

**NATIONAL POLLUTANT DISCHARGE
ELIMINATION SYSTEM**

**PHASE II
MUNICIPAL SEPARATE STORM SEWER
SYSTEM PERMIT**

CITY OF MOODY, ALABAMA

ANNUAL REPORT

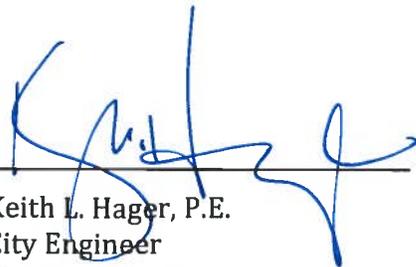
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Certification

City of Moody, Alabama

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 gather and evaluate 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, to the best of my knowledge and belief, the information submitted is 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.



Keith L. Hager, P.E.
City Engineer
Moody, Alabama

10-16-16
Date

Chapter 1 – Introduction

1.1 – Regulatory Background

The Environmental Protection Agency (EPA) created the National Pollutant Discharge Elimination System (NPDES) storm water program in order to minimize the discharge of pollutants into waters of the United States. Phase I of this program was created in 1990 for municipal separate storm sewer systems (MS4s), and it focused on operators of “medium” and “large” MS4s. Phase 1 required operators of these systems, which generally serve populations of 100,000 or more, to implement a storm water management program as a way to control polluted discharges into the MS4s from municipal, industrial, and construction activities. Phase II of the NPDES storm water program extended coverage to regulated “small” MS4s in 1999. These MS4s include any that are located within an urbanized area or as designated by the NPDES permitting authority. For the state of Alabama, permitting and enforcement of the storm water program falls under the jurisdiction of the Alabama Department of Environmental Management (ADEM). In 2011, ADEM created NPDES Permit Number ALR 040000, which serves as a General Permit for MS4 Phase II that covers storm water discharges associated with “small” MS4s that discharge water to waters of the State.

1.2 – Regulated Area Overview

The City of Moody is located in St. Clair County, east of Birmingham and west of Pell City. Officially incorporated in 1962, the City retains the legal authority to create land use and design regulations for any development within its city limits. The City of Moody believes in government that promotes residential and responsible commercial growth, while maintaining the integrity and quality of local and state water systems. The primary receiving water for this area is the Cahaba River.

1.3 – SWMP Overview

This document presents the City of Moody’s Storm Water Management Program (SWMP), per ADEM’s NPDES Phase II MS4 Permit requirements, covering storm water discharges from regulated small municipalities. This program was developed, implemented, and enforced in order to reduce the discharge of pollutants from the municipal storm drain system to the maximum extent practicable. In order to achieve this goal, Moody uses full implementation of BMPs, using all known, available, and reasonable methods of prevention, control, and treatment to control and prevent storm water pollution from entering waters of the State of Alabama.

Chapter 2 – SWMP Program Management

2.1 – SWMP Responsibilities

Although the Storm Water Regulations Board is the lead implementer of the SWMP, no single City department is responsible for all necessary program management activities. The multiple departments and agencies involved are anticipated to be:

- Mayor's Office
- City Council
- Storm Water Regulations Board
- Planning Commission
- Inspection and Public Works
- Commercial Development Authority
- Parks and Recreation Advisory Board
- Government Utility Services Corporation (GUSC)
- Fire and Rescue Department

The relationships between the departments and their corresponding responsibilities are dependent upon the solidification of the following discussion during program development.

A. Mayor's Office

The Office of the Mayor is responsible for the oversight of the program as a whole, as well as communication with the City Council.

B. City Council

The City Council is responsible for the approval of budgetary expenditures, as well as all City ordinances and resolutions, related to the implementation of the SWMP.

C. Storm Water Regulations Board

The Storm Water Regulations Board will lead the administration of the program, as well as the day-to-day activities, with substantial assistance and input from other departments. The Board will take the lead in assuring that MS4 training occurs citywide. It will also assist with flood plain management, construction site runoff control, post-construction storm water management, illicit discharge detection and elimination, and training within the good housekeeping for municipal operations category of minimum control measures (MCMs).

D. Planning Commission

The Planning Commission will assist in the development and educational part of the Permit, including MS4 training and good housekeeping.

E. Inspection and Public Works

The Inspection and Public Works Department is responsible for City owned and maintained grounds and landscaping and will be largely responsible for the Pollution Prevention/Good Housekeeping for Municipal Operations MCM. They will also serve a role in other MCMs, including illicit discharge detection and elimination, as well as public education.

F. Parks and Recreation Advisory Board

The Parks and Recreation Advisory Board will assist in the development and educational part of the Permit, as well as public outreach.

G. Government Utility Services Corporation

The Government Utility Services Corporation will focus on assisting the Storm Water Regulations Board in day-to-day activities, inspections, and outreach.

H. Fire and Rescue Department

The Fire and Rescue Department provides a support role through hazardous waste spill reporting and cleaning techniques. Other responsibilities this department has include good housekeeping, pollution prevention, illicit discharge detection and elimination, and public education.

