions of section §11-89C-9(d) of the Act, the city shall call upon and enter into agreements with the county tax assessor and tax collector to assess and collect any such fees, charges, or assessments.
- c. The county tax assessor and the tax collector shall implement procedures to assess and collect the fees, charges, or assessments levied in accordance with this article.
  - i. The stormwater user fee charges shall begin to accrue on the effective date of this article and shall be billed prospectively to property owners on an annual basis at the same time and mechanism as the county tax assessor and the tax collector assesses and collects ad valorem taxes.
  - ii. The fees, charges, or assessments shall be a lien upon any land to which it may be levied, and shall be assessed, collected, and enforced as are ad valorem taxes. In accordance with § 11-89C-10(b) of the Act, the county shall receive a one (1) percent commission on all amounts levied and collected which shall be deposited to the county general fund; and
  - iii. On a quarterly basis not later than the twentieth day of January, April, July, and October, the city shall remit five (5) percent of all fees collected pursuant to section 11-89C-9(d) of the Act to the state department of revenue.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29½.22. - Stormwater user fee charge appeals.



- a. The city manager shall administer the procedures and standards for the review of customer appeals as outlined herein.
  - i. If a customer believes his stormwater user fee charge is incorrect, the customer may seek an adjustment of the stormwater user fee charge allocated to a property at any time by submitting the request in writing to the city manager on forms provided by the city and setting forth in detail the grounds upon which relief is sought. The customer's account must be paid and current prior to consideration of an adjustment request by the city, except during the period prior to issuance of the first bill.
  - ii. Customers requesting a correction of the city's classification of a subject property or the city's determination of other pertinent factors relating to the amount of the fee charged to a subject property, except as otherwise provided in this section, and any adjustment of the stormwater user fee charge allocated to the property resulting from the correction, shall be required, at their own expense, to provide the city manager with accurate, verifiable information demonstrating the alleged error in the city's classification or determination. Customers requesting a correction and adjustment on said grounds shall bear the burden of demonstrating to the city manager's reasonable satisfaction that the city has erred in its classification or determination and that the error has resulted in an incorrect allocation of the stormwater user fee charge to the property.
  - iii. Customers requesting a correction of the city's delineation and calculation of impervious surfaces on a subject property, when applicable, shall be provided a statement of the city's results of its delineation and calculation of impervious surfaces for the property. If such a statement is not available, said customers may request a de novo delineation and calculation of impervious surfaces on the property, at the city's expense, and said customers shall be provided a statement of the results of the same. Customers requesting a correction on these grounds shall bear the burden of demonstrating to the city manager's reasonable satisfaction that the city has erred in its delineation and calculation of impervious surfaces and that the error has resulted in an incorrect allocation of the stormwater user fee charge to the property, and said customers shall provide the city manager, at their own expense, with such accurate, verifiable information as is necessary to meet their burden of proof, including, but not limited to, a survey certified by a registered land surveyor or a professional engineer, unless waived by the city manager for good cause shown by the customer.
  - iv. In all events, a customer's failure to provide the required information within the time limits established by the city manager, as may be reasonably extended, may result in denial of the customer's adjustment request.
  - v. The city manager shall render a written decision within thirty (30) calendar days of the city's receipt of a customer's completed adjustment request and all required information related to the request. The city manager's decision shall be sent by regular United States mail to the address provided on the adjustment request, and service shall be complete upon its mailing. If the result of the city manager's decision is that an adjustment is due, the city shall apply a credit in the amount of the overcharged amount, or a supplemental charge in the amount of the undercharged amount, on the next stormwater user fee charge billing to the subject property.

(Ord. No. 14-O-17, § 2, 7-14-2014)

Sec. 29½.23. - Stormwater user fee credits.

- (a) A stormwater user fee credit shall mean a reduction in the amount of an eligible customer's stormwater user fee charge as a result of completing or implementing an approved credit activity as defined in the City of Anniston Stormwater User Fee Credit Manual (the "manual"). The city manager shall direct that the manual, as adopted by the council, be maintained by the city and made available for public inspection.

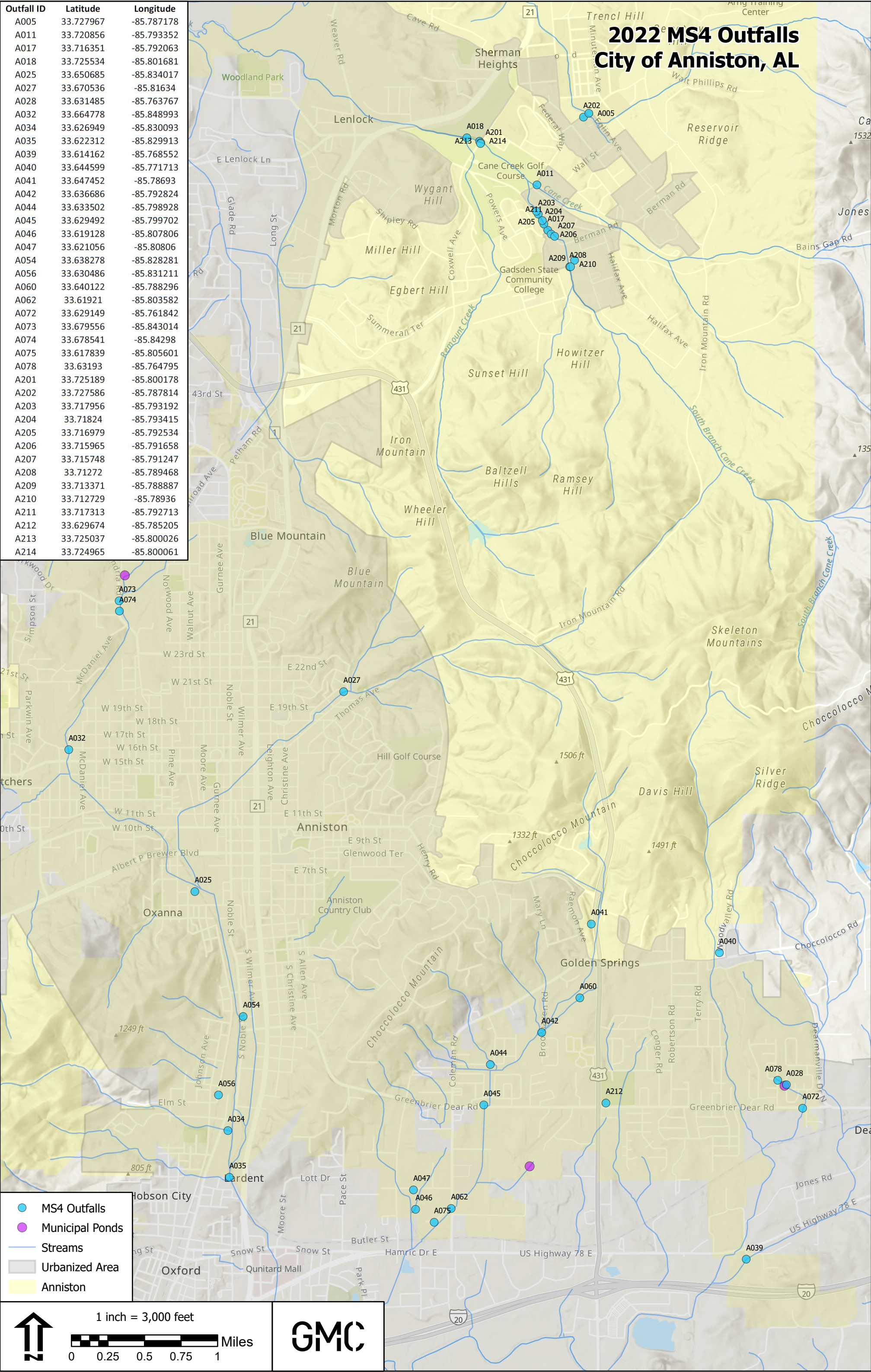
- (b) Eligible customers, which shall include (1) religious institutions, faith-based organizations, and/or places of worship, only to include the sanctuary building and the associated parking facilities; (2) non-profit organizations classified under 501(c)(3) according to the Internal Revenue Service; and (3) the City of Anniston School System and all other preschool, elementary, middle and high schools within the city, may apply for stormwater user fee credits in accordance with the manual.
- (1) In order to obtain a credit, the eligible customer must submit a stormwater user fee credit application (the application) to the city on forms provided by the city for such purpose, and in accordance with the procedures outlined in the manual.
  - (2) The application for any credit must be in writing in the format described in the manual and include the information necessary to establish eligibility for the credit. The customer's account must be paid and current prior to review and approval of an application by the city. Incomplete applications will not be accepted for consideration and processing.
  - (3) The city manager shall ensure that all qualified applications be evaluated by the city for compliance with the requirements, standards and criteria contained in the manual. The city shall determine the amount of the stormwater user fee credit, if any, in accordance with the criteria set forth in the manual. The city manager shall direct that a decision as to whether the application is approved in whole, approved in part, or denied be made in writing and provided to the applicant by mail (or email) no less than thirty (30) days from the city's receipt of a qualified application. Stormwater user fee credits approved by the city shall be applied to the customer's stormwater user fee charge account in accordance with the terms defined in the manual.

(Ord. No. 15-O-3, § 1, 2-16-2015)

## Appendix B: MS4 Outfall Map



Outfall ID	Latitude	Longitude
A005	33.727967	-85.787178
A011	33.720856	-85.793352
A017	33.716351	-85.792063
A018	33.725534	-85.801681
A025	33.650685	-85.834017
A027	33.670536	-85.81634
A028	33.631485	-85.763767
A032	33.664778	-85.848993
A034	33.626949	-85.830093
A035	33.622312	-85.829913
A039	33.614162	-85.768552
A040	33.644599	-85.771713
A041	33.647452	-85.78693
A042	33.636686	-85.792824
A044	33.633502	-85.798928
A045	33.629492	-85.799702
A046	33.619128	-85.807806
A047	33.621056	-85.80806
A054	33.638278	-85.828281
A056	33.630486	-85.831211
A060	33.640122	-85.788296
A062	33.61921	-85.803582
A072	33.629149	-85.761842
A073	33.679556	-85.843014
A074	33.678541	-85.84298
A075	33.617839	-85.805601
A078	33.63193	-85.764795
A201	33.725189	-85.800178
A202	33.727586	-85.787814
A203	33.717956	-85.793192
A204	33.71824	-85.793415
A205	33.716979	-85.792534
A206	33.715965	-85.791658
A207	33.715748	-85.791247
A208	33.71272	-85.789468
A209	33.713371	-85.788887
A210	33.712729	-85.78936
A211	33.717313	-85.792713
A212	33.629674	-85.785205
A213	33.725037	-85.800026
A214	33.724965	-85.800061





## Appendix C: Inspection Checklists

## MS4 COMPLIANCE INSPECTION REPORT

NPDES Permit No. <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		Mo/Day/Yr <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		Entry Time   Exit Time <div style="border: 1px solid black; height: 20px; width: 100%;"></div>		Inspection Type <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Monthly</span> <span><input type="checkbox"/> Complaint</span> <span><input type="checkbox"/> Follow-up</span> </div>	
Permittee Name:				Facility/Site Name:			
Mailing Address:				County:			
Responsible Official:		Title:		Facility Street Address or Location Description:			
Business Phone:		Email:		Discharge(s) to 303d or TMDL Waters? <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span><input type="checkbox"/> Yes</span> <span><input type="checkbox"/> No</span> </div>			
Current site activity:  _____  _____  _____				Receiving Water:  _____  Permit Expiration Date:  _____  Weather conditions:  _____			
<b>VIOLATIONS:</b> (list below)		<div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <span><input type="checkbox"/> Yes</span> <span><input type="checkbox"/> No</span> </div> _____  _____  _____  _____  _____					
Onsite Contact:		Date:		Inspector:		Date:	
Signature:		Phone No.:		Inspector Signature:		Phone No.:	
Title:				Title:			
Company:				Company:			

# Annual Inspection Report for Stormwater Management Ponds

Facility Type: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Inspection Items:	Pass	Fail	N/A	Comments
<b>Terrain/bank Components</b>				
Bank Stabilization				
Spillway				
Outfall				
Other:				
<b>Water Quality</b>				
Turbidity				
Floating Debris				
Submerged/semi-submerged debris				
Oil Sheen/Surface Scum				
Other:				
<b>General Site Conditions</b>				
Proper Maintenance Access				
Other:				
<b>Structures</b>				
Pumps				
Aerators				
Valves				
Water Treatment Structures				
Other:				

