

## UNIVERSITY

## STORM WATER MANAGEMENT PROGRAM PLAN

#### Prepared by AUBURN UNIVERSITY

## STORM WATER MANAGEMENT COMMITTEE

May 2023

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#### **INTRODUCTION**

This Storm Water Management Program Pan (SWMPP) was developed in general accordance with the guidelines provided in Title 40 Code of Federal Regulations (CFR), Part 122.26(d) incorporated by reference in the Alabama Administrative Code 335-6 as administered by the Alabama Department of Environmental Management (ADEM) and NPDES ALR040030 Phase II General Permit effective October 1, 2021.

The purpose of this SWMPP is to describe Auburn University and its operation and identify the Best Management Practices (BMPs) to be utilized to reduce the discharge of pollutants from Auburn University's main campus to the maximum extent practicable (MEP) to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA).

The Storm Water Committee formed to develop this SWMPP is comprised of individuals from both academic and operational areas of campus. The collaborative effort was strengthened by its diversity and includes the following individuals and their areas of responsibility or interest:

- Dr. Chris Anderson, Forestry & Wildlife Sciences
- Mr. Nicholas Blair, Facilities Management Planning, Design and Construction
- Dr. David Blersch, Biosystems Engineering
- Dr. Eve Brantley, AU CSES, ACES
- Mr. Ben Burmester, Facilities Management Planning, Design and Construction
- Ms. Mona Dominguez, Water Resource Center Alabama Water Watch
- Mr. Mike Freeman, Risk Management and Safety
- Ms. Valerie Friedmann, Architecture Planning & Landscape Architecture
- Ms. Joan Hicken, Facilities Management Waste Reduction & Recycling
- Dr. Thorsten Knappenberger, AU CSES
- Mr. Mike Kensler, Office of Sustainability
- Mr. Dan King, Facilities Management
- Mr. Eric Kleypas, Athletics Department Field Management
- Mr. Judd Langham, Facilities Management Planning, Design and Construction
- Ms. Charlene LeBleu, Architecture Planning & Landscape Architecture
- Mr. Glenn Loughridge, Campus Dining

- Mr. Tom McCauley, Risk Management & Safety
  Dr. Chandana Mitra, Department of Geosciences
  Ms. Wendy Peacock, Facilities Management Planning, Design and Construction
  Mr. Buster Reese, Facilities Management Planning, Design and Construction
  Ms. Amy Strickland, Office of Sustainability
  Mr. Justin Sutton, Facilities Management Landscape Services
  Mr. William Walker, Campus Dining
- Dr. Amy Wright, Department of Horticulture

#### Objective

The primary goal of the developed SWMPP is to improve the quality of surface waters at Auburn University by reducing the amount pollutants contained in storm water runoff to a maximum extent practicable (MEP). Auburn University will seek to reduce the pollutants from entering storm water runoff through the implementation of best management practices. The SWMPP will describe the minimum best management practices to be implemented by Auburn University and as required by ADEM General Permit ALR040030 (effective date October 1, 2021).

#### 1.1 MS4 Description

Auburn University is a large land grant educational institution located in Auburn, Lee County, Alabama comprised of approximately 1800 acres of contiguous property. Auburn University is one of the major liberal arts and science universities in the southeast. The area surrounding Auburn University consists of residential property to the east and southeast, agricultural property to the southwest and west and urban city property to the north and east.

#### **1.2 Definitions**

**ADEM:** Alabama Department of Environmental Management responsible for enforcing environmental regulations in the State of Alabama.

**Best Management Practices (BMP):** may include schedule of activities, prohibition of practices, maintenance procedures or other management practices to prevent or reduce

the pollution of Waters of the State. BMPs also include treatment requirements, operating procedures and practices both structural and non-structural designed to control runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage.

**Clean Water Act (CWA):** The Clean Water Act is an Act passed by U.S. Congress to control water pollution. It is formally referred to as the Federal Water Pollution Control Act of 1972 or Federal Water Pollution Control Act Amendments of 1972.

**Code of Federal Regulations (CFR):** A codification of the final rules published daily in the Federal Register. Title 40 of the CFR contains the environmental regulations.