2.2 – SWMP Coordination

The City of Moody anticipates sharing some implementation efforts with local MS4s concerning the implementation of Minimum Control Measures (MCM), such as Public Participation and Education Outreach. This coordination will allow for cost-effective implementation of certain MCMs in the program, and it is to occur on a strictly voluntary basis.

2.3 – SWMP Updates and Revisions

All updates and revisions that are necessary to maintain permit compliance, as well as all that are required by ADEM, will be submitted to the Department for review as part of the annual review of the SWMP in conjunction with the preparation of the annual report. The modified SWMP plan will become effective upon approval of the updates and revisions.

Chapter 3 – Minimum Control Measures (MCM) Criteria

This chapter provides guidance for meeting the requirements of the ADEM general permit involving storm water discharge from the MS4. There are six (6) minimum control measures (MCMs), and they are listed as follows: Public Education and Outreach, Public Participation/Involvement, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post Construction Storm Water Management, and Pollution Prevention/Good Housekeeping for Municipal Operations. Each of these six MCMs will be discussed in the following sections, along with the City's plan for implementation for each.

3.1 – Public Education and Outreach (MCM-1)

The Public Education and Outreach (MCM-1) requires the City to implement and evaluate a public education and outreach program that distributes educational materials to the community or conducts equivalent outreach activities about the impacts of polluted discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff to the maximum extent practical.

MCM-1 includes various target audiences. Residential, commercial, and industrial developers have been involved in the SMWP development. The general public, schools, elected officials, developers, contractors, and professional groups will be targeted for ongoing involvement in the SWMP implementation and evaluation. Federal, state, and other local agencies will be included in these processes as well. Educational materials will be specifically tailored to communicate a specific storm water pollution concern to a targeted audience.

MCM-1 will target non-point source pollutants found in storm water. These pollutants include, but are not limited to, trash, pesticides, fertilizers, sediment, pathogens, oils, and grease. The targeted sources include, but are not limited to, pool water disposal, illegal dumping, car washing, home auto repair, illicit discharges, failing septic systems, construction site erosion, other impacts from development, commercial parking lot runoff, and the improper application of pesticides, fertilizers, and herbicides. Target sediment sources may include residential developments, construction site erosion, commercial developments, and erosion due to all-terrain vehicle trespassing.

The City employs a variety of strategies for MCM-1, including the utilization of existing materials from other agencies and permittees. The creation of new materials to educate the targeted audiences is also planned. A few of the City's current and future compliance activities include, but are not limited to, brochures,

pamphlets, workshops, school presentations, curbside recycling, elected officials training, an environmental webpage, watershed signage, and environmental awareness signage. Each outreach strategy will be detailed below along with its goal, timeline, and responsible department, for implementation of the measure.

A. Environmental Website

Potential Target Audience: General Public

Current Program:

The Internet provides a highly accessible medium for relaying information and data to all citizens. The City of Moody's new website will feature an Environmental Outreach page (currently under construction), which will include a link to the City's SWMPP, MS4 information, Annual Report, and other storm water related topics, as well as provide information on any existing, as well as future storm water related activities.

Measurable Goals:

In year one of the permit cycle, the City will expand its website to include an environmental outreach page, as well as post links to its SWMP and its Annual Report on the website. In year two, the website will be expanded to include storm water related topics, general information about the storm water management program, upcoming program events, information on how to reduce storm water impacts, and links to related websites. In year three, the City will develop an email link for public inquiries / complaints related to storm water issues.

Responsible Department: Storm Water Regulations Board

B. Workshops

Potential Target Audience: Homeowners, Elected Officials, Contractors, Developers, and Professionals

Current Program:

Workshops are a useful educational tool for specific topic issues. Using exiting training programs, the City will coordinate with its partners to sponsor workshops in a variety of storm water topics for homeowners and professionals alike. Some examples of potential future workshops include the following: Nonpoint Education for Municipal Officials (NEMO), Erosion and Sediment Control, Rain Barrel, Stream

Restoration, Invasive Species Control, Low Impact Development workshops, and Green Infrastructure Workshops.

Measurable Goals:

In year one of the permit cycle, the City's Storm Water Regulations Board will be asked to create a list of potential storm water workshop topics for the city to sponsor. The City will use this list as a guide in choosing one workshop per year to sponsor.

Responsible Department: Storm Water Regulations Board

C. Brochures / Pamphlets

Potential Target Audience: General Public, Home Owners, Schools, Elected Officials, Contractors, and Developers

Current Program:

This element of MCM-1 will allow for the distribution of new and existing storm water education brochures and pamphlets for certain targeted groups. These include erosion and sediment control brochures for contractors working in the City of Moody, flyers targeting residential activities to homeowners, and flyers for presentations given to schools.

Measurable Goals:

In year one, the City will compile a list of existing EPA, ADEM, and other storm water educational brochures and pamphlets that can be used to implement this element of the MCM-1. Also, with guidance from the EAC, distribution locations will be determined and the brochure/pamphlets will be placed at the desired locations for distribution. In year two, erosion and sediment control brochures detailing effective BMPs to reduce sediment impacts to storm water will be distributed by mail to all residential home builders licensed in the City. In years three through five, the City will create one additional storm water brochure per year, each with a specific target audience.