Actions Required: \_\_\_\_\_

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**Owner Information**

Name: \_\_\_\_\_

Phone #: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

\_\_\_\_\_

## City of Anniston, Alabama Storm Water Inspection Checklist

<b>Facility:</b>	
<b>Facility Location:</b>	
<b>Date of Inspection:</b>	
<b>Reason for Inspection:</b>	
<b>Weather:</b>	

Has the facility applied for coverage under the NPDES Industrial Stormwater Permit?	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Does facility have Stormwater Pollution Prevention Plan (SWP3)?	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Has facility implemented the SWP3?	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Is there evidence of stormwater pollutants leaving site? (If YES, explain below) Describe pollutants:			

Were stormwater issues discussed with on-site representative?	<b>YES</b>	<b>NO</b>
If YES, what is name and position of representative?	Name:	
	Position:	
Other comments/summary:		

<b>Inspector Name:</b>	
<b>Company:</b>	
<b>Signature:</b>	



## Inspection Results:

Inspection Completed For:	YES/ NO/NA	PASS/ FAIL	Deficiencies Found	PHOTO #
Current Industrial NOI				
Stormwater Pollution Prevention Plan				
Areas around machinery and/or equipment				
Areas prone to leaks and spills				
Outdoor storage and handling areas				
Waste generation, storage, treatment and disposal areas				
Vehicle wash-down areas				
Fueling areas				
Loading and unloading areas				
Other:				

Inspect for the following:	
Stains, spots or puddles of oils, grease, or chemicals on concrete or around drains.	Torn bags of dry chemicals or bags exposed to rain
Leaking or corroded equipment, pipes, containers, or lines.	Broken or cracked dikes, walls, or other physical barriers
Improperly labeled or leaking drums	Improper outdoor storage of potential stormwater pollutants
Inadequate or inaccessible spill response equipment	Oily rags improperly discarded

## Appendix D: IDDE Plan



APPENDIX D

Illicit Discharge Detection  
&  
Elimination Plan  
for  
Anniston, AL  
March 2022

## Plan Review and Revision

This log will be used to document Illicit Discharge Detection and Elimination (IDDE) Plan revisions and their submittals to the Alabama Department of Environmental Management (ADEM).

DATE OF PLAN REVISION	DESCRIPTION OF PLAN REVISIONS
May 2019	IDDE Plan submitted to ADEM for review. Plan prepared at ADEM's request during February 2019 audit.
March 2022	Minor edits made to IDDE Plan to identify what area(s) are designated as "Priority Areas" and screening frequencies for outfalls that have had an identified illicit discharge identified

## **1.0 Introduction**

Illicit discharges are unpermitted non-stormwater flows to the stormwater drainage system that contain pollutants or pathogens. Illicit discharges can occur through direct discharges, dumping to the stormwater system or through upstream activities that eventually flow to storm drains or drainage channels. Illegal connections are physical connections such as pipes that allow illicit discharges to the stormwater system on an ongoing basis.

Screening of stormwater outfalls during dry weather is an important tool for investigating potential non-stormwater entries to the storm drainage system. Subsequent identification and elimination of illicit discharges and illegal connections can result in substantial improvements to local water quality.

The following screening program has been designed and implemented to comply with Part III.B.2 of the City's National Pollutant Discharge Elimination System Phase II Municipal Separate Storm Sewer System (MS4) Permit (Permit #ALR040050). This program includes a proactive dry weather screening program and subsequent source tracing procedures to identify and eliminate potential "illicit discharges" to the City's stormwater system, and is part of the City's Stormwater Management Program Plan (SWMPP).

## **2.0 Outfall Screening Frequencies and Protocols**

The City will perform dry weather screening (DWS) of MS4 outfalls located within the urbanized area of the incorporated City limits that discharge to State waterways. For additional information about City boundaries, please see the "Site Description" section in the City's SWMPP.

The City's permit requires that 100% of outfalls be screened within the 5-year permit period, and that a minimum of 15% of outfalls be screened each year. To meet this goal, the City has been systematically building the DWS program so the City is now inspecting and screening approximately 20% of identified MS4 outfalls in the City on an annual basis. MS4 outfalls screened each year will be rotated throughout the 5-year permit period to ensure that all outfalls are screened. If an illicit discharge is identified, that outfall may be re-screened the following year at the City's discretion if the City determines this is necessary based on the potential for subsequent illicit discharges, surrounding land uses, history of illicit discharges, and/or other site-specific factors that indicate an increased likelihood of illicit discharges.

The City will conduct more frequent screening of outfalls within areas the City has designates as "Priority Areas." This designation refers to areas within the City that may be screened more frequently in order to detect and eliminate illicit discharges because the area(s) have an increased potential for illicit discharges (see Part III.B.2.iii of the City's MS4

permit for reference). This may include areas located with more heavily industrial areas; areas known to have a large number of septic tank system users and/or septic tank system failures; areas with older stormwater infrastructure; areas where repeated illicit discharges have been identified, and/or other areas designated by the City.

For purposes of dry weather screening for the 2021 – 2026 permit period, the City considers “Priority Areas” to be areas that have had at least two illicit discharges identified at adjacent outfalls and/or outfalls located within 0.25 miles of each other (within the same drainage area) during the current 5-year permit cycle. If the City identifies a Priority Area that has had more than two (2) identified illicit discharges at adjacent outfalls and/or at outfalls within 0.25 miles of each other with the same drainage area, the City will conduct repeat dry weather screening at all outfalls within the designated area at least one additional time during the 2021 – 2026 year permit cycle (for a total of two DWS/outfall within the permit period). The City will have to make a “site-specific” determination on what outfalls fall within the boundaries of the “Priority Area” based on the drainage patterns and other drainage and site-specific factors. The City may also, at its discretion, opt to designate additional areas / outfall(s) as “Priority Areas” and conduct more frequent dry weather screening in the newly-designated area during the 2021- 2026 permit cycle. If the City identifies additional area(s) to be designated as Priority Areas and conduct more frequent outfall screenings, the City will update this IDDE Plan and submit the amended IDDE Plan to ADEM for review and approval.

Inspections will be performed during dry weather (i.e., no rain event for 72 hours prior to the sample event). During the inspection at each MS4 outfall, the City will collect and record Background Data and other relevant information about each outfall. This information will be recorded in Sections 1 and 2 on an Outfall Reconnaissance Inventory (ORI) form. A blank copy of this form is located in Appendix A of this Plan. If flow is present, the City will collect field data and record additional observations about physical and/or visual characteristics by completing Sections 3-7 of the ORI form as well.

Based on the results of the inspection, the City will assess the overall condition of the outfall and whether or not an illicit discharge is suspected. If an illicit discharge is suspected, the City may undertake one or more of the following source tracing measures:

1. Take sample(s) and provide to lab for analysis
2. Perform additional DWS upstream from suspected MS4 outfall
3. Perform visual inspection(s) of adjacent outfalls, stormwater infrastructure and identify adjacent land uses
3. Perform site inspection of a facility that is suspected of illicitly discharging
4. Video and/or dye test the storm line to search for source of illicit discharge

The results of any source tracing activities performed will be recorded on a Source Tracing Form. A blank copy of this form is located in Appendix A of this document. If an illicit discharge is positively identified, the City will take enforcement actions as specified in the

City's Stormwater Ordinance (Sec. 29½.9. – Enforcement). Penalties may also be assessed as outlined in the City's Stormwater Ordinance (Sec. 29½.10. – Penalties).

If an illicit discharge is suspected from an adjacent MS4, the City will contact the MS4 to work with them directly to identify and stop the illicit discharge. If the City is unable to resolve the issue with the MS4, the City will notify ADEM in writing of the suspect illicit discharge and steps taken by the City to address the issue.

## **3.0 DWS Program Procedures**

### **3.1 Outfall Screening Locations**

An outfall is the point where a municipal separate storm sewer system discharges to waters of the State. The City will identify the outfall that is the lowest downstream point in a storm sewer system to monitor (i.e. the final outfall). The City may not maintain the storm sewer system continuously upstream from the point that is monitored, but the lowest point in the system is the designated location to screen for illicit connections and illegal discharges which is the objective of this procedure.

The City of Anniston maintains an inventory of MS4 outfalls that have been identified within the City and a map of the currently known MS4 outfalls is updated each year and provided with the City's most recent Annual Report. The City is systematically growing this inventory as outfalls are identified by field crews and as new development/redevelopment occurs.

### **3.2 DWS Preparation**

#### **3.2.1 Field Sampling, Screening & Analysis Equipment**

Before undertaking field work, the field team should ensure that all of the necessary equipment is present and in order. Any meters/probes should be calibrated in accordance with manufacturer's specifications. In addition, field test kits should be inspected to ensure that they have sufficient reagents and test strips as well as to confirm the expiration dates prior to beginning field work activities associated with dry weather screening.

#### **3.2.3 Weather Considerations**

Prior to any screening field work, check local rain gages to ensure that the conditions are appropriate for dry weather outfall screening. **Dry weather conditions are defined as rainfall of less than 0.1 inch per day for at least 72 hours.**

### 3.3 DWS Field Procedures

Appendix A contains a copy of an ORI form which is used to record the observations and analytical results of the DWS procedures. Please see Section 2 of this Plan for additional information about completing the ORI Form.

#### 3.3.1 Field Observations and Measurements

Outfall screening is initiated by driving or walking to the outfall location. When an outfall is reached, the coordinates should be logged using the GPS receiver (if applicable).

Basic descriptive information is recorded at the top part of the Dry Weather Outfall Screening Form. Digital photographs may be taken of the outfall and photo numbers recorded on the screening form if deemed appropriate by the City.

Physical observations of the site are recorded on the screening form if flow is observed from an outfall. If no flow is observed during the outfall screening, the “Flow from outfall?” field should be checked “No” and the screening is complete. This result will be counted towards the total number of outfalls screened.

If flow is observed, then “Yes” should be checked and physical indicators are recorded as identified on the inspection sheet in Appendix A (outfall damage, deposits/stains, presence of benthic growth, poor pool quality, and abnormal vegetation). The following physical indicators are also recorded. Each of these observations associated with flowing outfalls may predict the presence of an illicit discharge or illegal connection:

- **Odor:** Description of any odors that emanate from the outfall and an associated severity score. Since noses have different sensitivities, the entire field team should reach consensus about whether an odor is present and how severe it is. A severity score of one means that it is faint, or the team cannot agree on its presence or origin. A score of two indicates a moderate odor within the pipe. A score of three is assigned if the odor is so strong that the field team smells it a considerable distance away from the outfall.
- **Color:** The visual assessment of the discharge color. The intensity of color is ranked from one (slightly tinted) to three (clearly visible in the flow). The best way to measure color is to collect the discharge in a clear sample bottle and hold it up to the light. Field teams should also look for downstream plumes of color that appear to be associated with the outfall.
- **Turbidity:** The visual estimate of the turbidity of the discharge, which is a measure of the cloudiness or opaqueness of the water. Turbidity is ranked from one (slight cloudiness) to three (opaque). Like the color observation, turbidity is best observed using a clear sample bottle. The field team should also look for turbidity in the plunge



pool below the outfall, and note any downstream turbidity plumes that appear to be associated with the outfall.

- **Floatables:** The presence of any floatable materials in the discharge or the plunge pool below. Sewage, oil sheen or film, and suds are all examples of floatable indicators. [Note that for dry weather screening, trash and debris are not considered indicators of an illicit discharge or illegal connection.]

The results of the observations will be recorded on the field screening form by City staff or their designated representative. City staff will also map the location of the outfalls screened, systematically updating the City's inventory of outfalls through the screening effort.

### 3.3.2 Water Quality Sampling & Assessment

If flowing water is present, City staff will perform field sampling of the discharge as noted below.

- Measure the discharge in-stream using a field probe, for pH and temperature.
- Collect a grab sample and perform analysis on the discharge using field equipment for ammonia, nitrite, and phosphate.
- Laboratory analysis may be performed in-lieu of field sampling for one or more of the water quality parameters. Grab samples should be collected and analyzed using EPA-approved field collection methods and laboratory analysis protocols.

## 3.4 Source Tracing

Once an illicit discharge is suspected or obvious, the City will attempt to trace the source of the illicit discharge as soon as possible.

City staff will utilize the Source Tracing form in Appendix A to record the results of any source tracing activities.