**Composite Sample:** A sample collected with consideration giving towards flow and time.

**Control Measure:** any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to Waters of the State.

**Discharge:** when used without a qualifier, refers to "discharge of pollutant" as defined as ADEM Admin Code 335-6-6-.02(m)

**EPA:** Environmental Protection Agency

**Grab Sample:** A sample that is taken on a one-time basis without consideration of the flow rate of the sampling media and without consideration of time.

**Green Infrastructure:** refers to systems and practices that use or mimic natural processes to infiltrate, evapotranspiration (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.

**Illicit Connection:** any man-made conveyance connecting an illicit discharge directly to municipal separate storm sewer (MS4)

**Illicit Discharge:** defined at 40 CFR 122.26(b)(2) and refers to any discharge to a municipal separate storm sewer (MS4) that is not entirely composed of storm water,

except those discharges authorized or excluded under an NPDES permit.

Low Impact Development (LID): an approach to land development (or redevelopment) 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.

**Maximum Extent Practicable (MEP):** the technology based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by the Clean Water Act (CWA) Section 402(p). A discussion of MEP as it applies to small MS4s like Auburn University is found at 40 CFR 122.34

**Municipal Separate Storm Sewer System (MS4):** A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm ditches) owned or operated by a state, city, town or other public body having jurisdiction over the collection and conveyance of storm water which is not a combined sewer and which is not part of a publicly owned treatment works.

**Notice of Intent (NOI):** the mechanism used to "register" for coverage under a General Permit.

**National Pollutant Discharge Elimination System (NPDES):** The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements under Section 307, 318, 402 and 405 of the CWA.

**Permit:** NPDES ALR040030 issued to Auburn University & became effective October 1, 2021.

Permittee: Auburn University

Priority Construction Site: any qualifying construction site in an area where the MS4

discharges to a waterbody which is listed on the most recently approved 303d 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, any waterbody assigned the Outstanding Alabama Water use classification in accordance with ADEM Admin Code 335-6-10-.09 and any waterbody assigned a special designation in accordance with 335-6-10-.10

**Storm water:** defined at 40 CFR 122.26(b)(13) storm water runoff, surface runoff and drainage.

**Storm Water Management Program Plan (SWMPP):** A plan developed for implementation of NPDES permit requirements.

**Waters of the State:** All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce. Waters of the State include but are not limited to all interstate waters and interstate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, play lakes or naturals ponds.

#### **REGULATORY MECHANISM**

Auburn University utilizes the Policy on Storm Water Management Compliance as the regulatory mechanism to prohibit activities on University Land that would be non-compliant with either the Permit or the SWMPP. Auburn University Facilities Management is the responsible for administering the Policy on behalf of the University.

#### Policy on Storm Water Management Compliance

#### CONTROL MEASURES

Storm water management controls or BMPs will be implemented to prevent pollution in storm water discharges from Auburn University's main campus. The Permit requires BMPs addressing five minimum control measures to be part of the SWMPP. These BMPs are described in the remaining subsections of this section with applicable measurable goals and scheduled implementation dates for each BMP.

The five control measures addressed by this SWMPP include:

- 2.1 Public Education and Public Involvement on Storm Water Impacts
- 2.2 Illicit Discharge Detection and Elimination
- 2.3 Construction Site Storm Water Runoff Control
- 2.4 Post Construction Storm Water Management in New and Redevelopment
- 2.5 Pollution Prevention / Good Housekeeping for Municipal Operations

#### 2.1 Public Education and Public Involvement on Storm Water Impacts

An informed and knowledgeable "community" at Auburn University will be an important factor in the success of this SWMPP to reach its goal of reducing the discharge of pollutants associated with storm water runoff. The effective implementation of this measure will help Auburn University to ensure:

- 1) Greater awareness to the University community of the importance of managing discharges to local receiving waters.
- 2) Greater support from the University community for the storm water management program; and
- 3) Compliance with the requirements of the General NPDES Permit.