Responsible Department: Storm Water Regulations Board

D. Curbside Recycling

Potential Target Audience: Homeowners

Current Program:

All recycling programs are beneficial to storm water management due to the fact that they reduce a potential pollutant source by collecting and reusing that source, rather than disposing of it.

Measurable Goals:

Throughout the permit cycle, the City will encourage citizens to use the recycling available through the contracted waste collection company. Environmental Programs will request data from the contractor about the quality of recycled goods collected, and this data will be included in the annual report. Increasing yearly totals will reflect the achievement level of these goals.

Responsible Department: Storm Water Regulations Board

E. School Presentations

Potential Target Audience: Students

Current Program:

Teaching young students the importance of proper storm water management is of the utmost importance to the success of any storm water program, as is exposure to many different aspects of how to enjoy the outdoors safely and sustainably. One feature of this teaching students ways to reduce storm water impacts in order to preserve the environment for future generations to enjoy. Educating the young student population is the key to the future of successful storm water management.

Measurable Goals:

The City will sponsor clean water presentations at each school, establish an annual Clean Waters Expo, and present storm water facts and other related topics to the students that attend the Expo. Sign in sheets will be provided, and the number of signatures will represent any growth experienced.

Responsible Department: Storm Water Regulations Board

F. Training of Elected Officials

Potential Target Audience: Elected Officials

Current Program:

Expanding the storm water management knowledge of elected officials is key to improving the program due to the fact that they are responsible for passing regulations and ordinances that guide the implementation of the City's Storm Water Management Plan, as well as for the budgetary control of the plan.

Measurable Goals:

The City will host and/or sponsor at least one NEMO workshop every permit cycle.

Responsible Department: Storm Water Regulations Board

G. Environmental Awareness / Watershed Signage

Potential Target Audience: General Public

Current Program:

Watersheds are a logical way to think about the connection between the land and the local quality of water. How we, as a community, treat the land has a direct impact on the quality of the water that we rely upon for many important public uses, such as swimming, fishing, and drinking. Watershed signage is a great way to increase the public's awareness about the importance of their environment and to encourage good stewardship of our valuable streams, wetlands, lakes, and ground water.

Measurable Goals:

In year one of the permit cycle, the City will implement watershed signage within each Well Head area. In years two through five of the cycle, the city will inspect and maintain all watershed and environmental awareness signage. Throughout the permit cycle, the Storm Water Regulations Board will also encourage and assist any Boy Scout who is seeking an Eagle Scout Project in an environmental topic, i.e. labeling storm drain inlets, etc.

Responsible Department: Storm Water Regulations Board

3.2 – Public Participation / Involvement (MCM-2)

Public Participation / Involvement (MCM-2) requires the City to develop, implement, and evaluate a public participation program centered on the SWMP and the Annual Report. The development of this program will be documented throughout the process. The ongoing activities for public involvement may include committees, stewardship programs, watershed associations, advisory councils, and other environmental related activities. Upon approval, the SWMP will be available to the public on the City's web page.

MCM-2 includes various target audiences, including, but not limited to the following: residential, commercial and industrial developers, contractors and professional groups. These audiences will be expected to be involved in the ongoing involvement in the SWMP evaluation and implementation. Also included will be federal, state, and other local agencies.

MCM-2 will target non-point source pollutants found in storm water. These pollutants include, but are not limited to, trash, sediment, pesticides, fertilizers, pathogens, oils, and grease. The sources that are targeted include, but are not limited to, illegal dumping, failing septic systems, impacts from development, construction site erosion, commercial parking lot runoff, and improper application of herbicides, pesticides, and fertilizers.

The City of Moody plans to employ a variety of different strategies for MCM-2, including the involvement with existing groups and the development of additional new mechanisms, as well as a focus on public participation as a whole. Each strategy is detailed below, along with its goal, timeline, and responsible department, for implementation of the measure.

A. Citizen's Environmental Advisory Committee

Current Program:

The formation of a Citizen's Environmental Advisory Committee will be recommended to the City Council. If approved, the committee will be made up of environmental consultants, biologists, engineers, botanists, private business owners, and City staff. The Committee would serve various roles for the City, including the annual review of the SWMP, environmental ordinance review, and promulgation. It would also assist the City in applying for federal and state grant monies to support its efforts in storm water management through each of the MCMs.

Measurable Goals:

In year one, the recommendation will be made for City Council consideration. If created, during years two through five, the City will hold at least four (4) EAC meetings per year. During one of these meetings, the City's SWMP will be reviewed and updated as necessary in order to maintain permit compliance.

Responsible Department: Storm Water Regulations Board and Public Works

B. Moody Fall Festival

Current Program:

The Moody Fall Festival will be used as an opportunity to educate citizens on all aspects of the water cycle and other related natural resources. This effort also instills in the children a general environmental awareness and stewardship as well as specific fresh water issues and protection strategies. The Fall Festival will include citizens of all ages and from various communities within and outside the community.