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## **Appendix A – ORI and Source Tracing Form**

## OUTFALL RECONNAISSANCE INVENTORY (ORI) FORM

### Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's Date:		Time (24 hour/Military):	
Investigators:		Form Completed By:	
Temperature (°F):		Rainfall (in) last 72 hours:	
Latitude:	Longitude:	Coord. Obtained: Computer / GPS	
Camera:		Photo #:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: _____ Known Industries: _____	
Notes (e.g., origin of outfall if known):			

### Section 2: Outfall Description

Location	Material	Shape	Dimensions (In)	Submerged
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> CMP <input type="checkbox"/> HDPE <input type="checkbox"/> Other:	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other: <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diam./Dimensions: Sketch:	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
				w/ sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open Drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width: Side Slope:	
<input type="checkbox"/> In Stream	(applicable when collecting samples)			
Flow Present?	Yes or No (If No then skip to section 5)			
Flow Description	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitive Characterization

Field Data for Flowing Outfalls				
Parameter		Result	Unit	Equipment
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to Fill		Sec	Stop Watch
<input type="checkbox"/> Flow #2	Flow Depth		In	Tape Measure
	Flow Width		Ft, In	Tape Measure
	Measured Length		Ft, In	Tape Measure
	Time of Travel		Sec	Stop Watch
Temperature			°F	Thermometer
pH			pH units	Test Strip / Probe
Ammonia			mg/L	Test Strip
Nitrite			mg/L	Test Strip
Phosphate			mg/L	Test Strip

## OUTFALL DRY WEATHER SCREENING INSPECTION SHEET

### Section 4: Physical Indicators for Flowing Outfalls Only

Are any physical Indicators Present in Flow? ☐ Yes ☐ No (If No then Skip to Section 5)

Indicator	Check if any	Description	Relative Severity Index ( 1 - 3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancide/Sour <input type="checkbox"/> Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1- Faint	<input type="checkbox"/> 2-Easily detected	<input type="checkbox"/> 3-Notice from a dist
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1- Faint colors in sample	<input type="checkbox"/> 2-Clearly visible in sample	<input type="checkbox"/> 3-clearly visible in outfall
Turbidity	<input type="checkbox"/>	See Severity	<input type="checkbox"/> 1-Slight Cloudy	<input type="checkbox"/> 2-Cloudy	<input type="checkbox"/> 3-Opaque
Floatables - DNI Trash	<input type="checkbox"/>	<input type="checkbox"/> Sewage (TP, etc) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1- Few/Slight; origin unk	<input type="checkbox"/> 2-Some; origin indic	<input type="checkbox"/> 3-Some; origins clear

### Section 5: Physical Indicators for Flowing Outfalls Only

Indicator	Check if any	Descriptions	Comments
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling,cracking, chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flowline <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor Pool Quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floats <input type="checkbox"/> Oil sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characteristics

<input type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of 2 or more indicators)	<input type="checkbox"/> Suspect (1 or more indicators with severity of 3)	<input type="checkbox"/> Obvious
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### Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermitten flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk Dam

### Section 8: Any Non-Illicit Discharge Concerns (eg trash or needed infrastructure repairs)?

## Source Tracing Form

Outfall ID:	
Employee Conducting Source Tracing:	
1) Suspected illicit discharge/dumping discovered through which method?	<input type="checkbox"/> Citizen Complaint <input type="checkbox"/> ORI <input type="checkbox"/> Field Inspection
Describe the nature of the suspicious discharge?	
2) Are there known industrial stormwater discharges in the drainage basin of the outfall?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3) What source tracing actions are being taken? (Describe source tracing activities.)	<input type="checkbox"/> MS4 outfall field sampling <input type="checkbox"/> Visual Inspection <input type="checkbox"/> Site Inspection <input type="checkbox"/> Upstream Sampling <input type="checkbox"/> Dye Testing <input type="checkbox"/> Line Video <input type="checkbox"/> Other
4) Was the source of the illicit discharge/dumping identified?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5) Was the responsible party contacted?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6) Was an enforcement action taken? (Describe enforcement actions)	<input type="checkbox"/> Yes <input type="checkbox"/> No
7) Was the source removed? (Describe actions taken)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Date:	
Signature:	

## Appendix E: SOPs for Municipal Facilities and Operations



# Your Actions Prevent Stormwater Pollution!

## *Standard Operating Procedures for Water Quality Protection*

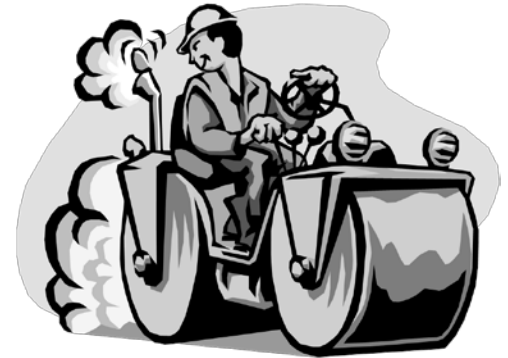
### *Good Housekeeping SOP- Asphalt Program*

#### *Why*

Standard Operating Procedures (SOPs) have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of municipal operations activities.

#### *What*

This **Asphalt Program SOP** provides operational best management practices (BMPs) developed to control pollutant discharges during asphalt program construction and reconstruction activities, including maintenance, repair, replacement, and installation of asphalt pavement in the City. These procedures are critical steps that must be included in the basic practices of the Asphalt Program construction by City staff and contracted staff.



#### *Who*

All City employees or City-contracted personnel who conduct asphalt paving construction and reconstruction.

At Asphalt Program construction sites.

#### **DO**

Cover inlets and manholes with protection during application of seal coat, tack slurry, slurry seal, and/or fog seal. Conduct operations during dry weather.

Place drip pans, absorbent materials, or plastic under equipment when not in use to catch & contain drips & leaks to prevent soil contamination and runoff.

When possible, recycle broken asphalt and old or spilled asphalt. If it cannot be recycled, collect and remove and dispose offsite as solid waste in accordance with standard specifications.

Substances used to coat transport trucks, asphalt trucks, and spreading equipment shall not contain soap, shall be non-foaming and non-toxic.

During thermoplastic striping, the pre-heater must be filled carefully to prevent splashing or spilling of materials; the same with filling the melting tanks during pavement marker application; leave 6" at top of pre-heater, and also in the melting tanks, to allow room for material to move and splash when vehicles are deadheaded.

When servicing or filling melting tanks, ensure all pressure is released before removing lids to avoid spills.

Monitor all asphalt program equipment closely for leaks; use drip pan as needed.

#### **DO NOT**

**DO NOT** allow any materials or sediment to enter storm drain system. Apply temporary perimeter controls like silt fence until stabilized or permanent controls are in place.

**DO NOT** apply seal coat, tack coat, slurry seal, or fog seal when rain is predicted; limit paving applications in wet weather.

**DO NOT** let petroleum or petroleum covered aggregate enter the storm system during chip sealing application and sweeping.

**DO NOT** transfer or load bituminous materials, or pre-heat, transfer or load thermoplastic near drain inlets or waterways.

**DO NOT** wash down or hose down the paving equipment except where the wash water will only enter the sanitary sewer drain as an approved discharge.

**DO NOT** repair asphalt paving equipment on a roadside surface; transport to the maintenance shop for repairs.

**DO NOT** coat transport trucks and spreading equipment with soap, foaming products, or toxic substances.

**DO NOT** fill pre-heaters or melting tanks beyond 6" from the top to leave room for splashing.



# Your Actions Prevent Stormwater Pollution!

## Standard Operating Procedures for Water Quality Protection

### Building Maintenance SOP

#### Why

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of City Municipal Operations functions that have the potential to impact 'waters of the state. One of the primary goals of the SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of activities.** Additional SOPs that compliment this SOP are the **Good Housekeeping SOP**, the **Landscaping SOP** and the **Chemical Application SOP**.

#### What

**Building Maintenance** is an operational best management practice (BMP) developed to control the maintenance and construction activities that take place at municipal facilities and their surrounding grounds with procedures to mitigate the contaminated debris, trash, and potential chemicals from reaching our stormwater system. These procedures are simple steps that must be included in everyday work activities to protect stormwater from contact with pollutants and are a joint responsibility of everyone in the work place conducting maintenance on buildings.



#### Who Where

All City employees or City-contracted personnel who work conduct maintenance on City buildings, including painting, window washing, sidewalk cleaning and the like, and building contractors.

All buildings and facilities where maintenance activities occur.

#### DO

Remove trash and debris around building and grounds daily or as needed.

Place temporary inlet protection at stormwater inlets to catch contaminants and wash water from maintenance activities.

Have spill cleanup materials available and ready to go during painting activities or any activity that has chemicals standing by for use.

Clean up paint or other spills promptly, with DRY methods, if possible.

Oversee contractors to ensure that correct procedures are followed and contaminants are kept to a minimum, and contained.

Ask the contractor for a list of chemicals they will be bringing on site for the maintenance work, and how they will control, contain and dispose of the unused portion of the chemicals and materials.

Expect contractors to follow proper cleanup procedures; monitor progress.

Keep maintenance equipment clean; do not allow a buildup of wastes.

Maintain a record of contractor work, and if any spills/problems occurred.

#### DO NOT

**DO NOT** let trash and waste accumulate at or around the building.

**DO NOT** transfer, pour or dispose of maintenance materials outdoors in parking lots, near or in storm drains, drainage ditches, or any other location where they can runoff into the storm drain system.

**DO NOT** let maintenance wash water, chemicals, paint, or any other maintenance residue enter the storm drain system.

**DO NOT** handle containers alone if awkward or require over-exertion on your part. Get help and spread the weight load.

**DO NOT** repair maintenance equipment outside; use a covered, designated area for such repairs.

**DO NOT** hose down debris collected from sidewalk cleaning (unless floor drain is connected to the sanitary sewer); use dry sweeping method and dispose properly in trash.

**DO NOT** let contractors conduct maintenance in conflict with proper procedures for the work; monitor closely.





# Your Actions Prevent Stormwater Pollution!

## *Standard Operating Procedures for Water Quality Protection*

### Detention Pond Maintenance SOP

#### *Why*

Standard Operating Procedures (SOPs) have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants during the performance of municipal operations activities.**

#### *What*

**Detention Pond Maintenance** is an operational best management practice (BMP) developed to control pollutant discharges by keeping these stormwater facilities operating properly with routine maintenance including mowing and debris control. These procedures are critical steps that must be included during pond maintenance on an annual basis, as an intermediate inspection, or on an as-needed basis after a storm event.

#### **DO**

Inspect inlet and outlet works initially on a monthly basis until the appropriate timing of maintenance is established; then conduct maintenance per schedule.

Conduct maintenance per schedule, or on an as-needed basis as identified during an annual inspection or on an as-needed basis after a storm event.

Keep screen and/or trash rack free from debris using established maintenance schedule or on an as-needed basis after a storm event; notify supervisor if screen or rack is in need of maintenance.

Report damage/compromise to side slopes, pond banks, inlet pipe, trickle channels, outlet structure; prepare a repair schedule and complete repairs.

Remove vegetation adjacent to outlet works that may interfere with operation; note if noxious weeds present and notify supervisor.

Remove debris and trash from the detention pond and surrounding area and dispose properly.

When mowing, collect grass clippings and all other clippings/trimmings and take offsite for disposal or dispose in trash on site.

Notify supervisor any hazardous conditions or materials found during inspection.



#### *Who*

All City employees or City-contracted personnel responsible for maintenance of stormwater features.

#### *Where*

All detention ponds currently existing at City facilities.

#### **DO NOT**

**DO NOT** mow detention pond too close to the surface; height should be 4 to 6 inches to maintain healthy grasses.

**DO NOT** clean equipment or conduct maintenance on equipment in the detention pond, or near a storm drain or other stormwater conveyance feature.

**DO NOT** leave grass clippings or trimming residue in pond; collect and dispose of in trash.

**DO NOT** apply landscaping chemicals in pond area, or in areas where the residue could make it into the pond during a storm event.

**DO NOT** attempt to clean up any unidentified or possibly hazardous materials found in or around pond during inspections; notify supervisor immediately upon discovery of hazardous materials.



# Your Actions Prevent Stormwater Pollution!

## Standard Operating Procedures for Water Quality Protection

### Drainageway Maintenance SOP

#### Why

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of municipal operations activities.**

#### What

**Drainageway Maintenance** is an operational best management practice (BMP) developed to control pollutant discharges by promoting maintenance of our primary "filter" for stormwater runoff reaching 'waters of the state', including our creeks, drainage channels, ditches, and grass swales with or without active flows. Drainageways can be a source of pollutants if not properly maintained. These procedures are critical steps that must be included for all maintenance activities in City drainageways.