The Public Education and Public Involvement on Storm Water Impacts control measure consists of BMPs that focus on the development and promotion of educational materials and efforts designed to inform the public about the impacts that storm water discharges have on local water bodies and to foster community partnerships that provide opportunities for stakeholders to learn more about storm water practices and policies, demonstration projects and assessments of local water quality.

Educational materials, activities and partnerships will be designed and promoted to engage the public to better understand the impacts of storm water pollution, local MS4 efforts as well as to highlight and support measures to reduce the introduction of pollutants in storm water. The measure is expected to reach the constituents within the MS4s permitted boundary (Auburn University's main campus). An emphasis of these outreach efforts will be towards the removal of known pollutants from storm water to include floatables, pathogens and sediment.

A plan for effectively engaging in Public Education and Public Involvement on Storm Water Impacts is presented below as required by the Permit.

#### Target Audience

Auburn University has a unique opportunity to reach several distinct target audiences throughout the year. These audiences include Auburn University faculty and staff, students, parents of students, visitors, contractors on campus, and surrounding community stakeholders.

#### Pollutants of Concern

Primary storm water pollutants of concern for Auburn University include pathogens as listed on the 2010 303(d) list for Parkerson Mill Creek, floatables i.e. litter from improper trash disposal, and sediment from land disturbing activities and in-stream erosion processes.

#### **Communication Mechanisms**

Communication of storm water pollution prevention principles will include the following mechanisms AU web sites, interactive campus storm water BMP tour, Auburn News which is an electronic bulletin that reaches the entire student body and all Auburn University employees, representation at various local citizen advisory groups and other state stormwater association meetings, inclusion of storm water and stream information on signage in strategical locations on campus, presentations to student and watershed organizations, continued participation in university-led activities such as Camp War Eagle, Earth Day/Week, Arboretum Game Day events, Office of Sustainability events and efforts, Alabama Cooperative Extension Services (ACES) initiatives, multiple academic research and educational initiatives, student service events (i.e. Big Event, IMPACT) and various social medial platforms.

#### **Responsible Parties**

The Public Education and Outreach measure development and implementation will be overseen by a partnership between the University Water Resources Center, the Office of Sustainability, Facilities Management – Waste Reduction and Recycling, and the Department of Risk Management and Safety (RMS).

#### Measurable Outcomes and Evaluation

Effectiveness of the activities related to this measure will be measured through:

- Number of presentations delivered various AU programs will provide at a minimum of four presentations specific to storm water management annually.
- 2. RMS maintains the central electronic resource (webpage) to serve as primary reference site for the updated University SWMPP. <u>RMS-Stormwater</u>
- 3. Quantify the number of individuals reached through University led activities throughout each reporting cycle. Audience includes students, staff, employees and visitors to Auburn University and is targeted at 2500 individuals each reporting cycle.
- 4. Number of University led PMC cleanup efforts. AU aims to promote three cleanup events throughout each reporting cycle.
- 5. Documented attendance to regular local, State and regional association meetings and/or programs.
- 6. Continued attendance, partnership, or participation in Alabama Water Watch monitoring workshops.

#### 2.2 Illicit Discharge Detection and Elimination

Per the Permit, an Illicit discharge is defined at 40 CFR Part 122.26(b)(2) and refers to "any discharge to an MS4 (municipal separate storm sewer system) that is not composed entirely of storm water ..." Exceptions include NPDES permitted discharges and discharges resulting from fire-fighting activities. Some examples of illicit discharges include sanitary wastewater, effluent from septic tanks, car wash wastewaters, improper oil disposal, and radiator flushing disposal, laundry wastewaters, construction site runoff, spills from roadway accidents, and swimming pool discharges (that have not been dechlorinated). These illicit discharges can enter a storm drain system either through a direct connection (e.g., a pipe connected directly to the storm drain) or indirectly (e.g., spills, dumped chemicals, cracks in sanitary sewers). As a result, inadequately treated wastes potentially containing high levels of pollutants, such as heavy metals, oil and grease, toxics, viruses, and bacteria, are discharged into the MS4 and ultimately to the Waters of the State. The next subsections describe Auburn University's current program to detect and eliminate both direct and indirect illicit discharges into the storm drain system and associated plans for the permit term.