Measurable Goals:

Throughout the duration of the permit cycle, City staff will participate in the environmental education portion of the Fall Festival.

Responsible Department: Storm Water Regulations Board

C. Environmental Website

Current Program:

The Internet provides a highly accessible medium for relaying information and data to all citizens. The City of Moody's new website will feature an Environmental Outreach page (currently under construction), which will include a link to the City's SWMPP, MS4 information, Annual Report, and other storm water related topics, as well as provide information on any existing, as well as future storm water related activities.

Measurable Goals:

In year one of the permit cycle, the City will expand its website to include an environmental outreach page, as well as post links to its SWMP and its Annual Report on the website. In year two, the website will be expanded to include storm water related topics, general information about the storm water management program, upcoming program events, information on how to reduce storm water impacts, and links to related websites. In year

three, the City will develop an email link for public inquiries / complaints related to storm water issues.

Responsible Department: Storm Water Regulations Board

D. Keep Moody Green Program

Current Program:

The City mandates garbage pickup for its citizens. Citizens are permitted to dispose of any material except putrescible garbage, hazardous chemicals, and tires.

Measurable Goals:

Throughout the duration of the permit cycle, City staff will participate and/or assist with at least one cleanup day per year. During the first permit cycle, the City will continue the program as is. During the remainder of the permit cycle, the Storm Water Regulations Board will work with the City, County, and other municipalities to sponsor and/or assist in a "Household Hazardous Waste Amnesty Day", during which citizens can safely dispose of any hazardous wastes.

Responsible Department: Inspection and Public Works / Storm Water Regulations Board

3.3 – Illicit Discharge Detection and Elimination (IDDE) (MCM-3)

The EPA defines illicit discharges into a storm drain system as “any discharge to a MS4 that is not composed entirely of storm water.” Some exceptions include permitted industrial sources and discharges from firefighting activities. Examples of illicit discharges include, but are not limited to sanitary wastewater, laundry, residue from a car wash, trash, oil, etc. These discharges can enter a storm drain system indirectly by cracks in pipes, spills, and dumped materials, or they can enter directly through a direct connection. As a result, untreated waste containing high levels of pollutants can enter storm water systems and eventually enter into state waters.

The Illicit Discharge Detection and Elimination (MCM-3) requires the City to develop, implement, enforce, and evaluate a program to detect and eliminate illicit discharges and improper disposal, including spills not under the scope of another responding authority, into the City’s regulated MS4 area, to the maximum extent practical. The program is required to include the following actions:

- A. Annually update the storm water infrastructure inventory map, showing the location of all outfalls and the names and locations of all waters of the State that receive discharges from those outfalls; structural BMPs that are owned, operated, and maintained within the boundaries of the City’s MS4 area. Effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into the MS4 to the extent allowable under State or local law, and implement appropriate enforcement procedures and actions. The ordinance is to be reviewed on an annual basis and be updated when necessary.
- B. Develop and implement a plan to detect and address non-storm water discharges to the system, including illegal dumping, that are not authorized by a separate NPDES permit; inform public employees, businesses, and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste.

In the execution of controlling illicit discharges and improper disposal of wastes into storm water, the City of Moody will exclude the following categories of non-storm water discharges, which are not required to be addressed by the State: landscape irrigation, rising ground watersheds, uncontaminated pumped groundwater, uncontaminated groundwater infiltration, diverted stream flows, water line flushing, foundation drains, irrigation watersheds, water from crawl space pumps, springs, air conditioning condensation, discharges from portable water sources, lawn watering, flows from riparian habitats and wetlands, fire fighting flows, de-chlorinated swimming pool discharges, individual residential car washing, and footing drains.

MCM-3 target audiences will include residential, commercial and industrial developers, who have been involved in the development of the SMWP. Also, the general public, school, elected officials, developers, contractors, and other professional groups will be targeted for ongoing involvement, implementation, and evaluation of the SWMP. Federal, state, and other local agencies will be included in these processes as well.

MCM-3 will target non-point source pollutants found in storm water, such as sediment, pesticides, fertilizers, paints, swimming pool discharges, pathogens, oils, and grease. The sources targeted for these pollutants include, but are not limited to, illegal dumping, illicit swimming pool connections, failing septic systems, illicit septic system connections, unpermitted construction site discharges, and the improper disposal of pesticides, fertilizers, herbicides, paints, etc.

The City of Moody plans to employ a variety of strategies for MCM-3, including the formation and enforcement of city ordinances, as well as educational outreach. It is the City of Moody's goal to reduce illicit discharge to its MS4 to the maximum extent practical for the implementation of this measure. Each strategy will be detailed below, along with its goal, timeline, and department responsible for implementing the measure.

A. Storm Water Infrastructure Data Organization

Current Program:

This element of MCM-3 will involve City staff locating all existing storm water infrastructure data in GIS format and using it to create a mapping system for outfalls that discharge into state waters.