#### Who

All City employees or City-contracted personnel who maintain stormwater conveyance structures.

#### Where

City drainageways and related surface water conveyance features.

#### DO

Conduct maintenance per schedule, or on an as-needed basis as identified during an inspection based on identified sediment and debris buildup, or on an as-needed basis after a storm event.

Remove debris and trash from the drainageway and surrounding area and dispose properly before mowing; make note if noxious weeds present and notify supervisor.

Inspect drainageway outfalls and trickle channel features (if applicable) while in field doing maintenance; note any feature that needs repair and/or replace due to defective materials; prepare an MRF report and follow through on repairs & replacement; note any unusual conditions in the drainageway during the inspection and report them.

Report any suspected illegal connections or other waste dumping activities in the drainageway; these would include flows during dry-weather conditions, or unusual fluids. These may require special disposal operations; report to Supervisor.

Clean out sediment from culverts in drainageways, ditches and swales; check if needs to re-graded (invert has filled in with fine-graded sediments). When mowing, collect grass clippings and all other clippings/trimmings and take offsite for disposal or dispose in trash.

Maintain a longer riparian fringe at top of bank when mowing to catch pollutants.

Report bare ground that may lead to erosion; re-vegetate as necessary. Report locations of grass clippings, etc being placed in drainageway; remove these wastes.

#### DO NOT

DO NOT mow drainageways, ditches, or swales too close to the surface; height should be 4 to 6 inches to maintain healthy grasses

DO NOT clean equipment or conduct maintenance on equipment in the drainageway, channel, ditch, or near a storm drain or other stormwater conveyance feature.

DO NOT leave grass clippings or trimming residue in channel; collect and dispose of in trash.

DO NOT apply landscaping chemicals in channel area, or in areas where the residue could make it into the drainageway during a storm event

DO NOT make contact with anyone suspected of an illicit discharge without first contacting supervisor for instructions.

DO NOT attempt to clean up any unidentified or possibly hazardous materials found in or around channel during inspections; notify supervisor immediately upon discovery.



# Your Actions Prevent Stormwater Pollution!

## *Standard Operating Procedures for Water Quality Protection*

### Vehicle & Equipment Storage SOP

#### Why

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from the site during the performance of municipal operations activities.**

#### What

This **Vehicle and Equipment Storage** SOP provides operational best management practices (BMPs) developed to control pollutant discharges by promoting proper storage of vehicles and equipment for longer periods of time that have the potential to leak, spill, or release chemicals or hazardous materials. The potential exists for vehicle or equipment to leak fluids that then are wither infiltrating into the ground or are carried off with stormwater. These procedures are critical steps that must be included in any long-term storage activities, at all city or City-contracted facilities that store vehicles and equipment for longer periods of time.



#### Where Who

All City or City-contracted employees who oversee the long-term storage of vehicles and equipment.

At all City or at City-contracted facilities where vehicles or equipment are stored or parked for longer periods of time.

#### DO

Monitor parked vehicles and equipment closely for leaks; use drip pans as needed. Check drip pans frequently and dispose of fluids appropriately.

Monitor vehicle and equipment fluids closely, and keep fluids at proper levels.

Have spill cleanup materials available and ready to go to address any leaks or spills.

Clean up spills promptly, with DRY methods (rags and absorbents), if possible. Clean up is not complete until absorbent is swept up and disposed properly.

Conduct daily inspections to ensure that all vehicles and equipment are stored correctly.

Keep clutter around stored vehicles and equipment to a minimum; a more organized storage area is easier to both spot a leak or spill, as well as to properly clean up.

#### DO NOT

**DO NOT** store outdoors a vehicle or piece of equipment that is KNOWN to have a leak; move indoors and schedule repair.

**DO NOT** allow exposure of buildup of oil and grease on vehicle or equipment being stored outdoors. Clean off buildup before storing outdoors.

**DO NOT** wash or hose down any outdoor vehicle or equipment storage areas except where the wash water will only enter the sanitary sewer drain as an approved discharge.

**DO NOT** repair equipment or vehicles outside; use a covered, designated area for such repairs.

**DO NOT** allow clutter and mess to conceal any leak problem in the storage area.



# Your Actions Prevent Stormwater Pollution!

## *Standard Operating Procedures for Water Quality Protection*

### Good Housekeeping SOP

#### *Why*

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of City Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of the SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of activities.**

#### *What*

**Good Housekeeping** is an operational best management practice (BMP) developed to control pollutant discharges by promoting efficient and safe practices (storage, use, cleanup, and disposal) when handling materials potentially harmful to stormwater such as fertilizers, pesticides, herbicides, cleaning solutions, paint products, and automotive products. Good housekeeping is simply the practice of keeping **all materials, supplies and containers well organized; storing materials securely** when not in use; **cleaning up after work activities;** and **disposing of materials properly.** These procedures are simple steps that must be included in everyday work activities to protect stormwater from contact with pollutants, and are a joint responsibility of everyone in the work place.



#### *Who*

All City employee or City-contracted employees who work with any chemicals, cleaning solutions, paint products, automobile fluids, or any materials that could be spilled; or work with any equipment.

#### *Where*

All offices where materials stored could be spilled; all outdoor work areas where materials are stored or used; and all areas that store or use equipment that has the potential to spill or leak.

#### DO

- Keep all work areas neat and well organized.
- Sweep or pick up all trash and debris daily or as needed.
- Have spill cleanup materials available and ready to go.
- Clean up spills promptly, with DRY methods, if possible.
- Conduct daily inspections to ensure that equipment and materials are being handled, disposed and stored correctly.
- Recycle or dispose of all wastes properly and promptly.
- Keep equipment clean; do not allow a buildup of oil/grease.
- Monitor parked vehicles closely for leaks; use drip pan as needed.
- Keep unused containers closed with a tight fitting lid and label.

#### DO NOT

- DO NOT** let waste accumulate at or around the work place.
- DO NOT** transfer, pour or dispose of materials outdoors, near or in storm drains, or drainage ditches. Use signage to reinforce.
- DO NOT** wash down or hose down any outdoor Dumpster or storage areas except where the wash water will only enter the sanitary sewer drain as an approved discharge.
- DO NOT** handle containers alone if awkward or require over-exertion on your part. Get help and spread the weight load.
- DO NOT** repair equipment or vehicles outside; use a covered, designated area for such repairs.
- DO NOT** hose down work area (unless floor drain is connected to the sanitary sewer); use dry sweeping method if possible.
- DO NOT** place a waste in an area not designated for its hazardous nature or if that areas' disposal method is not a recommended one.





# Your Actions Prevent Stormwater Pollution!

## Standard Operating Procedures for Water Quality Protection

### Landscape Chemical Application SOP

#### Why

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state.

One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of municipal operations activities.**



#### What

**Chemical Application procedures during routine landscape maintenance activities** consist of operational best management practices (BMPs) developed to minimize or prevent the discharge of pesticides and fertilizers deposited into the drainage system by promoting proper storage and application of chemicals during landscape maintenance activities. These procedures are critical steps that must be included in every landscape maintenance activity that includes chemical application to either control weeds or pests or to provide adequate fertilization.

#### Who

All City employees or City-contracted services, who work with any landscape chemicals.

#### Where

All municipal facilities and operations where pesticides, herbicides or fertilizers are stored, mixed, applied, recycled or disposed.

#### DO

- Utilize soil test analyses to optimize fertilizer applications.
- Follow label directions when storing, handling, mixing, recycling and disposing of chemicals and empty container; properly calibrate application equipment to ensure proper amount of chemicals are applied.
- Have spill cleanup materials available and ready to go in case of spill; clean up chemical spills promptly, with DRY methods, if possible.
- When watering landscaped area after fertilizer application, take care to not allow water to runoff into streets or other conduits to the waterways.
- Recycle or dispose of all spent or excess chemicals properly and promptly.
- Keep application equipment clean; do not allow a buildup of chemicals.
- Keep all pesticide and herbicide chemicals in leak proof shelters away from elements to help prevent contamination of the stormwater system.
- Keep all fertilizer chemicals covered to keep dry and reduce water damage.
- Keep unused containers closed tightly; use a tight fitting lid; label containers.

#### DO NOT

- DO NOT** keep chemicals in a damaged container; replace or transfer chemicals to new holding containers.
- DO NOT** transfer, pour or dispose of chemicals outdoors, near or in storm drains, or drainage areas; transfer over impervious surface so spills can't seep into ground.
- DO NOT** apply landscape chemicals to frozen ground.
- DO NOT** handle chemical containers alone if awkward or require over-exertion on your part. Get help and spread the weight load so accidents don't happen.
- DO NOT** over-water landscape areas after fertilizer application such that water discharges off-site, to the street or to the waterway directly.
- DO NOT** over-purchase landscaping chemicals; keep only necessary quantities on hand.
- DO NOT** apply chemicals if not had proper training on uses, types, amounts, and application requirements.



# Your Actions Prevent Stormwater Pollution!

## *Standard Operating Procedures for Water Quality Protection*

# Parking Lot Sweeping & Repair SOP

### Why

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of the City Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of municipal operations activities.**

### What

This **Parking Lot Sweeping and Repair SOP** provides operational best management practices (BMPs) developed to control pollutant discharges by promoting efficient pickup of fine-grained sediment particles on **parking lots, and other large outdoor paved surfaces** that carry a substantial portion of the pollutant load, as well as managing repair materials used to conduct routine pothole repair. In addition, because the operation and maintenance of street sweepers used to sweep parking lots can contribute to the problem if not handled properly, procedures for resultant sweeping debris and refuse must be managed appropriately. Please also use the **Street Sweeping SOP** for proper procedures. These procedures are critical steps that must be included in every trip out to sweep parking lots, maintain the parking lots, or similar, in conjunction with the **Street Sweeping SOP**.



### Who Where

All City employee and City-contracted personnel who operate street sweeping equipment, pothole patching and asphalt overlay equipment.

Parking lots and other large outdoor paved surfaces within the City and other City-contracted areas.

### DO

Operate all sweeper equipment according to manufacturer's settings and standards; perform regular maintenance of sweepers per schedule or as needed.

Follow sweeping schedule established for that facility's parking lot area. Note areas that are prone to additional sediment and debris buildup and add to schedule.

Conduct additional inspections after large storm event, after snow piles melt, after a special event held in the parking lot or similar, and after temporary storage of materials; make note of a lot that has consistently higher content of debris & report.

If parking lot has outfall or storm drain, protect this feature when materials are stored in parking lot or if snow is brought to parking lot for long-term melting; place snow piles away from these inlets so debris is not carried away with resulting melt.

Make note of excessive litter and suggest putting a garbage receptacle at the site.

If unusual sweeper debris is noted, bring to attention of supervisor for testing.

Use **Material Handling & Storage**, and **Spill Prevention and Control SOPs** for repair (patching and pothole repairs) activities to make sure no adverse affects from repair activities. Make sure repair equipment does not contribute oil, diesel, or transmission fluid leaks to lot area and follow instructions on SOPs for clean up.

### DO NOT

**DO NOT** ignore any leak or drips from sweeper equipment; put in a repair ticket and utilize a drip pan during temporary storage of vehicle.

**DO NOT** make any repairs to sweeper equipment or vehicles in the parking lot; use a covered, designated area for such repairs.

**DO NOT** wash down the parking lot with the exception of a very fine water spray for dust control.

**DO NOT** empty sweeper hoppers wastes near storm drains or detention ponds or drainageways where rain event could mobilize sweeper wastes.

**DO NOT** bring excess repair materials to the parking lot and use up what is brought. Never leave repair materials stored without proper storing techniques (see **Materials Storage SOP**).

**DO NOT** hose down left over materials after repair activities; use dry clean-up methods and sweep up excess material and properly dispose.



# Your Actions Prevent Stormwater Pollution!

## *Standard Operating Procedures for Water Quality Protection*

# Spill Prevention and Control SOP

## Why

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of municipal operations activities.**

## What

**Spill Prevention and Control** is an operational best management practice (BMP) developed to control pollutant discharges by promoting proper use of equipment during fueling, cleaning, painting, chemical applications, and any other activities that involve a liquid that could be spilled. Spill prevention is one of the most preventable causes of water quality pollution that occurs. Spill Prevention BMPs are all about planning, prevention and response. These procedures are critical steps that must be included in everyday work activities to protect stormwater from contact with pollutants, and are a joint responsibility of everyone in the workplace who utilize chemicals, fuel vehicles, maintain and repair equipment, apply landscape chemicals, and conduct municipal operations with liquids.



