



City of Auburn

CITY OF AUBURN - EROSION AND SEDIMENT CONTROL INSPECTION AND ENFORCEMENT PROGRAM

July 2010

Executive Summary

The purpose of this document is to provide a brief overview of the Federal Phase II stormwater regulations which govern the Stormwater Management Program for the City of Auburn, as well as a detailed summary of the Erosion and Sediment Control Inspection and Enforcement Program which is part of the overall Stormwater Management Program for the City of Auburn.

The Alabama Department of Environmental Management (ADEM) has the predominant role and responsibility for regulating erosion and sediment control practices in Alabama. ADEM regulates construction activities on all sites one (1) acre or greater in size through a construction site erosion and sediment control permitting, inspection and enforcement program. ADEM is the primary regulatory entity responsible for the protection and preservation of water quality in Alabama. The City of Auburn has not been delegated any authority by the State or Federal government to directly develop water quality standards for construction site stormwater. The City of Auburn's Erosion and Sediment Control Inspection and Enforcement Program was established in 2003 with the adoption of the Erosion and Sediment Control Ordinance discussed in Section 2.1 of this document. The City of Auburn's Erosion and Sediment Control Inspection and Enforcement Program is intended to support ADEM construction site erosion and sediment control program in that potential issues can often be identified by the City and resolved prior to any significant water quality impacts occurring. The City of Auburn's Erosion and Sediment Control Inspection and Enforcement Program does not supersede

ADEM's construction site erosion and sediment control program and is intended solely to support ADEM's program. In addition, the City of Auburn's Erosion and Sediment Control Inspection and Enforcement Program does not regulate offsite discharges into Waters of the U.S. Once sediment has been released from a construction site, this becomes a violation of the Clean Water Act and ADEM/EPA enforcement procedures then govern. Post-storm event inspections conducted by the City ensure that failed best management practices (BMPs) are identified and corrected in a prompt manner. Potential water quality violations are required to be self-reported by the construction site permittee to ADEM through a Notice of Non-Compliance. ADEM can use this Notice of Non-Compliance and follow-up response actions to determine whether any further inspections or enforcement are warranted by ADEM. City of Auburn enforcement, fines, etc. are based on the failure to install and properly maintain BMPs.

1.0 Background

- The City of Auburn is categorized as a Phase II Stormwater municipality based on the Federal Phase II Stormwater Program regulations.
- The Phase II regulations were an extension of the Phase I Stormwater Program that was initiated by Congress in 1992. The Phase I regulations required large communities with populations greater than 100,000 to apply for individual stormwater permits. In Alabama, there were 5 entities governed by the Phase I regulations: Birmingham/Jefferson County, Huntsville/Madison County, City of Montgomery, City of Mobile and Baldwin County.
- The Phase II regulations were published in December 1999 and became effective in March 2003. Phase II Municipal Separate Storm Sewer Systems (MS4s) are defined as: *"Systems located in "urbanized areas" as defined by the U.S. Bureau of the Census. Has a population of at least 50,000 and an overall population density of at least 1,000 people per square mile."* The City of Auburn is governed by the Phase II regulations due to the overall population of Auburn, Opelika and Lee County.
- The City of Auburn applied for and received a National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Permit in March 2003. The original Permit was issued for a 5-year time period ending in March 2008. In August 2007, the City of Auburn applied for a new Phase II Permit. At the direction of the Alabama Department of Environmental Management (ADEM), the City continues to operate under the original 2003 Permit until ADEM issues the new NPDES Phase II Permit. On September 10, 2009, ADEM released the proposed NPDES Phase II Stormwater Permit to MS4 permittees in draft form for review and comment. Formal comments provided by the permittees were reviewed and addressed in the draft Phase II Stormwater General Permit for MS4s that was released for public comment on January 14, 2010. A second,

revised draft Permit was issued for public comment in May 2010. It is anticipated that the new Phase II Permit will be finalized in September 2010.