Measurable Goals:

In years one and two of the permit cycle, the City plans to locate and map all exiting storm water outfalls. In years three through five, the City would initiate the creation of a storm water outfall maintenance database that would include the location, description, and condition of each existing outfall. Each outfall in the database would also include a layer for inspections and notes. This database would also allow for the addition of any new outfalls, submitted in As-Built form, to the City of Moody.

Responsible Department: Storm Water Regulations Board

B. Field Assessments and Site Inspections

Current Program:

Field assessments will include any storm water observations made during the normal duties of City staff. Site inspections will include field visits

made, aside from an employee's normal duties, in response to any reports of potential noncompliance or as a result of program directives. A process will be established for each of the designated field personnel to report non-storm water discharges that are potentially in violation of the future ordinance. This process will include reporting any potential violations to the appropriate City staff. Designated City personnel will be trained in water quality inspection procedures, internal processes, and general storm water quality practices. If necessary, this process will be modified to match the system established when the new ordinance is created. Currently, City staff routinely inspects storm water infrastructure. Staff also responds to notifications of potential illicit discharges from the public and other agencies. To reduce the amount of pollutants in runoff, City crews regularly perform maintenance and cleaning of roadways, ditches, culverts, grounds, parks, and channels. These practices will be described and recognized in all appropriate sections of the program.

Measurable Goals:

In years one and two, the City will designate responsible personnel for field assessments and site inspections, as well as develop procedures for implementation of reporting/inspecting and enforcement. In years three through five, the City will educate the general public, as well as commercial and industrial developments, on hazards associated with illicit discharges. They will also initiate basic field assessments in order to establish priority areas for the more in-depth inspections, conduct a minimum of ten (10) in-depth inspections, and respond to all identified and reported potentially illicit discharges and connections, per established procedures and guidelines. In year five, the City will collect and review data regarding enforcement activities, as part of the annual report, to identify the principle pollutants and plan for future action.

Responsible Department: Storm Water Regulations Board, Fire Department, Inspection and Public Works, and GUSC

C. Hazardous Materials Response Program

Current Program:

The storm water program will be coordinated with the hazardous materials response program operated by the City's Fire Department. The Inspection and Public Works Department and other entities that coordinate with the hazardous materials response program will assist in this effort.

Measurable Goals:

In year one, the City will meet with the Fire Department to develop and implement strategies for incorporating storm water pollution prevention practices into the hazardous materials response program. They will also monitor the location, frequency, and type of response events, as well as report information in the Annual SWMPP report. In years two through five, the City will establish a section on their Environmental Website for public inquiries and reports regarding illicit discharges, as well as advertise IDDE information on the website, in educational brochures/flyers, and through local media. They will also receive, respond, and report appropriately on all reported events or inquiries fielded from the public.

Responsible Department: Storm Water Regulations Board, Fire Department, and Inspection / Public Works Department

D. City Staff Training

Current Program:

The goal of this element is to assure that City staff understand storm water issues and are appropriately trained to recognize and report on illicit discharges and connections while performing their normal duties in the field. Training will be provided to hazardous materials response teams, inspection and public works, and all other necessary employees. These training sessions may be offered in conjunction with other training elements of the program.

Measurable Goals:

In year one, the City will develop a training presentation for new hires on basic storm water issues and on IDDE. In years two through five, the City will provide one general storm water training session annually for new employees involved in the program, as well as provide specific training annually for all employees with program responsibility, such as GUSC and inspection / public works.

Responsible Department: Storm Water Regulations Board, Inspection and Public Works, and GUSC

E. Evaluation

The evaluation of an MCM-3 program is best measured by the goals that are met. At the end of the permit year, the City will evaluate the overall effectiveness of MCM-3 through assessment of the success of the goals that were set and achieved.

3.4 – Construction Site Storm Water Runoff Control (MCM-4)

The Construction Site Storm Water Runoff Control (MCM-4) requires the development, implementation, and enforcement of a program to reduce, to the maximum extent practicable, pollutants in any storm water runoff to the MS4 from construction activities that result in a total land disturbance of greater than or equal to one acre, as well as activities 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. The sites are termed as qualified construction sites by ADEM.

MCM-4 will target developers, contractors, homebuilders, and professional consultants. It will also include the training of City staff. Federal, state, and county agencies will also be included through coordinated efforts within the program.

MCM-4 will mainly target construction sites for sediment and erosion control. Other potentially targeted pollutant sources are petroleum, oils and greases from equipment storage areas, pH changes through concrete washouts, and pathogens from the lack of portable facilities.

The City of Moody plans to use a variety of strategies for MCM-4, including the implementation and enforcement of city ordinances that deal specifically with sediment and erosion control, as well as the training of City staff. The City will rely on ADEM standards for appropriate erosion and sediment controls for all qualified construction sites. Coordination with ADEM concerning compliance issues will also be a major focus for the City. Each strategy will be detailed below, along with its goal, timeline, and responsible department, for the implementation of this measure.

A. Residential Erosion and Sediment Control Ordinance

Current Program:

The City will pursue an Erosion and Sediment Control Ordinance, which would regulate land disturbances that exceed a TBD area of exposed soils associated with land disturbance, with the exception of agricultural operations.