## Who

All City or City-contracted personnel who work with any landscape chemicals, cleaning solutions, paint products, automobile fluids, or any materials that could be spilled; work with any equipment; or fuel vehicles.

## Where

All indoor offices where materials stored could be spilled; all outdoor work areas where materials are stored or used; and all areas that store or use equipment that has the potential to spill or leak.

## DO

Keep all work areas neat & well organized with *only* enough chemical to get job done.

Be knowledgeable about material you are working with; be familiar with MSDS fact sheets & SPCC plan.

Have spill cleanup materials available and ready to go; familiarize yourself with locations of spill kits and cleaning materials and how to use them.

Notify supervisor if spill is discovered and is unknown; there may be special instructions.

Clean up spills promptly, with DRY methods (rags and absorbents), if possible. Clean up is not complete until the absorbent used is disposed properly.

Conduct inspections of your work area materials to ensure equipment and containers are secure and stored responsibly. Transfer if leaking observed.

Handle, use, transfer, store, and re-package all chemicals indoors or under cover to lessen potential for spills that can be carried away by stormwater.

Keep unused containers closed with a tight fitting lid and label.

## DO NOT

**DO NOT** delay in clean up of spills. Delay allows for spreading of wastes by wind, rain, and traffic. If you have to delay any cleanup, string warning tape or cone off to keep area secure.

**DO NOT** transfer or pour materials outdoors near or in storm drains or drainage ditches.

**DO NOT** hose down work area where spills could occur (unless floor drain is hooked to the sanitary sewer); use dry sweeping methods.

**DO NOT** handle containers alone if awkward or require over-exertion on your part. Get help and spread the load.

**DO NOT** remove or damage spill kits; these are available in case of a spill event. Notify supervisor if spill kit is gone from designated location or is missing some important components.



# Your Actions Prevent Stormwater Pollution!

## Standard Operating Procedures for Water Quality Protection

### Street Sweeping SOP

#### Why

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from a site during the performance of municipal operations activities.**

#### What

**Street sweeping** is an operational best management practice (BMP) developed to control pollutant discharges by promoting efficient pickup of fine-grained sediment particles on **city streets, county roads, bridges, public right-of-way, parking lots, and other large outdoor paved surfaces** that carry a substantial portion of the pollutant load. In addition, because the operation and maintenance of street sweepers can contribute to the problem, procedures for resultant sweeping debris and refuse must be managed appropriately. All sweeper hopper debris must be taken directly to a permanent disposal site, or if absolutely necessary, to a secure temporary storage area at the County's Road & Bridge yard with no possible impact from wind and rain. These procedures are critical steps that must be included in every trip out to sweep City streets or similar, every transfer location during the day, and every trip back in.



#### Who

All City-contracted employees who operate street sweeping equipment.

#### Where

City streets, roads, bridges, public right-of-way, parking lots, and other large outdoor paved surfaces.

#### DO

Before starting out, check pavement for leaks from the equipment; if leak observed, make note to repair and consider drip pan use.

Operate all sweeper equipment according to manufacturer's settings and standards.

Perform regular maintenance of sweepers per schedule or as needed.

Make note of areas that indicate storage of construction materials, have higher than normal median maintenance (grass cuttings on street), and areas of snow melt that may require additional or increased sweeping activities.

Make note of any streets that have consistently higher content of debris and/or sediments and inform supervisor who can increase schedule of operations.

Make sure that sweeper debris is taken directly to the permanent disposal site or is taken to a secure temporary location, away from inlets or direct runoff, for storage.

Washing of sweeper equipment only at wash rack to trap grease, oils and sediment.

If unusual sweeper debris is noted, bring to attention of supervisor for testing.

#### DO NOT

**DO NOT** ignore any leak or drips from sweeper equipment; put in a repair ticket and utilize a drip pan during temporary storage of vehicle.

**DO NOT** transfer or dispose of sweeper materials near or in storm drains, or drainage ditches, even temporarily.

**DO NOT** wash street sweeping equipment outside except at the Road & Bridge Vehicle Wash area that has the benefit of the oil and grease trap to collect pollutants.

**DO NOT** ignore routine maintenance requirements for the sweeper equipment that can possibly mitigate future problems and nip potential equipment leaks in the bud.

**DO NOT** repair sweeper equipment or vehicles outside; use a covered, designated area for such repairs.

**DO NOT** wash down any streets or curbs with the exception of very fine water spray for dust control.





# Your Actions Prevent Stormwater Pollution!

## *Standard Operating Procedures for Water Quality Protection*

### Vehicle Maintenance SOP

#### Why

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of the City's Municipal Operations functions that have the potential to impact 'waters of the state.

One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from the site during the performance of municipal operations activities.**

#### What

This **Vehicle Maintenance SOP** provides operational best management practices (BMPs) developed to control pollutant discharges by promoting regular maintenance of City-contracted vehicles and equipment, as well as appropriate activities within the maintenance shop and bays. Several operational components of vehicle maintenance activities have the potential for polluting receiving waters, including storage while waiting for repair (leaks); parts cleaning (spills), storage of maintenance fluids used in repairs and routine maintenance (leaks & spills); and the maintenance facility itself (poor good housekeeping practices). These procedures are critical steps that must be included during all maintenance activities, pre-repair storage and post-storage of vehicles to be maintained.



#### Who

City employees or City-contracted personnel who perform maintenance on City vehicles and equipment.

#### Where

The County's Road & Bridge Peoria Street facility, specifically the maintenance bays and corresponding storage areas.

#### DO

#### DO NOT

#### General Vehicle Maintenance Activities

Keep all work areas neat & well organized. Sweep up all trash & debris daily or as needed. Label containers, sign procedures, and designate work areas.

Conduct daily inspections to ensure that equipment & materials are being handled, disposed and stored correctly. Recycle or dispose of all wastes properly and promptly.

Have spill cleanup materials nearby. Clean up spills promptly, with DRY methods; cleanup is completed **ONLY** after absorbent disposed properly and rags disposed of properly or sent to industrial laundry.

Keep wastes separated to increase waste recycling/disposal options and reduce costs.

Conduct maintenance and repair activities indoors or under cover whenever possible to minimize exposure of fluids to stormwater runoff.

Park vehicles to be maintained in the designated areas. Monitor parked vehicles closely for leaks; use drip pan as needed.

Drain fluids from leaking or wrecked vehicles, and from motor parts, as soon as possible and dispose of fluids properly.

**DO NOT** let waste accumulate at or around the work place; more clutter equals more accident opportunities.

**DO NOT** transfer, pour or dispose of maintenance fluids outdoors near or in storm drains or ditches.

**DO NOT** wash or hose down the garage area except where the wash water will only enter the sanitary sewer drain as an approved discharge; use dry clean-up methods as often as possible.

**DO NOT** repair equipment or vehicles outside; use a covered, designated area for such repairs.

**DO NOT** leave a leaking vehicle unattended; use a drip pan temporarily and then drain fluids if not being repaired and waiting for final disposition.

**DO NOT** mix waste oil, fuel, antifreeze or chlorinated solvents. Consult a hazardous waste hauler.



# **Your Actions Prevent Stormwater Pollution!**

## ***Standard Operating Procedures for Water Quality Protection***

### **Vehicle Washing SOP**

#### ***Why***

**Standard Operating Procedures (SOPs)** have been prepared for all activities conducted as part of the City's Municipal Operations that have the potential to impact 'waters of the state. One of the primary goals of these SOPs is to **provide time-tested, generally accepted routine procedures that minimize the potential for release of pollutants from the site during the performance of municipal operations activities.**

#### ***What***

This **Vehicle Washing** SOP provides operational best management practices (BMPs) developed to control pollutant discharges by promoting a conscious effort when washing City-contracted vehicles and equipment to reduce the amount of sediment, antifreeze, heavy metals, oil and other materials that may runoff from the wash rack. Uncontrolled washing activities have a potential to produce a high concentration of pollutants in runoff wash water to the stormwater system. These procedures are critical steps that must be included in every vehicle washing activity at the Road & Bridge South Peoria Street facility Wash Rack, including the truck rinse off area to the west of the Wash Rack.



#### ***Who***

All City employees and City-contracted personnel including Trustees, who provide vehicle washing services.

#### ***Where***

All activities at the Road & Bridge South Peoria Street facility Wash Rack for vehicles and equipment, including the rinse off area for trucks.

#### **DO**

Keep the Wash Rack area neat and well organized. Sweep or pick up all trash and debris daily or as needed, before it is carried away during a storm event.

Keep the drain sock handy and close by as it will be used frequently. Replace drain sock when it can no longer hold back the sediments from the drain.

Use the drain socks to protect the wash rack drain from excessive sediments. Prior to any washing activity, put the "sock" filter medium around the four sides of the drain to catch any sediment and debris from washing activity. Even if you might not 'see' any sediment, there is usually quite a bit on the undercarriage.

After each washing activity, sweep up the filtered sediment and debris after it is dry to keep it from going back down the drain or off site during a storm event. Transfer to a container for storage. Use DRY cleanup only, do not hose down accumulated sediments.

Transport the dried sediment to the Vector Truck washout area when quantity collected and stored is sufficient to warrant a trip there.

Use biodegradable, phosphate free detergents.

Keep equipment clean; do not allow a buildup of oil/grease. Conduct daily inspections.

#### **DO NOT**

**DO NOT** let waste accumulate at Wash Rack.

**DO NOT** let filtered sediments that were kept from the drain with the drain sock go either back down the drain or be carried off site in a rain event.

**DO NOT** wash or hose down the washing area except where the wash water will only enter the sanitary sewer drain as an approved discharge.

**DO NOT** handle detergent containers alone if awkward or requires over-exertion on your part. Get help and spread the weight load.

**DO NOT** use phosphate detergents; this is in the Cherry Creek basin that has a regulatory standard in place for Phosphorous.

**DO NOT** use spray-on acid-based wheel cleaners where the rinse water may flow to a storm drain untreated.

## Appendix F: Impaired Waters Monitoring Plan



APPENDIX F

Impaired Waters

Monitoring

Plan

for

Anniston, AL

March 3, 2022

## Plan Review and Revision

This log will be used to document Impaired Waters Monitoring Plan revisions and their submittals to the Alabama Department of Environmental Management (ADEM).

DATE OF PLAN REVISION	DESCRIPTION OF PLAN REVISIONS
May 31, 2019	Impaired Waters Monitoring Plan submitted to ADEM for review as a result of Cane Creek being newly listed on ADEM's final 2018 303(d) list.
March 3, 2022	Impaired Waters Monitoring Plan submitted to ADEM for review as a result of UT to Choccolocco Creek being listed on ADEM's final 2020 303(d) list.

## Background

Section 303(d) of the Clean Water Act requires states (including Alabama) to identify waters that do not currently support their designated use and prioritize these waters based on the severity of the pollution and the designated use. Waters identified as not meeting their designated use are considered impaired and are summarized by each state in a biennial (every two years) list called the 303(d) List which is then submitted to EPA.

For each impaired waterbody, the state is required to establish a total maximum daily load (TMDL) for the pollutant(s) of concern (POC) to meet applicable water quality standards.

Alabama's most recent Final 2020 303(d) List includes segments of rivers, streams, lakes, reservoirs, and estuaries that do not support their designated use. The list contains information specific to each impaired segment including:

- Waterbody name
- County(s) in which the impaired segment is located
- Cause(s) of the impairment
- Source(s) of known or suspected pollutant(s)
- Location of listed waterbodies
- 

## Impaired Stream Segments within City Limits of Anniston

Based on the Final 2020 and Draft 2022 303(d) list developed by ADEM, there currently are two impaired stream segments, Cane Creek and UT to Choccolocco Creek, within the City's MS4 (i.e., the urbanized areas of incorporated areas of Anniston) as summarized in **Table 1** below. The designated use for Cane Creek and UT to Choccolocco Creek is "Fish and Wildlife."