Regulations require identification and elimination of all non-storm water discharges and appropriate responses to protect the campus community and the environment. Auburn University relies upon multiple methods to identify illicit discharges as quickly as possible. All potential illicit discharges should be reported to Auburn University Risk Management and Safety upon discovery. Discovery and reporting methods include reports conveyed from the campus community to the University's Facilities Management Department by dialing 844-HELP, by utilizing the electronic reporting feature known as "Ask Facilities" or by contacting RMS at 844-4870. Reports might originate from faculty, staff, students, or campus visitors. AU staff with specific training on illicit discharge identification will increase the probability of proper and timely reporting.

Investigation of illicit discharges will commence as soon as practicable but always within 5 working days of the initial discovery or report. Investigation and mitigation measures are implemented upon detection to identify possible source(s) of illicit discharges and to either prevent or reduce adverse impacts to the MS4. A written record will be maintained to document each illicit discharge investigation. Record will include the nature of the discharge, possible sources, mitigation, or cleanup measures implemented, any steps taken to prevent similar discharges in the future, and documentation of any ADEM reporting required.

#### Target Audience

Auburn University has a unique opportunity to reach several distinct target audiences throughout the year. These audiences include Auburn University faculty and staff, students, parents of students, visitors, contractors on campus, and surrounding community stakeholders.

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#### Responsible Parties

The Illicit Discharge Detection & Elimination measure development and implementation will be overseen by a partnership between the Auburn University Facilities Management, RMS and the University Water Resource Center.

#### Measurable Outcomes and Evaluation

- Update map of all campus storm water outfalls. As required by Section III(b)(i) of the Permit, Auburn University will provide annual updates of the map to ADEM by May 31<sup>st</sup> each year.
- 2. Promote illicit discharge detection and elimination program/elements at a minimum of four training/educational efforts.
- 3. Continue bacteriological monitoring to identify possible sources of impairment.
- Perform and document annual dry weather screening/outfall inspections. Evaluate all outfalls to PMC during each reporting cycle.
- 5. Continue to investigate and prioritize repair or replacement of suspect infrastructure.
- 6. Evaluate IDDE Standard Operating Procedure (SOP).

#### Auburn University

# Illicit Discharge Detection and Elimination Standard Operating Procedure

1. Purpose of Standard Operating Procedure:

A. To improve the quality of surface water and ground water within the watershed areas owned and maintained by Auburn University by preventing illicit discharges and illicit connections.

B. To prevent the discharge of contaminated storm water runoff from Auburn University properties and operations into the storm drainage system and Parkerson Mill Creek.

C. To comply with the requirements of Auburn University storm water permit.

D. To comply with all United States Environmental Protection Agency and State laws applicable to storm water discharges.

#### 2. Definitions

An Illicit Discharge is the discharge of pollutants or non-storm water materials to the storm drainage system via overland flow or direct dumping of materials into a catch basin or inlet. Examples of illicit discharges include overland drainage from car washing or cleaning paint brushes in or around a catch basin.

An Illicit Connection is the discharge of pollutants or non-storm water materials into the storm drainage system via a pipe or other direct connection. Sources of illicit connections may include sanitary sewer taps, wash water from laundry facilities, wash water from sinks, or other similar sources.

3. Illicit Discharges

No University employee, student, visitor, contractor, department, or unit shall cause or allow discharges into the Auburn University storm drainage system which are not composed entirely of storm water, except for the allowed discharges listed in Section 5.

Prohibited discharges include but are not limited to: oil, anti-freeze, grease, chemicals, wash water, paint, animal waste, garbage, and litter.

4. Illicit Connections

The following connections are prohibited, except as provided in Section 5 below: Any drain or conveyance, whether on the surface or subsurface, which allows any non-storm water discharge, including but not limited to sewage, process water, wastewater, or wash water, to enter the storm water drainage system, and any connections to the storm drain system from indoor drains or sinks.