Measurable Goals:

In the second year of the permit, the City will pursue an Erosion and Sediment Control Ordinance. In year three, the Storm Water Regulations Board will review and update this ordinance. During the remainder of the permit cycle, the ordinance will go through an internal review and comment period, to be followed by submittal to the City Council for

review and adoption. After adoption, the implementation process will begin. During the remainder of the permit cycle, following any updates to the Erosion and Sediment Control Ordinance, the BMP checklist will also be updated.

Responsible Department: Storm Water Regulations Board and City Council

B. Erosion and Sediment Control Training

Current Program:

All City Building Inspectors are required to receive annual training through ADEM's Qualified Credential Inspector Program. This training gives the inspectors the knowledge needed to effectively monitor single-family residential and commercial construction sites for erosion and sediment controls and storm water runoff concerns.

Measurable Goals:

In years one through five, continue the annual training required to keep building inspectors current in their certifications. Track the training and submit data in the City's Annual SWMP Report.

Responsible Department: Commercial Development Authority and Storm Water Regulations Board

C. Commercial and Residential Construction Site Inspections and Enforcement

Current Program:

Inspections of all construction sites are an integral part of MCM-4. Prior to the start of any land disturbance on a qualified construction site, the developer must submit their ADEM construction general permit authorization. The City maintains an inventory of all qualified construction sites within the MS4 area. Currently, all qualified construction sites are inspected a minimum of twice during the construction process. The City will create an Erosion and Sediment Control Inspection Form that include the following: developer/owner information, current weather conditions, status of BMPs, deficiencies noted, if a re-inspection is required, and if enforcement action will be pursued. During the inspection, all discharge points are inspected and the site conditions are compared to the approved erosion and sediment control

plan. Any deficiencies are noted and reported to the site manager and/or the developer. The developer has 48 hours to correct all deficiencies from the inspection or face a stop work order until they are corrected. The construction site is not considered completed until all areas are permanently stabilized, all construction debris is removed, and temporary sediment control structures are removed. A final inspection is required prior to release from the permit.

Enforcement varies based on the severity of the deficiencies. Minor concerns will receive a written or verbal warning requiring 48 hours to comply with the ordinance. If not corrected, or in the case of major deficiencies, the City may stop work on the construction site. Stop work orders are typically issued on sites with active construction while BMP deficiencies still exist. When an erosion or sediment control complaint regarding a construction site is received, immediate action is taken by the Storm Water Regulations Board to inspect, document, and resolve the compliance issue using enforcement if needed.

Measurable Goals:

Although the City has a construction site inspection program, there is a need for enhancing several aspects in order to maintain compliance with the new general permit. In year two, the City will pursue adoption of an Erosion and Sediment Control Ordinance to add the possibility of a Municipal Ordinance Ticket to the enforcement process. Site inspections will be prioritized based on status of construction, site conditions, location and size of the site, and proximity of the site to sensitive areas such as streams and wetlands. Priority construction sites include qualified construction sites that discharge to impaired waters listed for sediment or Outstanding Alabama Water. Priority construction sites will receive precedence in inspections. In year three, the City's goal is to enhance the database used to track all inspections and timelines for site compliance. In years four and five, the City will determine the overall effectiveness of the program and modify as needed for permit compliance.

Responsible Department: Commercial Development Authority and Storm Water Regulations Board

D. Evaluation

The evaluation of the program will include the level of achievement of the program's goals. Also during the permit term, the effectiveness of the program will reveal itself based on construction site compliance. The results of the program will be evaluated annually and documented in the annual report.

3.5 – Post Construction Storm Water Management (MCM-5)

The City will employ a variety of strategies for MCM-5, including education outreach and the creation and enforcement of new and existing ordinances. The City's goal is to minimize water quality impacts from new development and re-development sites. The Post Construction Storm Water Management (MCM-5) requires the City to develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb one acre or greater by insuring that controls are in place that prevent or minimize water quality impacts. It also requires the City to develop and implement strategies that include a combination of structural and/or non-structural BMPs that are appropriate for the community, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law, and adequate long-term operation and maintenance of BMPs.

For MCM-5, the City of Moody will target developers, contractors, and the property owners association.

MCM-5 will target non-point source pollutants found in storm water, such as sediment, pesticides, fertilizers, paints, swimming pool discharges, pathogens, oils, and grease. The sources targeted for these pollutants include, but are not limited to, illegal dumping, illicit swimming pool connections, failing septic systems, illicit septic system connections, unpermitted construction site discharges, and the improper disposal of pesticides, fertilizers, herbicides, paints, etc.

The City of Moody plans to employ a variety of strategies for MCM-5, including the formation and enforcement of city ordinances, as well as educational outreach. It is the City of Moody's goal to reduce illicit discharge to its MS4 to the maximum extent practicable for the implementation of this measure. Each strategy will be detailed below, along with its goal, timeline, and department responsible for implementing the measure.