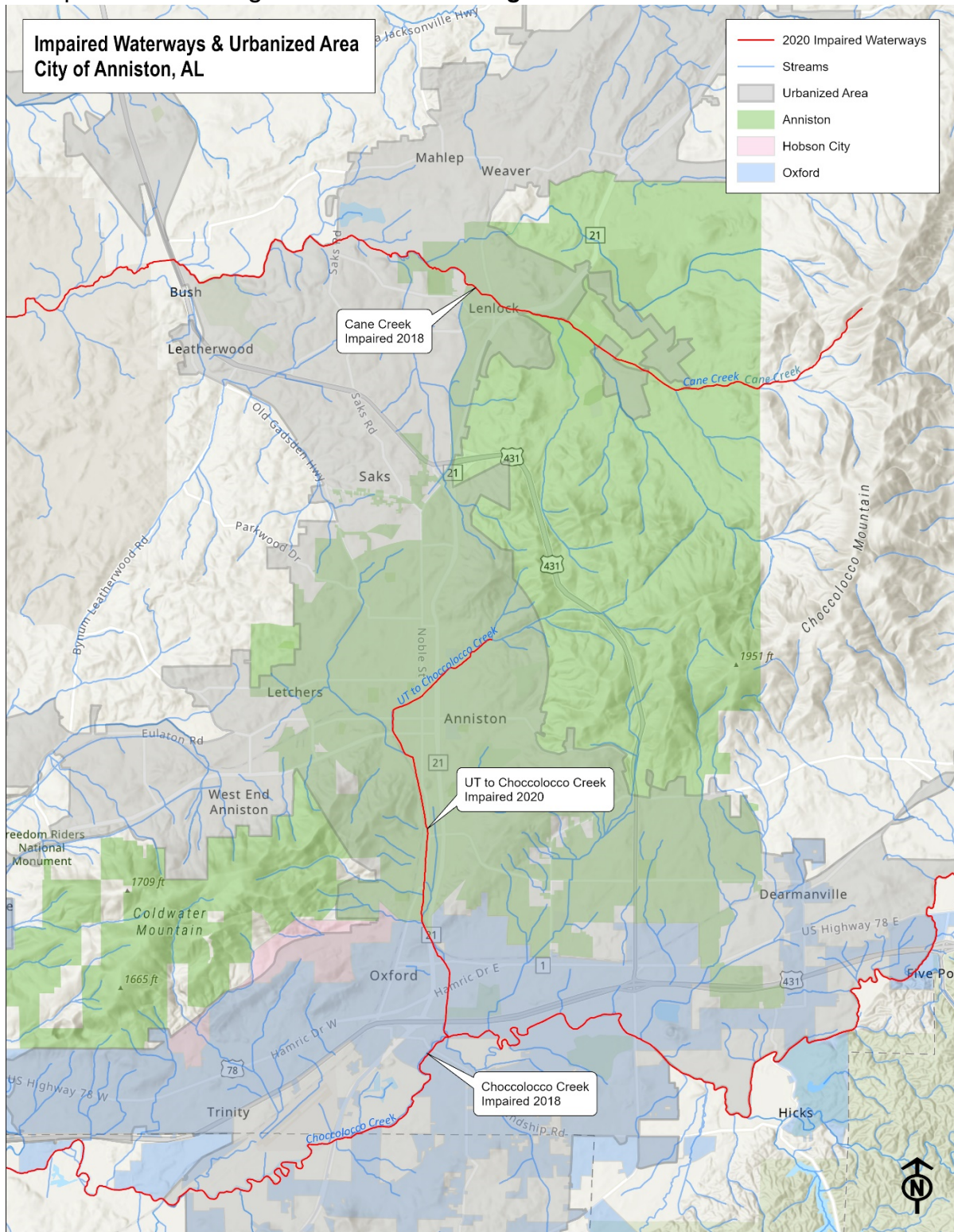
**Table 1. Impaired Waters in the City of Anniston**

Assessment Unit	Waterbody Name	River Basin	County	Causes	Basis for Addition to the List	Date of 303(d) Listing
AL03150106-0408-100	Cane Creek	Coosa	Calhoun	Pathogens ( <i>E. coli</i> )	Records at ADEM station CNCC-1 from 2016 show that the <i>E. coli</i> criterion was exceeded in 5 out of 8 samples.	ADEM 2018
AL03150106-0505-100	UT to Choccolocco Creek	Coosa	Calhoun	Pathogens ( <i>E. coli</i> )	Records at ADEM station UCHC-1 from 2017 show that the <i>E. coli</i> criterion was exceeded in 7 out of 23 samples.	ADEM 2020



## Map of Impaired Waters

The impaired stream segments are shown on **Figure 1** below.



**Figure 1: Impaired waterways and urbanized area of the City of Anniston**

This map also shows another impaired stream segment (Choccolocco Creek) which is located south of the City. The Impaired Waters Monitoring Plan does not address this waterway since it is located outside the City limits.

## Water Quality Monitoring Plan

### Monitoring Sites

The City has identified two (2) monitoring locations within Cane Creek and two (2) monitoring locations within the UT to Choccolocco Creek where *E. coli* bacteria samples will be collected. The four sites are summarized in **Table 2** below and shown in **Figure 2**.

**Table 2. Impaired Waters Monitoring Sites**

Site ID	Location
CC-1	Iron Mountain Road
CC-2	Woodland Park
UT-1	Woodland Avenue
UT-2	RR & S Noble Street

### Water Sample Collection

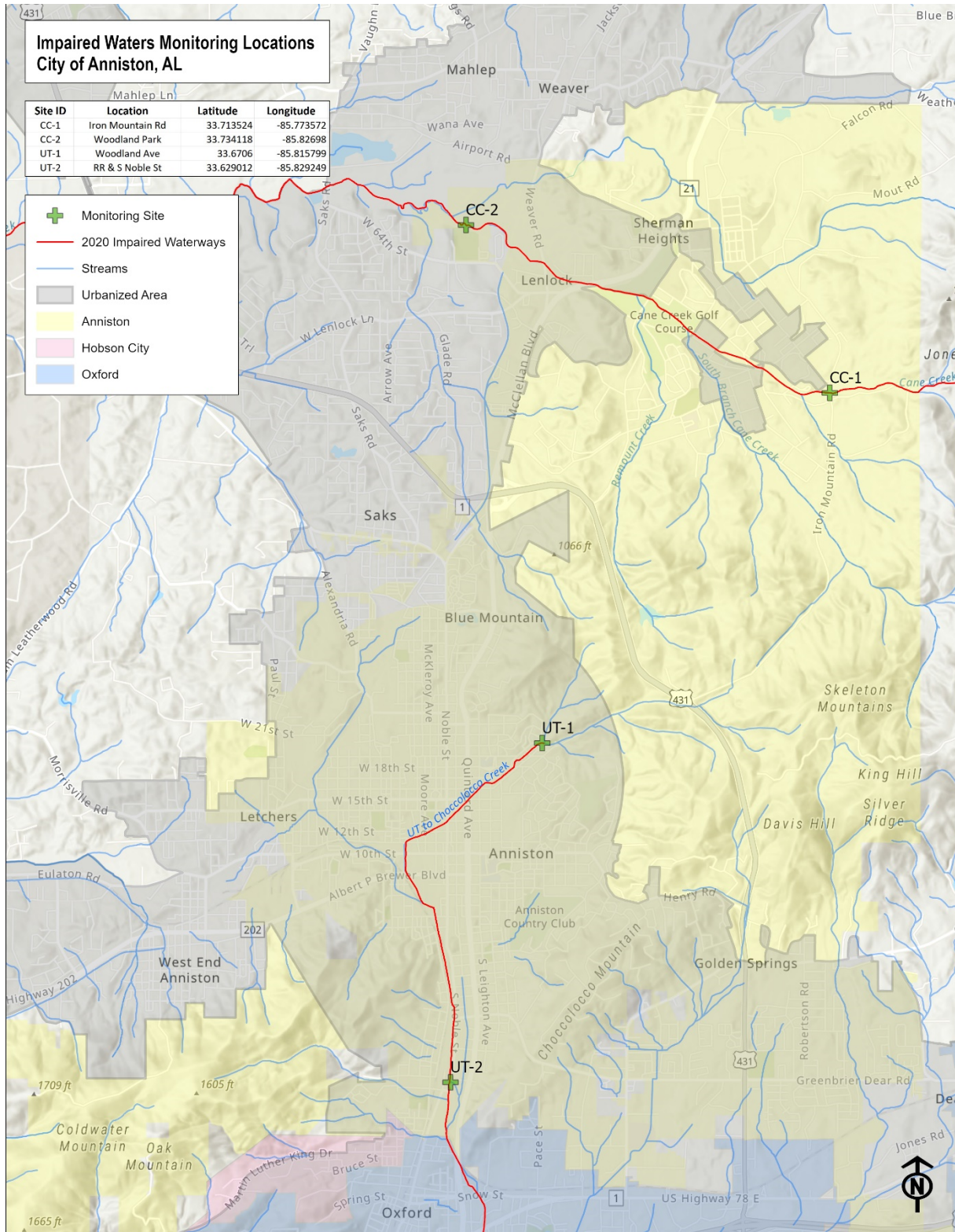
#### Cane Creek

The City will conduct *E. coli* sampling within the impaired segment of Cane Creek. Samples will be collected twice per year at each monitoring location. One grab sample will be collected during the summer period from May – October and one grab sample will be collected during the winter period from November – April. The samples will be analyzed by a qualified independent lab. The City initiated the sampling at both sites on February 5, 2019.

#### UT to Choccolocco Creek

The City will conduct *E. coli* sampling within the UT to Choccolocco Creek. Samples will be collected twice per year at each monitoring location. One grab sample will be collected during the summer period from May – October and one grab sample will be collected during the winter period from November – April. The samples will be analyzed by a qualified independent lab. The City will initiate the sampling at both sites in February and March of 2022.





**Figure 2: Impaired waterways monitoring locations for in the City of Anniston**

## Water Sample Reporting

The City will include, in each Annual Report, a copy of all monitoring results from the reporting period, including the information required by Part V and Part VI of the City's MS4 Permit.

## Water Quality Criteria (Bacteria)

For the designated use of Fishing and Wildlife, ADEM has established the following water quality criteria for bacteria:

- (i) In **non-coastal waters**, bacteria of the *E. coli* group shall not exceed a **geometric mean of 548 colonies/100 ml**; nor **exceed a maximum of 2,507 colonies/100 ml in any sample**. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours.
- (ii) **For incidental water contact and whole body water-contact recreation during the months of May through October**, the bacterial quality of water is acceptable when a sanitary survey by the controlling health authorities reveals no source of dangerous pollution and when the geometric mean *E. coli* organism density **does not exceed 126 colonies/100 ml nor exceed a maximum of 298 colonies/100 ml in any sample in non-coastal waters**. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours. When the geometric bacterial coliform organism density exceeds these levels, the bacterial water quality shall be considered acceptable only if a second detailed sanitary survey and evaluation discloses no significant public health risk in the use of the waters. Waters in the immediate vicinity of discharges of sewage or other wastes likely to contain bacteria harmful to humans, regardless of the degree of treatment afforded these wastes, are not acceptable for swimming or other whole body water-contact sports."

Source: *Chapter 335-6-10 Water Quality Criteria, Alabama Department of Environmental Management, Water Division, Water Quality Program*

## **APPENDIX**

1. Section C.5 (Surface Water and Sediment Sampling) of ADEM's Alabama Environmental Investigation and Remediation Guidance (AEIRG)
2. *Surface Water Sample Collection Fecal Coliform, Enterococcus, & E. Coli.*

**C.4.4 Specific Sampling Equipment Quality Assurance Techniques** - Clean and repair, if necessary, all equipment used to collect groundwater samples before storing at the conclusion of field studies, as outlined in Appendix E of this document. Cleaning procedures or repairs utilized in the field must be thoroughly documented in the field records or field logbook.

## **C.5 Surface Water and Sediment Sampling**

Prior to any sampling events, conduct initial reconnaissance to locate suitable sampling locations. Bridges and piers are normally good choices since they provide ready access and permit water sampling at any point across the width of the water body. However, these structures may alter the nature of the water flow and thus influence sediment deposition or scouring. Additionally, bridges and piers are not always located in desirable locations with reference to waste sources, tributaries, *etc.* Wading for water samples in lakes, ponds and slow-moving rivers and streams must be done with care since bottom deposits are easily disturbed, thereby resulting in increased sediments in the overlying water column. On the other hand, wadeable areas may be best for sediment sampling. In slow-moving or deep water, a boat is usually required for sampling.