- The United States Environmental Protection Agency (USEPA) outlined six (6) “minimum control measures” that all Phase II entities must address when establishing individual stormwater programs. The six (6) minimum control measures are:
 - Public Education and Outreach
 - Public Involvement and Participation
 - Illicit Discharge Detection and Elimination
 - Construction Site Stormwater Runoff Control (i.e. Erosion and Sediment Control)
 - Post-Construction Stormwater Management
 - Pollution Prevention and Good Housekeeping
- The Phase II regulations are intended to guide local communities in the development of strategies to educate the public, to prepare local legislation, and to inspect stormwater collection and conveyance systems to promote the protection and preservation of water quality. ADEM maintains jurisdiction over water quality regulations in Alabama by regulating activities from which pollutants could be discharged into Waters of the State.

2.0 Erosion and Sediment Control Inspection and Enforcement Program

2.1 Roles and Responsibilities

- According to Appendix D of the Alabama Notice of Intent (ALNOI) General Permit for Phase II Small MS4s, *“ADEM Administrative Code Ch. 335-6-12 implements a Statewide construction stormwater regulatory program consistent with NPDES requirements for construction activities. As provided by 40 CFR Part 122.35(b), this NOI does not require an MS4 to implement a local construction stormwater control program.”* ADEM has implemented a statewide construction site stormwater regulatory program that addresses the minimum control measure outlined in the Federal Phase II Regulations. The City of Auburn recognized a need to develop a construction site erosion and sediment control program to aid in the protection of local water resources. While City of Auburn regulations do not supersede the ADEM regulations, they are intended to support the ADEM regulations.
- The original Erosion and Sediment Control Ordinance adopted by the City was drafted by the Auburn, Lee County, Opelika, and Auburn University (ALOA) Citizen Advisory Group in 2002. The ALOA group was formed to incorporate the diverse input of individuals representing the four regulated organizations,

business leaders, developers and local citizens interested in environmental protection. This group developed a base set of regulations that were common to all. Once drafted, City of Auburn, Lee County, City of Opelika and Auburn University representatives presented the ordinance to their respective governing bodies. The Ordinance was adopted by the Auburn City Council in July 2002.

- The City of Auburn developed regulations to manage construction site erosion by adopting an ordinance often referenced as the Erosion and Sediment Control Ordinance (Ordinance) (City Code, Chapter 7, Article III). The City determined that it was in the best interest of the community to develop construction site erosion and sediment control regulations for development activity within the jurisdiction of the City of Auburn to protect and preserve local water resources.
- In December 2004, the Auburn City Council amended the Ordinance to establish protocol for the enforcement of the Ordinance and to enable City personnel to issue citations and/or stop work orders to developers/contractors in violation of the Ordinance. This amendment added the necessary enforcement authority for staff to more effectively implement the requirements of the Ordinance.

Since the adoption of the Erosion and Sediment Control Ordinance, the Water Resource Management (WRM) Department has prepared and provided information to aid engineers, developers and contractors in designing, constructing and maintaining Best Management Practices (BMPs) on construction sites. The WRM Department routinely evaluates the policies and practices of the City to ensure that the Erosion and Sediment Control Inspection and Enforcement Program is effective in minimizing erosion and managing sediment transport on construction sites. The City of Auburn has the following roles and responsibilities related to erosion and sediment control:

- Reviews Erosion and Sediment Control Construction Best Management Practices Plans (CBMPPs) submitted for individual developments by the engineer of record and provides comments to the engineer. The engineer of record for a development is a licensed professional engineer that is responsible for designing BMPs that will ensure compliance with City regulations as well as ADEM permit requirements for construction sites. The City has adopted statewide standards (i.e. *The Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas, latest edition*) to encourage uniformity in BMP design, construction and maintenance.
- Conducts initial on-site walk-through inspections of site BMPs to ensure that all BMPs are installed in accordance with the approved CBMPP.
- Conducts site inspections after each ¼-inch, 24-hour rainfall event or a minimum of once per month. The purpose of these inspections is to document failures/deficiencies in BMPs on-site and to communicate those deficiencies to the respective permit holder. Follow-up inspections are made as necessary to ensure that corrections are being made promptly to correct any deficiencies and to restore the BMPs.