A. BMP Long-Term Monitoring and Maintenance

Current Program:

The goal of this element is to periodically review and assess the performance of the post-construction BMPs installed with new and redevelopment projects. Field inspections verifying the adequate construction of the BMPs in accordance with the approved improvement plans will be performed along with permit cycle inspections. The field inspections will include an evaluation of the BMPs and how well the BMP has been maintained since construction. Performance and potential

improvements will be noted. If possible, the BMPs will be viewed while functioning during a rainfall event. Information gathered with this element will be used to revise acceptable BMPs and processes.

Measurable Goals:

In year one, the City will update, as needed, design review guidance for plan reviewers. In years one through five, the City will review a minimum of 30% of post construction BMPs annually, evaluate performance and design, report the results in the annual reports, and conduct enforcement as required to ensure compliance.

Responsible Department: Storm Water Regulations Board, Inspection and Public Works, and GUSC

B. Low Impact Development/Green Infrastructure Ordinance

Current Program:

Low-impact development (LID) is a term used to describe a land planning and engineering design approach to managing storm water runoff. LID emphasizes conservation and use of on-site natural features to protect water quality. This approach implements engineered small-scale hydrologic controls to replicate the predevelopment hydrologic regime of watersheds through infiltrating, filtering, storing, evaporating, and detaining runoff close to its source.

Green infrastructure is a concept that highlights the importance of the natural environment in decisions about land use planning. In particular, there is an emphasis on the “life support” functions provided by a network of natural ecosystems through interconnectivity to support long-term sustainability. EPA has extended the concept to apply to the management of storm water runoff at the local level through the use of natural systems, or engineered systems that mimic natural systems, to treat polluted runoff.

Measurable Goals:

In year three, the City will survey local consultants and citizens to aid in the development of a Low-Impact Development / Green Infrastructure Ordinance. In year four, the draft ordinance will be presented to City departments for internal review. Once the comments are addressed from the internal review, the new ordinance will be taken to the City Council for review and adoption.

Responsible Department: Inspection and Public Works, Storm Water Regulations Board, and City Council

C. Development Community Education Outreach

Current Program:

Education and outreach is required to ensure that the development community is informed about the program and correct design standards to minimize pollutants discharged in storm water runoff. Outreach activities will include the distribution of existing and new education materials in conjunction with the Public Education and Outreach MCM and sponsorship of workshops targeted to the development community.

Measurable Goals:

In years one through five, the City will create new and gather existing outreach materials from local agencies to have available for contractors and the general public at specific locations determined under the Public Education and Outreach MCM.

Responsible Department: Storm Water Regulations Board

D. Evaluation

The evaluation of an MCM-5 program is best measured by the goals that are met. At the end of the permit year, the City will evaluate the overall effectiveness of MCM-5 through assessment of the success of the goals that were set and achieved.

3.6 – Pollution Prevention / Good Housekeeping for Municipal Operations (MCM-6)

Pollution Prevention / Good Housekeeping for Municipal Operations (MCM-6) requires that the City develop and implement a program for pollution prevention and good housekeeping at municipal operations. It also requires the development and implementation of an employee training program designed to prevent and reduce, to the maximum extent practicable, storm water pollutants in areas such as new construction and land disturbances, parks maintenance, storm water system maintenance, fleet and building maintenance, and all other applicable municipal operations.

Other program requirements include the outlining of procedures for the proper disposal of waste removed from the MS4 and municipal operations, including, but not limited to materials such as accumulated sediments, dredge spoil, floatables, and other debris. There will also be procedures outlined in order to ensure that any new flood management projects are assessed for impacts on water quality. Existing projects shall be assessed for incorporation of additional water quality protection devices and practices.

MCM-6 will target all non-point source storm water pollutants. These include, but are not limited to, trash, sediment, pesticides, fertilizers, pathogens, oils, and grease. The targeted sources involved are publicly owned properties and right-of-ways, as well as municipal facilities and operations.

The City of Moody will use a variety of strategies for MCM-6, but will separate its overall plan into two major categories: Good Housekeeping and Pollution Prevention. These will be discussed in detail in the following paragraphs.

A. Good Housekeeping

Good Housekeeping concerns measures that involve City-owned facilities. This section includes the following measures for compliance with the permit requirements:

1. Inventory of Facilities:

In year one, the City's goal is to inventory all City-owned facilities and conduct a baseline assessment for reduction of pollutants from storm water runoff. This inventory will include buildings, parks, vacant property, parking areas, and ancillary storage areas. It will also include the drainage area that each facility impacts and all potential pollutants.

2. Assessment of Facilities:

All facilities that were inventoried in year one will have a complete assessment done by year three of the permit. The assessment will include an inspection of all areas. All deficiencies will be identified and reported to the appropriate supervisor for remediation.

3. SWMP Standard Operating Procedures (SOP) for Facilities:

Following the assessment, each facility will develop standard operating procedures (SOPs) in regards to storm water runoff and housekeeping practices. The goal is for the City to complete 10% of the facility SOPs per permit year.