### **C.5.1 Sampling Site Selection**

- (a) Rivers, Streams and Creeks – Locate areas that exhibit the greatest degree of cross-section homogeneity in the selection of a surface water sampling site in rivers, streams, or creeks. When collecting a series of samples in close proximity to each other, always collect the most downstream location first to prevent substrate disruption. When several locations along a stream reach are to be sampled, they must be strategically located at the following locations:
  - i. At intervals based on time-of-water travel, not distance [*e.g.*, sampling stations may be located about one-half day time-of-water travel for the first three days downstream of a waste source (the first six stations) and approximately one day through the remaining distance].
  - ii. At the same locations, if possible, when the data collected are to be compared to a previous study.
  - iii. Wherever a marked physical change occurs in the stream channel. When major changes occur in a stream reach, an upstream, downstream, and intermediate station must be selected. Major changes may consist of:
    - a. A wastewater discharge;
    - b. A tributary flow;
    - c. Non-point source discharge (farms or industrial sites); or,
    - d. A significant difference in channel characteristics.
  - iv. At isolated major discharges and tributaries. Dams and weirs cause changes in the physical characteristics of a stream. They usually create quiet, deep pools in river reaches that previously were swift and shallow. Bracket such impoundments with sampling stations. When time-of-water-travel through the

pools is long, establish stations within the impoundments. To determine the effects of certain discharges or tributary streams on ambient water quality, locate the stations both upstream and downstream from the discharges. In addition to the upstream and downstream stations bracketing a tributary, establish a station on the tributary at a location upstream and out of the influence of the receiving stream. Sample tributaries as near the mouth as feasible and utilize a boat, if necessary. Care should be exercised to avoid collecting water samples from stratified locations that are due to difference in density resulting from temperature, dissolved solids, or turbidity.

- v. Actual sampling locations will vary with the size of the water body and the mixing characteristics of the stream or river. For streams less than 20 feet wide, select a sampling site where the water is well mixed. In such cases, a single grab sample taken at mid-depth at the center of the channel is adequate to represent the entire cross-section. A sediment sample could also be collected in the same vicinity if applicable.
- vi. For slightly larger streams, collect at least one vertical composite from mid-stream. Collect samples just below the surface, at mid-depth, and just above the bottom. For much larger streams and rivers, collect at least quarter point ( $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$  width) composite samples. Measure dissolved oxygen, pH, temperature, and conductivity from each aliquot of the vertical composite.
- vii. For large rivers, several locations across the channel width should be sampled. Vertical composites across the channel width should be located in a manner that is roughly proportional to the flow (*i.e.*, they should be closer together toward mid-channel where most of the flow is, than toward the banks where the proportion of total flow is less).

In most circumstances, collect a number of sediment samples along a cross section of a river or stream in order to adequately characterize the bed material. A common procedure is to sample at quarter points along the cross-section. When the sampling technique or equipment requires that the samples be extruded or transferred on-site, they may be combined into a single composite sample. However, samples of dissimilar composition must not be combined and must be stored for separate analysis in the laboratory. To ensure representative samples, the preferred method is diver-deployed coring tubes.

- (b) Lakes, Ponds, and Impoundments - Lakes, ponds, and impoundments have a much greater tendency to stratify than rivers and streams. The relative lack of mixing generally requires that more samples be obtained. Occasionally, an extreme turbidity difference may occur where a highly turbid river enters a lake. For these situations, each layer of the vertically stratified water column needs to be considered. The number of water sampling stations on a lake, pond, or impoundment varies with the objective of the investigation as well as the size and shape of the basin. In ponds and small impoundments, a single vertical composite at the deepest point is sufficient. Dissolved oxygen, pH, and temperature are measured for each vertical composite aliquot. In naturally-formed ponds, the deepest point is usually near the center; in impoundments, the deepest point is usually near the dam. In lakes and larger impoundments, several vertical subsamples must be composited to form a single

sample. These vertical sampling locations are often collected along a transection or grid. In lakes with irregular shapes and with several bays and coves that are protected from the wind, additional separate composite samples are needed to adequately determine water quality. Similarly, collect additional samples where discharges, tributaries, land-use characteristics, *etc.*, are suspected of influencing water quality. When collecting sediment samples in lakes, ponds, and reservoirs, the sampling site should be approximately at the center of the water mass. Consider the shape, inflow pattern, bathymetry, and circulation when selecting sediment-sampling sites in lakes or reservoirs.

- (c) Estuarine Waters – Conduct a reconnaissance investigation for each estuarine study unless prior knowledge of the estuarine type is available. Focus the reconnaissance on the freshwater and oceanic water dynamics with respect to the study objective of the National Oceanic Atmospheric Administration (NOAA) tide tables and United States Geological Survey (USGS) freshwater surface water flow records that provide valuable insights into the estuary hydrodynamics. Water sampling in estuarine areas is normally based upon the tidal phases, with samples collected on successive slack tides. Include vertical salinity measurements at one to five-foot increments coupled with vertical dissolved oxygen and temperature profiles in all estuarine sampling events. A variety of water sampling devices are used but the Van Dorn (or similar type) horizontal sampler or peristaltic pump is suitable. Samples are collected at mid-depth areas where the depths are less than 10 feet unless the salinity profile indicates the presence of a halocline (salinity stratification). In this case, samples are collected from each stratum. Depending upon the study objective, when depths are greater than 10 feet, collect water samples at the one-foot depth from the surface, mid-depth, and one-foot from the bottom. Estuarine investigations are two-phased, with study investigations conducted during wet and dry periods. Depending upon the freshwater inflow sources, estuarine water quality dynamics cannot normally be determined by a single season study.
- (d) Control Stations - In order to have a basis for comparison of water quality, the collection of samples from control stations is always necessary. A control station upstream from the waste source is as important as the station(s) down-gradient, and should be chosen with equal care to ensure representative results. In some situations it is desirable to have background stations located in similar, nearby estuaries that are not impacted by the phenomena or pollutants being investigated. At times, it may be desirable to locate two or three stations downstream from the waste inflow to establish the rate at which the unstable material is changing.

### **C.5.2 Surface Water Sampling Equipment**

- (a) Dipping Using Sample Container – Collect a sample directly into the sample container when the surface water source is accessible by wading or other means. Face the sampler upstream and collect the sample without disturbing the sediment. Always collect the surface water sample prior to a sediment sample at the same location. Do not displace the preservative from a pre-preserved sample container such as the 40-ml VOC vial.
- (b) Scoops - Stainless steel scoops are useful for reaching out into a body of water to collect a surface water sample. Use the scoop to directly collect and transfer a surface

water sample to the sample container, or it may be attached to an extension in order to access the selected sampling location. The scoop is one of the most versatile sampling tools available to the field investigator.

- (c) Peristaltic Pumps - Another device that can be effectively used to sample a water column is the peristaltic pump/vacuum jug system. The use of a metal conduit to which the tubing is attached allows for the collection of a vertical sample (up to about a 25-foot depth) that is representative of the water column. Commercially available pumps vary in size and capability with some being designed specifically for the simultaneous collection of multiple water samples.
- (d) Discrete Depth Samplers - When discrete samples are desired from a specific depth, and the parameters to be measured do not require a Teflon<sup>®</sup> coated sampler, a standard Kemmerer or Van Dorn sampler may be used. The Kemmerer sampler is a brass cylinder with rubber stoppers that leave the ends of the sampler open while being lowered in a vertical position, allowing free passage of water through the cylinder. The plastic Van Dorn sampler is lowered in a horizontal position. A messenger is sent down a rope when the sampler is at the designated depth to cause the stoppers to close the cylinder, which is then raised. Water is removed through a valve to fill respective sample containers. With a rubber tube attached to the valve, dissolved oxygen sample bottles can be properly filled by allowing an overflow of the collected water. With multiple depth samples, care should be taken not to stir up the bottom sediment and thus bias the sample.
- (e) Bailers - Teflon<sup>®</sup> bailers may also be used for surface water sampling if the study objectives do not necessitate a sample from a discrete interval of the water column. A closed top bailer with a bottom check-valve is sufficient for many studies. As the bailer is lowered through the water column, water is continually displaced through the bailer until the desired depth is reached, at which point the bailer is retrieved. This technique may not be successful where strong currents are found.
- (f) Buckets - A plastic bucket can be used to collect samples for *in-situ* analyses (e.g., pH, temperature and conductivity). However, the bucket must be rinsed twice with the sample water prior to collection of the sample.

### C.5.3 Sediment Sampling Equipment

- (a) Scoops and Spoons - If the surface water body is wadeable, collect sediment samples by using a stainless steel scoop or spoon. The sample is collected by wading into the surface water body and, while facing upstream (into the current), scooping the sample along the bottom of the surface water body in the upstream direction. Remove excess water from the scoop or spoon. However, this may result in the loss of some fine particle size material associated with the bottom of the surface water body. Place the sample aliquots in a glass pan and homogenize. In surface water bodies that are too deep to wade, but less than eight feet deep, use a stainless steel scoop or spoon attached to a piece of conduit either from the banks if the surface water body is narrow or from a boat. Place the sediment into a glass pan and homogenize. Use a BMH-60 sampler if the surface water body has a significant flow and too deep to wade. The BMH-60 is not efficient in mud or other soft substrates because its weight will cause penetration to deeper sediments, missing the most recently deposited material at the sediment-water interface. It is also difficult to release secured samples in an

undisturbed fashion that would readily permit sub-sampling. Use BMH-60 only on subsamples that have not been in contact with the metal wall of the sampler.

(b) Dredges

- i. Peterson Dredge – For routine analyses, use the Peterson dredge when the bottom is rocky, in very deep water, or when the stream velocity is high. Slowly lower the dredge as it approaches bottom since it can displace and miss fine particle-sized sediment if allowed to drop freely.
- ii. Ekman Dredge – The Ekman dredge has only limited usefulness. It performs well where the bottom material is soft, as when covered with organic sludge or light mud. It is unsuitable, however, for sandy, rocky and hard bottoms, and is too light for use in streams with high velocities. Do not use it from a bridge that is more than a few feet above the water because the spring mechanism, which activates the sampler, can be damaged if the Ekman dredge is dropped from too great a height.
- iii. Ponar Dredge – The Ponar dredge is a modification of the Peterson dredge and is similar in size and weight. It has been modified by the addition of side plates and a screen on the top of the sample compartment. The screen over the sample compartment permits water to pass through the sampler as it descends, reducing turbulence around the dredge. The Ponar dredge is easily operated by one person in the same fashion as the Peterson dredge. The Ponar dredge is one of the most effective samplers for general use on all types of substrates.
- iv. Mini Ponar Dredge – The “mini” Ponar dredge is a smaller, much lighter version of the Ponar dredge. It is used to collect smaller sample volumes when working in industrial tanks, lagoons, ponds, and shallow water bodies. It is a good device to use when collecting sludge and sediment containing hazardous constituents because the size of the dredge makes it more amenable to field cleaning.

- (c) Coring – Core samplers are used to sample vertical columns of sediment. They are particularly useful when a historical picture of sediment deposition is desired since they preserve the sequential layering of the deposit, and the loss of material at the sediment-water interface is minimized. Many types of coring devices have been developed depending on the depth of the water from which the sample is to be obtained, the nature of the bottom material, and the length of core to be collected. They vary from hand push tubes to weight or gravity-driven devices. Coring devices are also useful in pollutant monitoring because turbulence created by descent through the water is minimal, and fines of the sediment-water interface are also minimally disturbed. The sample is withdrawn intact permitting the particular removal of layers of interest. Core liners made of glass or Teflon<sup>®</sup> can be purchased, reducing possible sample contamination. The samples are delivered to the lab for analysis in the tube in which they are collected. The disadvantage of coring devices is that a relatively small surface area and sample size is obtained, necessitating repetitive sampling to achieve the required amount of material needed for analysis. The advantages offset the disadvantage that coring devices are recommended in sampling sediments for trace organic compounds or metals analyses. In shallow, wadeable waters, the direct



use of a core liner or tube made of Teflon<sup>®</sup>, plastic, or glass is recommended by the USEPA Region 4 for the collection of sediment samples. Teflon<sup>®</sup> or plastic is preferred to glass because they are less fragile and reduce the possibility of sample loss. Stainless steel push tubes are also appropriate and provide a better cutting edge and higher strength than Teflon<sup>®</sup>. The use of glass or Teflon<sup>®</sup> tubes eliminates metal contamination from core barrels, cutting heads, and retainers. The tube is approximately 12 inches in length if recently deposited sediments (8 inches or less) are to be sampled. Use longer tubes when the depth of the substrate exceeds 8 inches. Soft or semi-consolidated sediments such as mud and clays have a greater adherence to the inside of the tube and can be sampled with larger diameter tubes. A small-diameter tube is required for coarse or unconsolidated sediments such as sands and gravel, because of their tendency to fall out of the tube. A 2 inch diameter tube is usually the best size. The wall thickness of the Teflon<sup>®</sup>, plastic or glass tube is about 1/3 inch. The core tube is pushed into the substrate until 4 inches or less of the tube is above the sediment-water interface. When sampling hard or coarse substrates, a gentle rotation of the tube, while being pushed, will facilitate greater penetration and decrease core compaction. The top of the tube is capped to provide suction and reduce the chance of losing the sample. A Teflon<sup>®</sup> plug or a sheet of Teflon<sup>®</sup> held in place by a rubber stopper or cork may be used. After capping, slowly extract the tube with the suction and adherence of the sediment keeping the sample in the tube. Cap the other side of the tube before pulling the bottom part of the core above the water surface.