ADEM has the predominant role and responsibility as it relates to erosion and sediment control in Alabama. ADEM requires the City to maintain and operate a stormwater management program that complies with the six (6) minimum control measures. ADEM also regulates construction site activities on all sites over 1 acre in size. ADEM is responsible for the protection and preservation of water quality in Alabama and does so by regulating activities that could lead to adverse impacts on the environment. ADEM performs the following tasks as they relate to construction sites in Alabama:

- Reviews and approves/rejects construction site NPDES Stormwater Permits. All sites with planned disturbance greater than 1 acre are required to obtain an individual NPDES Construction Stormwater Permit. Sites less than 1 acre, but that have the potential to have an adverse impact on downstream water quality, can also be required to obtain a permit. Sites that are less than 1 acre, but are part of a larger common-plan development, are also required to obtain a permit.
- Conducts site inspections in accordance with the NPDES permits and responds to citizen concerns.
- Issues enforcement in the form of consent orders and fines if deficiencies are evident on-site that result in a negative impact on downstream water quality.

2.2 CBMPP Review and Initial Approval Process

The City of Auburn has incorporated a CBMPP review and approval process for construction site erosion and sediment control that is summarized below:

- CBMPPs are submitted by the engineer of record for the project along with other applicable engineering plans. The CBMPP is reviewed by the City of Auburn as part of the Development Review Team (DRT) plan review process. Staff in the WRM Department determines compliance with City of Auburn standards. Comments are compiled by the WRM Department and e-mailed to the DRT Coordinator. Comments are then subsequently mailed to the applicant by the DRT Coordinator.
- Once all comments have been addressed and the plans have been approved through the DRT process, a pre-construction meeting is scheduled by the Public Works Inspection Division Manager. The developer, contractor, engineer of record, and any other applicable parties are encouraged to attend the pre-construction meeting.
- At the conclusion of the pre-construction meeting, a clearing and grubbing permit is issued to the permit holder by the Public Works Inspection Division Manager provided that the permit holder has submitted the ADEM NPDES permit for the site and provided a copy of that permit (or ADEM-received permit application), as well as any other applicable state/federal permits, to the City. This clearing and grubbing permit allows the contractor to begin clearing and grubbing for implementation of the site CBMPP.

- Once all BMPs have been properly installed, the contractor schedules an initial Erosion and Sediment Control walk-through inspection with the Watershed Division Manager and/or Public Works Inspection Division Manager. The Division Manager will then conduct a walk-through inspection of the BMPs on-site in accordance with the approved CBMPP. If all measures are satisfactorily installed, the Division Manager will issue a grading and utility permit to the contractor authorizing the contractor to begin grading operations and utility installation on-site. If the BMPs on-site have not been satisfactorily installed in accordance with the CBMPP, the Division Manager will notify the contractor of the issues on-site and will schedule a follow-up inspection prior to issuing the grading and utility permit.

2.3 Inspection and Enforcement Process

The City of Auburn has developed an inspection and enforcement strategy that monitors sites in a proactive manner and responds to deficiencies as necessary to ensure that City standards are being met to the maximum extent practicable. The program implemented by the City supports the construction site inspection program administered by ADEM in that the majority of potential issues are resolved by the City before any significant water quality impacts can occur. The following is a summary of the inspection and enforcement process employed by the City of Auburn:

- Routine inspections are made on a monthly basis, typically within the first full week of the month to determine site compliance with the City Ordinance and the approved CBMPP.
- Rainfall inspections are typically made within 48 hours after each ¼-inch 24-hour rainfall event to determine site compliance with the City Ordinance and the approved CBMPP.
- Site Inspections fall into 3 categories:
 - If no deficiencies are found on-site, a copy of the inspection report and letter are mailed to the permit holder stating that “no deficiencies were found on-site at the time of inspection”.
 - If minor deficiencies are noted on-site at the time of inspection, a copy of the inspection report along with a letter outlining the deficiencies and proposed corrective actions are mailed to the permit holder stating that these issues should be corrected prior to the next rain event. The inspector also communicates with the permit holder via phone and/or e-mail to ensure that he/she understands the nature of the deficiencies and proposed corrective actions. The inspector conducts follow-up inspections on-site as necessary prior to a subsequent rain event to ensure that these items are being addressed. If the contractor does not take immediate corrective action to address the issues on-site, the site

falls into the next inspection category (major deficiencies) listed below when the follow-up inspection is conducted.