5. Allowed Discharges

The following discharges to the storm drainage system are allowed:

A. Discharges that are specifically permitted under a State or federal stormwater program.

B. Incidental non-storm water discharges which do not significantly contribute to the pollution of Auburn University surface waters and are limited to the following:

- Water line flushing
- Reclaimed water line flushing
- Landscape irrigation, including but not limited to reclaimed water
- Diverted stream flows
- Rising groundwater
- Uncontaminated groundwater infiltration
- Uncontaminated pumped groundwater
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate (that does not contain biocide)
- Springs
- Water from crawl space pumps
- Footing drains
- Flows from riparian buffers and wetlands
- De-chlorinated swimming pool discharges
- Flows from emergency firefighting
- Building wash water without detergents, cleaners, or corrosive additives.

C. If Auburn University determines that any of the above discharges contribute to pollution of campus streams or other surface waters or is notified by a State or federal government agency, such as the Alabama Department of Environmental Management, that the discharge must cease, Auburn University will instruct the responsible person to cease the discharge.

D. When instructed to cease the discharge, the discharger of substances newly classified as pollutants shall cease the discharge immediately and be given reasonable time to make corrections so that the discharge will not continue.
E. Nothing in this SOP shall affect a discharger's responsibilities under federal or State law.

6. Enforcement and Penalties

A. Whenever Auburn University finds that a violation of this SOP has occurred; Auburn University may order compliance by written notice to the responsible person. Such notice may require without limitation:

i. The performance of monitoring, analyses, and reporting;

ii. The elimination of prohibited discharges or connections;

iii. Cessation of any violating discharges, practices, or operations;

iv. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;

v. Payment of any fee, penalty, or fine assessed against Auburn University to cover remediation cost;

vi. The implementation of new storm water management practices; and

vii. Disciplinary action up to and including dismissal, where appropriate.

B. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violation(s). Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, then Auburn University Department of Risk Management & Safety will initiate work orders for the appropriate corrective actions and the individual or University department will be charged for the cost.

7. Dry weather outfall inspection and monitoring

Auburn University shall, at a minimum, visually inspect PMC all outfalls during dry weather conditions each reporting cycle. Flows suspected of containing illicit discharges due to the presence of odors, colors or sheens shall be investigated. Investigation may include water chemistry field testing and/or bacteriological sampling and will be dependent upon the characteristics of the observed discharge. Investigations may involve Facilities Management, Risk Management and Safety and AU Water Resource Center resources to trace source of suspect illicit discharge. Upon source discovery, measures will be implemented to cease discharge immediately as possible. Should immediate cessation not be practicable, a schedule will be developed. Should the source of discharge be determined to originate off campus, the MS4 community having jurisdiction will be notified within 24 hours as well as the Department. The physical condition of the outfall shall also be noted during the inspections. Compromised outfall structures requiring maintenance will be documented with a work order to correct noted deficiency submitted within 24 hours of its discovery. 8. Promote Illicit Discharge Detection & Elimination SOP

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Promotion of this SOP shall be presented to Auburn University community via multiple methods to raise awareness via various means.

#### 2.3 Construction Site Storm Water Runoff Control

In accordance with Part III (B) (4) of NPDES Permit No ALR040030, Auburn University developed the Construction Site Storm Water Runoff Control Best Management Practice.

#### Target Audience

The Construction Site Runoff Control Program was developed for the contractors performing construction activities on campus and to assist AU Facilities Management personnel responsible for managing development on campus. Auburn University has a unique opportunity to reach several distinct target audiences throughout the year. These audiences include Auburn University faculty and staff, students, parents of students, visitors, contractors on campus, and surrounding community stakeholders.

#### **Responsible Parties**

Auburn University's Facilities Management is responsible for all construction projects on campus and implementation of this measure.

Auburn University Design and Construction Standards serve as the University's regulatory mechanism for the Construction Storm Water Control Program and were recently revised to strengthen the storm water management efforts on all University construction sites including the following sections.