Responsible Departments: Storm Water Regulations Board, Inspection and Public Works

B. Pollution Prevention

Pollution prevention includes measures that involve right-of-ways, including bridges, storm water management systems, and roadways. This section includes the following measures for compliance with the permit requirements:

4. City Facility Recycling Program:

The City municipal building will be equipped with recycling containers for paper, aluminum, plastic, and cardboard. Employees are expected to recycle all these wastes with the exception of confidential documents, which are to be shredded and recycled through a private company. Furthermore, the City implemented recycling containers for plastic bottles and aluminum cans at our Sports Fields and for all festivals and events held in City parks.

5. Storm Water System Maintenance Programs

The storm water management system for the City contains grassed and concrete swales, culverts, inlets, and pipes. Currently, these areas are maintained on an as-needed basis by determination of the Inspection and Public Works Department.

Areas are also maintained when valid complaints of drainage problems are filed with the City.

In year one, the Storm Water Regulations Board and the Inspection and Public Works Department will meet to discuss a plan of action for storm water management system maintenance. By year three, a plan will be developed for consistent efforts in managing storm water systems. By year four, the plan will be implemented with a tracking mechanism. By year five, the goal is to show quantities of pollutants removed from the system and frequency of all areas maintained. Major areas of storm water management system maintenance will be tracked through capital storm water projects.

6. Litter Patrol

The City operates and maintains its streets and right-of-ways in a manner to minimize discharge of pollutants. The Inspection and Public Works have a litter collection program in place. Additionally, prior to weekly grass mowing, designated crews within the Inspection and Public Works Department pick up trash from the City's right-of-ways and all other areas that it maintains. Any severe right-of-way erosion noted during the mowing process is repaired in a timely manner. Grassed ditches serve as storm water filters during rain events. In years one through five, the City will track areas patrolled by the amount of litter collected.

7. Capital Storm Water Projects

Each new budget year, the City determines a list of capital projects to be completed. The Mayor's Office and City Council are the lead in this effort. These projects typically include a tremendous amount of funding, as well as hiring an outside engineering firm and general contractor. If approved, these projects are included in the budget for the following year. Some of these projects may be emergency repairs due to natural causes/disasters. Emergency projects are completed as soon as practicable for the safety of the public.

In years one through five of the permit cycle, all capital storm water projects will be monitored for compliance with the City's proposed erosion and sediment control ordinance. Inspections of these projects will be conducted, as will be the case for all qualified construction sites. Any deficiencies will require immediate attention and compliance. The annual report will reflect a list of all projects, project locations, details, goals of the project, and compliance inspections.

Responsible Departments:

City Council, Storm Water Regulations Board, Mayor's Office, Inspection and Public Works

C. Training

Training is essential for all City employees regarding pollution prevention and good housekeeping. Previous MCMs detail specific training programs that will be developed and implemented. The City will also develop a training program for the purpose of educating employees regarding storm water runoff and pollution prevention. This training will be a part of other MCM training as well.

In year one, the City will develop a training presentation for new hires on basic storm water issues, IDDE, pollution prevention, and good housekeeping. In years two through five, the City will provide a general storm water training session per year for new employees involved in the program. Also in years two through five, the City will annually provide specific training in regards to facility SOPs for all employees with any program responsibilities.

D. Evaluation

The evaluation of the program will include the level of achievement of the program's goals. Also during the permit term, the effectiveness of the program will reveal itself based on construction site compliance. The results of the program will be evaluated annually and documented in the annual report.

Chapter 4 – Water Quality Monitoring Plan

A. Records of Monitoring Information:

- The date(s), precise location(s), and time(s) of sampling measurements / analysis
- The name of the individual(s) who performed the sampling measurements / analysis
- The sampling measurement / analytical techniques or methods used
- The results of such sampling measurements / analyses
- Monitoring results will be reported with the SWMP Annual Report

B. Target Pollutant:

- Sediment will be the targeted pollutant for the City's Water Quality Monitoring Program.

Chapter 5 – Record Keeping and Reporting

The State's general permit requires the submission of an annual report. Reports are due on March 31st of each year during the first five-year permit term. The governing body or an official designated by the governing board must certify these reports. At a minimum, the annual reports will contain the following information:

- Statuses of compliance with permit conditions
- An assessment of the appropriateness and effectiveness of the identified BMPs
- Status of the identified measurable goals of reducing the discharge of pollutants and protecting water quality
- Results of information collected and analyzed, including monitoring data, if any, during the reporting period
- A summary of the storm water activities that the permittee plans to undertake during the next reporting cycle
- An assessment of the appropriateness and effectiveness of the identified BMPs
- Any proposed change(s) to the SWMP, along with a justification of why the change(s) are necessary, and a change in the person or persons implementing and coordinating the SWMP

The Storm Water Regulations Board Manager is responsible for assembling information from the various City departments to author the annual reports. Forms for use in recordkeeping by involved departments will be developed to facilitate the collection of the information required for the annual reports.

The City will keep records required by the permit for at least five years, or for the duration of the permit. The records used to document compliance with SWMP will be available to the public during regular business hours from the various implementing departments. The SWMP and related documents may be viewed in the Storm Water Regulations Board, 670 Park Avenue, Moody, AL 35004.