**SURFACE WATER SAMPLE COLLECTION  
FECAL COLIFORM, ENTEROCOCCUS, & *E. COLI***

**SOP #2064**

**Rev. 6.0**

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### ***PREFACE***

This Standard Operating Procedures (SOP) Manual supersedes all Departmental SOPs relating to the methods addressed and is designed to be periodically reviewed and updated. The primary purpose of this document is to establish and maintain uniform operational and quality control guidance. The compliance with these procedures is essential to produce reliable data. Any deviation from this SOP must be documented and approved by the Project QA/QC Coordinator and/or project supervisor.

### ***DISCLAIMER***

This document has been prepared for use by the staff of the Alabama Department of Environmental Management (ADEM). Mention of trade names or commercial products does not constitute endorsement or recommendation for use. No portion of this manual is intended to supersede any Departmental policy memorandum issued by the Director or Deputy Director.

### ***NOTE***

Any alpha suffix added to the version date indicates the incorporation of corrections for non-critical typographic errors or formatting, i.e., no methodology changes were incorporated.



## **SURFACE WATER SAMPLE COLLECTION FECAL COLIFORM, ENTEROCOCCUS & *E. COLI***

### **1 SCOPE AND APPLICATION**

This method describes the surface water sample collection for the Bacteriological analysis by the ADEM Laboratory, or for Beach Monitoring, the Alabama Department of Public Health.

### **2 SUMMARY OF METHOD**

- 2.1 Surface water samples are collected in appropriately sized, clean, sterile bottles and preserved on ice for transport to the laboratory.
- 2.2 The maximum holding time before sample incubation is initiated is 8 hours.
- 2.3 Samples processed after this time must be qualified to indicate that the result is an estimate because of the exceedance of the method holding time.

### **3 INTENSIVE BACTERIOLOGICAL STUDIES**

- 3.1 Intensive bacteriological studies consist of five individual samples collected no closer than 24 hours apart within a 30 day time period.
- 3.2 Samples must, if at all possible, be analyzed within holding time.
- 3.3 The 30 day period should be within the June 1st to September 30th time period. If two intensive surveys are requested the preferred time periods are June/July for the first 30-day period and August/September for the second 30-day period.

### **4 DEFINITIONS**

**Grab Sample** - an individual sample collected at one location over a period of time not exceeding 15 minutes. A grab sample is normally associated with water or wastewater sampling. However, soil, sediment, water, liquid hazardous waste samples, etc., may also be considered grab samples; no particular time limit would apply for the collection of such samples. Grab samples shall be used to characterize the medium at a particular location at one instant in time.

### **5 HEALTH & SAFETY WARNINGS**

General field health and safety warnings apply.

### **6 INTERFERENCES**

- 6.1 Surface waters containing residual chlorine or other halogens must be preserved with (sterile) Sodium Thiosulfate ( $\text{Na}_2\text{S}_2\text{O}_3$ ) to neutralize any residual halogen and prevent the continuation of the bactericidal action during transit. (SM 1998, SM2005, SM 2012 Section 9060A.2)
- 6.2 Surface waters containing high concentrations of copper, zinc, or heavy metals must be preserved with (sterile) disodium salt of ethylenediaminetetraacetic acid (EDTA) (See Standard Methods 1998 and 2005, Section 9060A part 2).

## 7 PERSONNEL QUALIFICATIONS

- 7.1 No employee shall conduct this technique until he/she has actual field experience and has successfully demonstrated the ability of conducting this technique under the supervision of a senior staff member.
- 7.2 Each new employee shall accompany an experienced field employee on as many as possible of the differing types of sampling situations the employee may be called upon to conduct.
- 7.3 During this training period the new employee will be permitted to perform all facets of field investigations, including sampling, under the direction and supervision of senior technical staff members.

## 8 EQUIPMENT AND SUPPLIES

Sterile 120, 250, or 500 mL Bottles, depending on sample being collected	Wash Water
Labels	Antibacterial Soap
Pencil/Marking Pen	Disposable Gloves
Cooler with ice	Paper Towels
Chain-of-Custody Form(s)	

### Beach Bacteria Sample Supplies

Sterile, non-toxic 250 or 500 mL Polypropylene bottles	Chain-of-Custody/Lab Report forms
Sterile phosphate buffer for Trip Blanks	

## 9 SAMPLE COLLECTION

### General

- 9.1.1 Surface water samples are collected in appropriately sized, clean, sterile bottles and preserved on ice for transport to the laboratory. (120 mL for *E. coli* or fecal coliform by defined substrate technology, 250 or 500 mL for Enterococcus).
- 9.1.2 DO NOT pre-rinse bottles, as they are sterile before collection.
- 9.1.3 When collecting a bacteriological sample by hand, grasp the bottle at the base with one hand and plunge the bottle mouth down into the water to avoid introducing any surface scum. To avoid contamination, position the mouth of the bottle away from the collector's hand and body.
- 9.1.4 The sampling depth should be 6-12 inches below the water surface. If the stream is less than 12 inches deep, the sampling depth should be mid-depth.
- 9.1.5 Tip the bottle slightly upward to allow air to exit and the bottle to fill.
- 9.1.6 Samples for Defined Substrate Technology (*E. coli* or Fecal coliform) and Enterococci procedures: Fill the sterile bottle so the meniscus touches the fill-line. Tightly close and label the bottle. If the bottle is over-filled, the excess may be poured off before closing the bottle.

### Wadeable Streams

- 9.1.7 Wade into the stream downstream of the intended sample collection location, taking care not to disturb the substrate.



- 9.1.8 Position the mouth of the container facing upstream and in front of your position.

By Boat

- 9.1.9 On the upstream side of the boat, position the mouth of the bottle into the current away from the collector's hand.
- 9.1.10 If there is no current, as in the case of a reservoir, create a current artificially by pushing the bottle forward horizontally in a direction away from the hand.

From Bridge

- 9.1.11 When sampling from a bridge, place the bottle in a weighted frame and lower the device to the water on the upstream side with a rope.
- 9.1.12 Face the bottle mouth upstream by swinging the sampling device first downstream (toward the underside of the bridge), and then allowing it to drop into the water, without slack in the rope.
- 9.1.13 Pull the sampling device rapidly upstream and out of the water. Take care not to dislodge dirt or other material from the bridge or sampling platform that might fall into the open bottle.
- 9.1.14 It is not acceptable to collect any bacteria samples using a bucket sampler.

Swimming Beaches

- 9.1.15 Wade out into the swimming area until the total water depth is 2 to 3 feet. Alternatively, a sample may be collected off a pier in water that is 2 to 3 feet deep. Care should be exercised to collect the sample in a direction away from the pier.
- 9.1.16 Position the mouth of the bottle away from the collector's hand and body. Create an artificial current by moving the bottle horizontally in the direction it is pointed.

## **10 SAMPLE HANDLING AND PRESERVATION**

- 10.1 Samples must be transported on ice and held below 8°C, but not frozen, during transport. Samples must not be allowed to submerge in water.
- 10.2 Samples that will be processed at the laboratory within 1 hour after collection do not require iced preservation.
- 10.3 If not processed upon laboratory receipt, samples must be stored in a laboratory refrigerator between 2-8°C.
- 10.4 Samples that are not collected as part of an intensive bacteriological study or beach monitoring sampling event must be received and processed in the microbiology laboratory no more than 36 hours after collection.
- 10.5 Samples collected as part of an intensive bacteriological study from which a geometric mean is calculated or samples collected for monitoring of swimming beaches must be processed/incubated in the lab within 8 hours of collection.
- 10.6 Any samples older than 8 hours at the time incubation is initiated are noted on the laboratory bench sheet and reported using the appropriate laboratory qualifier codes.

## **11 TROUBLESHOOTING**

N/A

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## **12 DATA ACQUISITION, CALCULATIONS, & DATA REDUCTION REQUIREMENTS**

N/A

## **13 DATA AND RECORDS MANAGEMENT**

- 13.1 All samples shall be fully identified and sample chain-of-custody maintained for all samples collected. See SOP#9040, Station, Sample Identification and Chain of Custody Procedures.
- 13.2 All sample collection activities shall be traceable, through field records or notes, to the person/crew collecting the sample. All maintenance and calibration records for sampling equipment shall be kept so that they are similarly traceable.

## **14 QUALITY CONTROL & QUALITY ASSURANCE**

### General

Duplicate samples for field quality control must be collected and analyzed at the frequency outlined in SOP #9021, Field Quality Control: Measurements and Samples.

### Beach Sampling

- 14.1.1 The bottles, prepared by the lab, have a paper or aluminum foil dust cover, which should remain on the bottle until the sample is collected.
- 14.1.2 A sufficient number of bottles are obtained from the lab for each sample site, for trip blanks and for temperature control samples.

## **15 REFERENCES**

- ADEM. 2016 (as amended). Standard Operating Procedures #2061 General Surface Water Sample Collection. Alabama Department of Environmental Management (ADEM), Montgomery, AL.
- ADEM. 2015 (as amended). Standard Operating Procedures #9021 Field Quality Control: Measurements and Samples. Alabama Department of Environmental Management (ADEM), Montgomery, AL.
- ADEM. 2013 (as amended). Standard Operating Procedures #9025 Field Equipment Cleaning Procedures. Alabama Department of Environmental Management (ADEM), Montgomery, AL.
- ADEM. 2017 (as amended). Standard Operating Procedures #9040 Station, Sample Identification and Chain of Custody Procedures. Alabama Department of Environmental Management (ADEM), Montgomery, AL.
- APHA. 2012. Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> ed., American Public Health Association (APHA), American Water Works Association and Water Pollution Control Federation, Washington, D.C.
- 40 CFR, Part 136/Vol. 77, No. 97/ Friday, May 18, 2012/ Rules and Regulations.



## 16 CHANGE TRACKING

Rev. Date (Review Date) Rev. #	Approved By:	Detail of Approved Change
02/06/2006 Rev. 0		Original Version
02/20/2007 Rev 1.0	V. Hulcher	Annual review. Corrected non-critical typos and formatting un-related to methods addressed. Added "Note" in preface section. Deleted Section 7.2 referencing the 3 months experience requirement. Deleted references to "Field Operations Division" within the body of the text (Section 7.3). Converted depth cited in 9.5.1 to feet from meters (as used in the Beach database).
02/29/08 Rev. 1.0		Annual Review—no changes
01/06/10 Rev. 2.0	J. Branch	Annual Review. Made non-critical grammatical and formatting changes. Added the following sections: 2.1 and 9.1.1. Modified section 8 to reflect current equipment needs.
02/27/12 Rev. 3.0	G. Curvin	Periodic review. Made non-critical grammatical and formatting changes. Modified the following sections: 2.2; 9.1.3; 9.1.6; and 9.5.1. Added Sections 9.1.2 and 9.4.4.
02/20/13 Rev. 4.0	J. Branch	Periodic review. Made non-critical grammatical and formatting changes. Modified the following sections: 2.2; 8; 9.1.6; 10.4-10.7; and 15. Added Sec. 10.2 and 10.3.
01/21/15 Rev. 5.0	J. Branch	Periodic review. Made non-critical grammatical and formatting changes. Modified the following sections: 6.1; 6.2; 9.1.11; 9.1.12; 10.1; and 10.2. Deleted Sec. 10.3.
01/25/17 Rev. 6.0	J. Branch	Periodic review. Made non-critical grammatical and formatting changes. Modified the following sec.: 9.1.4-shallow stream sample depth; 9.1.6-removed membrane filter methods; and 10-updated sample temperature requirements.