#### Section G10 – Site Preparation

2022-Design-Standards-Binder-Final.pdf (auburn.edu)

Section G10 of the Design and Construction Standards was modified to provide the Contractor a contractual responsibility to meet the objectives of the General NPDES Permit. This section requires that the Contractor:

- Meet the requirements outlined in the Alabama Handbook for Erosion and Sediment Control and Storm Water Management of Construction Sites and Urban Areas.
- Demonstrate compliance with ALR100000 Notice of Intent requirements prior to initiating any earthwork at the site with use of the "AU Land Disturbance Authorization" form contained in the contract Front End documents.
- Prior to requesting Termination of Coverage per ALR100000 from the State, the Contractor shall provide AU a completed "Notice of Intent to Close Permit" form to obtain concurrence from AU.
- Require turbidity monitoring at specified construction sites to ensure that site runoff not result in an increase of 50 NTU turbidity standards.

Auburn University will conduct routine turbidity monitoring at specified sites to determine the effectiveness of the on-site controls design, installation, and maintenance. Construction contracts administered by Facilities Management further identify the procedures that will be taken by the Auburn University should NPDES non-compliance be identified to include withholding payment and notification to ADEM.

#### Measurable Outcomes and Evaluation

- Perform in-house construction site inspections in accordance with Contractors NPDES Permit responsibilities.
- 2. Perform annual training erosion and sedimentation training to AU designers and project managers to better understand the G10 requirements.
- 3. Continue in-house turbidity monitoring of select sites to quantify sedimentation impacts.

#### 2.5 Post Construction Runoff Control

The post construction runoff control measure is designed to ensure that new construction designs do not result in increased storm water pollution.

Development can alter landscapes by increasing impervious areas (i.e., roofs, driveways, parking lots) and changing drainage patterns, thereby increasing the storm water rate, volume and velocity of runoff from a site. This can lead to degradation of receiving waters and increases in the occurrence of flooding. Storm water from developed impervious areas can also contain a variety of pollutants that are detrimental to water quality, such as sediment, nutrients, heavy metals, pathogenic bacteria, and petroleum hydrocarbons.

The goal of post-construction storm water management is "to reduce runoff volume and improve water quality by replicating the natural hydrology and water balance of the site, based on historical conditions and undeveloped ecosystems in the region." LEED v4 Our intention is to develop storm water management designs in a manner best replicating natural site hydrology processes. New projects on campus shall address water quality and quantity impacts early in the design process to provide long-term water quality benefits. The implementation of Green infrastructure BMP designs that reduce impervious surfaces, provide water filtering services and encourage infiltration is preferred. New projects offer many opportunities to reduce storm water runoff from the site.

To meet the requirements of Part III B5 of the Permit, Auburn University developed a Campus Landscape Master Plan (CLMP) as part of the overall Comprehensive Campus Master Plan. The Master Plan is approved by the Board of Trustees and serves as the mechanism to ensure that the objectives of the CLMP are achieved. The CLMP embraces a sustainable environment, including an emphasis on Low Impact Development and Green Infrastructure approaches to storm water management that incorporate best management practices for maintenance and implementation schedules, as well as campus watershed restoration opportunities.

The Design and Construction Standards performance requirements state a project is to not increase peak storm water flows for the 2-, 5-, 10-, and 25-year storm events as well as provide water quality treatment for the first 1.2 inches of rainfall with an 80 percent Total Suspended Solids (TSS) reduction goal. Projects are also encouraged to reduce overall

storm water runoff volume by reducing impervious cover campus wide and promotion of infiltration.

#### Responsible Parties

Auburn University's Facilities Management is responsible for the implementation of the CLMP and implementation of this measure.

#### Measurable Outcomes and Evaluation

- Provide training to AU Design Leads, maintenance personnel, and others on AU storm water management preferences, updated Design Standards / Post Construction Storm Water Manual.
- 2. All new and redeveloped AU properties shall develop a storm water management plan to comply with the Design and Construction Standards. A report documenting the implementation or consideration of Low Impact Development and Green Infrastructure shall be reviewed per the Post Construction Storm Water Manual by Facilities Management.

#### 2.6 Pollution Prevention / Good Housekeeping for Municipal Operations

Efforts to survey University activities and facilities will continue. These surveys focus on the storage of materials at the variety of areas managed by Facilities Management, Auxiliary Operations, various academic departments, and AU Athletic Department.