- If major deficiencies (i.e. sediment is leaving the site, failure to correct minor deficiencies since the last inspection, etc.) are noted on-site, the following enforcement process is initiated:
 - The City issues a 72-hour hand-delivered written Notice of Violation (NOV) to the permit holder outlining the deficiencies and proposed corrective measures on-site. The permit holder or representative of the permit holder is required to sign and date two (2) copies of the NOV (one (1) copy for the permit holder and one (1) copy for the City).
 - At the end of the above referenced 72-hour time period, a follow-up inspection is conducted by the Watershed Division Manager and inspector. If the permit holder has failed to satisfactorily address the deficiencies on-site at the end of this time period, a 24-hour verbal notice is issued to the permit holder by the Watershed Division Manager. This verbal notice is documented by staff through detailed field inspection notes.
 - At the end of the above referenced 24-hour time period, a follow-up inspection is conducted by the Watershed Division Manager and the inspector. If the permit holder has failed to satisfactorily address these issues at the end of this time period, a citation is issued to the permit holder by the City to appear in Municipal Court for violations of the Erosion and Sediment Control Ordinance. City personnel also have the ability to issue a stop work order on-site if conditions warrant.
 - Penalties for violating the Erosion and Sediment Control Ordinance are \$500 per day per offense and/or possible jail time as determined by the Municipal Court.

3.0 Responsibility and Jurisdiction

As previously discussed, all construction activity where more than 1 acre of land is disturbed is required to be permitted by ADEM. ADEM monitors sites for compliance to protect water quality within the Waters of the State. The developer must hire a qualified credentialed professional (QCP) to design the CBMPP and a qualified credentialed professional (QCP) or qualified credentialed inspector (QCI) must inspect the BMPs for proper installation and maintenance. The QCP/QCI is required by the construction site NPDES stormwater permit to conduct inspections after each ¼-inch 24-hour rainfall event or a minimum of once per month, which is the same criteria that the City uses for conducting inspections. Inspection reports must be submitted to ADEM

and the City by the QCP and notices of noncompliance must be made within 24-hours of an event by phone or e-mail and then in writing with a report of the findings and recommended actions within 5 days of occurrence. The City of Auburn supports the ADEM construction site stormwater program through implementation of the City of Auburn Erosion and Sediment Control Inspection and Enforcement Program. Post-storm event inspections conducted by the City ensure that failed BMPs are identified and corrected in a prompt manner. The City has adopted state-wide standards for the design, construction and maintenance of BMPs to provide a degree of uniformity in the requirements across the City. The City also routinely consults with ADEM to determine if there are any changes that need to be made to more effectively protect water quality within Waters of the State.

It is the responsibility of the developer to hire a consultant that is a qualified professional to design all aspects of the development, including the CBMPP. The engineer of record is responsible for designing BMPs using the resources available in the *Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas* or similar handbooks for adjoining states and other resources such as the American Society of Civil Engineers BMP Database. The City of Auburn is responsible for determining if the engineer has taken necessary measures in designing the BMPs and provides comments if it appears there are deficiencies in the CBMPP. Staff inspect the installation and maintenance of the BMPs, but it is the responsibility of the qualified professional selected and hired by the developer to inspect and make recommendations as to the performance of BMPs during construction. The City does not direct work, but does point out deficiencies and take necessary enforcement actions when deficiencies are not addressed.

The City of Auburn has not been delegated any authority to directly develop water quality standards. Water quality standards are set at the state and federal level and are managed through ADEM, the United States Army Corps of Engineers (USACE) and the USEPA. The City of Auburn works closely with these governing agencies when deficiencies occur that may have resulted in adverse water quality or environmental impacts as well as to learn ways to improve the existing City program.

In summary, the Erosion and Sediment Control Inspection Program is one of many key components of the overall Stormwater Management Program for the City of Auburn designed to protect water quality within the City. Components of the overall program are designed to address the six (6) minimum control measures discussed earlier in the document, and include, but are not limited to, public education and outreach, erosion and sediment control inspection and enforcement and post-construction stormwater management (i.e. comprehensive water quality sampling program). The City has been proactive to develop a successful program that is considered a model program in the State of Alabama and has often been called upon by ADEM or other communities to provide guidance on developing their programs.