Part III.B.5.a. of the Permit requires Auburn University to inventory "municipal facilities" including municipal facilities that have a potential to discharge pollutants via storm water runoff, develop strategies to reduce litter, floatables and debris from entering the storm sewer system from these facilities, develop SOPs detailing good housekeeping practices to be employed at the appropriate municipal facilities, develop an inspection program to evaluate these operations and to develop a good housekeeping training program for municipal facility staff as outlined in the SOP.

#### Standard Operating Procedure

Municipal Facilities have been inventoried and are listed below. Due to the activities conducted at these facilities and because of the potential to introduce pollutants to the University's MS4, have been identified as "Municipal Facilities" and fall subject to this SOP. Implementation requires inspection of the municipal facility by the responsible AU entity. All discharges will cease upon discovery as possible. The responsible AU entity Supervisor will be notified of all discharges upon discovery. All discharge(s) and/or potential discharge(s) and the subsequent corrective measures taken will be documented be documented, and recommended corrective measures taken immediately. Record of inspection will be maintained by AU for a period of three years and will be made available for internal and external audit.

#### MS4 Municipal Facility Inspection SOP:

#### I. PURPOSE

This document provides standard operating procedures (SOP) for performing municipal facility inspections in accordance General NPDES Permit No. ALR040030 Part III.5.a.iii.

#### II. OBJECTIVE

The purpose of the procedure is to prevent or minimize to the maximum extent practicable (MEP) pollutants from being discharged from these "municipal facility" locations/operations into Auburn University's MS4.

#### III. SCOPE

RMS will perform Inspections at these facilities annually with reinforcement provided through annual training and/or consultation. Regular inspections will assess the impacts of AU operations at these facilities that may include but not be limited to:

Equipment	Street	Road	Waste
Washing	Sweeping	Maintenance	Management
Vegetation	Fleet	External	Material Storage
Control	Maintenance	Building	-
		Maintenance	

Should stormwater concerns be identified during the inspection, measures will be taken in cooperation with RMS and the responsible group as soon as possible.

#### **Inventory of Municipal Facilities**

Facilities Management	Athletics
Auto/Small Engine Shop	Plainsman Park
Fleet Fueling Station	Jordan Hare Stadium
Materials Management	Soccer Complex
Landscape Services	Jane B. Moore Softball Complex
Facilities Management Yard	Hutsell Rosen Track
Chilled Water Plant I	Auburn Arena
Chilled Water Plant II	Watson Field House
Chilled Water Plant III	Football Performance Facility (under
	construction)
District Energy Plant	
Hot Water Plant I	Risk Management & Safety
Hot Water Plant II	Environmental Health & Safety I
Satellite Steam Plant	Environmental Health & Safety II
44 kV Substation	Environmental Health & Safety III
115 kV Substation	Pathological Waste Incinerator
Student Affairs	
Foy Dining (CD)	
Village Dining (CD)	
Student Center (CD)	
Terrell Hall Dining (CD)	
Wellness Kitchen (CD)	
Sports Plex (CR)	
Intramural Field House/Equipment Pole Barn (CR)	

CD: Campus Dining

CR: Campus Recreation

GL: Greek Life

#### MS4 Municipal Facility Inspection:

Facility Information					
Facility Name:					
Facility	Facility POC:     Phone Number:				
Date of Inspection: Inspectors:					
Site E	valuation		Yes		No
Doest	facility have potential pollutants o	r processes exposed to rain?			
Inspe	ction Checklist				
Good I	Housekeeping				
Inspec	tion Item		C		NC
1.	1. Is site free from litter and debris?				
2.	2. Are designated waste receptacles properly used?				
3.	Are spills immediately cleaned up to the extent that only stains remain?				
4.	4. Are BMPs in good working order?				
5.	<ol><li>Storm drainage system and outfalls are inspected and free of debris and spills?</li></ol>				
Pollution Prevention		С	NC	N/A	
6. Is exposed equipment/processes clean and in good working order?					
7.	7. If the facility stores materials or products outdoors (except final products intended for outdoor use), is there is appropriate coverage to prevent discharging?				
8.	<ol> <li>If facility has outdoor storage, storage container is in good condition (i.e., not open, deteriorating, or leaking)?</li> </ol>				
9.	If facility has outdoor storage, spill kits personnel are aware of spill procedure	s/equipment are onsite, and es?			
10.	10. Does facility have materials or residuals on the ground, in the storm drain system, and/or local water ways?				

11. Does the facility have any apparent IDDEs?		
12. Are hazardous materials/waste stored on or within containment and distanced from storm drain system and/or local waterways?		
13. Are hazardous materials/waste storage areas properly labeled?		
Environmental Training		
14. Has the Facility POC received Stormwater training?		

#### Measurable Outcomes & Evaluation:

- 1. Quantify regulated and non-regulated waste management and minimization volumes from campus operations.
- 2. Perform and document "municipal facility" annual inspections.
- 3. Provide and document annual pollution prevention training to municipal facility personnel.
- 4. Update "municipal facility" inventory annually.

#### Responsible Department:

Auburn University RMS, Facilities Management, Office of Student Affairs and Athletics

#### Spill Prevention Control and Countermeasure (SPCC) Program

AU RMS has developed and maintains the campus SPCC Plan. The Plan calls for the proper storage and management of oil containing equipment. The SPCC Plan identifies the procedures to be followed to regularly (monthly) inspect applicable containers and instructs "oil handling personnel" on the appropriate measures to take in the event of a spill.

#### Measurable Outcomes and Evaluation:

- 1. Document the number of inspections performed on regulated storage units on an annual basis (SPCC).
- 2. Document the number of preventive maintenance procedures performed on tanks, valves, pumps, pipes, and other equipment.

- 3. Document the number of training presentations performed and the number of employees trained annually.
- 4. Document the annual volume of used oil managed by AU.

#### **Responsible Department:**

AU RMS & Facilities Management

#### Monitoring Plan for Pathogen Impairment

In accordance with Part V of the Permit, AU will continue to evaluate Parkerson Mill Creek (PMC) Watershed for its pathogen impairment. PMC is in Lee County; the watershed is part of the Chewacla Watershed, in the lower Tallapoosa River Basin. The 9.3 square mile (5,981 acres) watershed contains 21,000 meters (68,500 ft.) of main stem perennial stream and approximately 86,000 meters (282,152 ft.) of tributary stream length. The stream network empties into Chewacla Creek, just south of the H.C. Morgan Water Pollution Control Facility. The watershed includes the City of Auburn, Auburn University and the surrounding areas. The headwaters of PMC are approximately 3,000 meters (9,845.5 ft.) in length and are located on the campus of Auburn University. In 2007, ADEM listed PMC as impaired on Alabama's 303(d) List of Impaired Waters for pathogens from point source and non-point sources, primarily urban runoff and storm sewer connections. As such, AU regularly monitors PMC by performing bacteriological analysis through the AU Water Resource Center's Alabama Water Watch (AWW) program. The results of the monitoring effort will be reported with the submission of the annual report. Collaboration with the City of Auburn will continue as both entities contain and have influence on this watershed.

#### REVIEW AND UPDATING SWMPP

AU will review the SWMPP annually in conjunction with the preparation of the annual report required under Part IV, Section B of the General Permit.

The annual report will be submitted to the ADEM for each year of the permit term. Reports are due to ADEM by May 31st of each year and will cover activities for the previous reporting period (April 1- March 31).

The reports consist of:

- Compliance status including:
  - Assessment of the appropriateness of the BMPs
  - Progress towards achieving statutory goals of reducing the discharge of pollutants and protecting water quality.
  - Measurable goals for each of the minimum control measures
- Results of information collected and analyzed, if any, during the reporting period.
- Any changes made to the SWMPP since the last annual report and a summary of the storm water activities AU plans to initiate during the next reporting cycle.
- Proposed changes to the SWMPP
- Description and schedule for implementation of additional BMPs that may be necessary based on monitoring results.
- Monitoring data

Annual reports are signed by the Stormwater Executive Committee and facilitated by Risk Management and Safety.