



# The University of North Alabama Stormwater Management Program Plan

FEBRUARY 2021

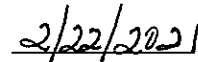
### Certification Statement

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



Evan Thornton, CFO

Vice President,  
Business and Financial Affairs



Date

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## **1.0 INTRODUCTION**

This Stormwater Management Program Plan (SWMPP) has been 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 ALR040063 Phase II General Permit, effective October 1, 2016.

Stormwater runoff is generated from rain and snowmelt events that flow over land or impervious surfaces, such as paved streets, parking lots, and building rooftops, and does not soak into the ground. The runoff picks up pollutants like trash, chemicals, oils, and dirt/sediment that can harm rivers, streams, lakes, and coastal waters. To protect these resources, the use of stormwater controls, known as best management practices (BMPs), are utilized to filter out pollutants and/or prevent pollution by controlling it at its source.

### **1.1 Objective**

The purpose of this SWMPP is to describe the methods utilized by the University of North Alabama to:

1. reduce the discharge of pollutants from the campus to the maximum extent practicable
2. protect water quality
3. satisfy the appropriate water quality requirements of the Clean Water Act (CWA).

The University of North Alabama SWMPP includes best management practices (BMPs), control techniques and systems, design and engineering methods, public participation and education, and monitoring and other provisions designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP).

### **1.2 MS4 Description**

The University of North Alabama is comprised of 200 acres of property and is located in Florence, Lauderdale County, Alabama north of the Tennessee River. The area surrounding the University of North Alabama consists of residential property to the north, east and west, and urban city property to the south. Cypress Creek receives stormwater from the University of North Alabama MS4.

### 1.3 Definitions

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

**Alabama Handbook:** *Alabama Handbook For Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas, Volumes 1 and 2*, Alabama Soil and Water Conservation Committee, Montgomery, Alabama, July 2018.

**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.

**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

**Floatable Debris (aka "floatables"):** buoyant solid waste that pollutes waterways. Sources include boats and shipping vessels, stormwater discharge, sewer systems, industrial activities, offshore drilling, recreational beaches, and landfills. Waste dumped far from shore can end up as floatable debris when flooding, high winds, or other weather conditions transport it into rivers and streams.

**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 stormwater 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 system (MS4)

**Illicit Discharge:** Defined at 40 CFR 122.26(b)(2) refers to any discharge to a municipal separate storm sewer system (MS4) that is not entirely composed of stormwater, 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 stormwater 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 stormwater 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 stormwater discharges established by the Clean Water Act (CWA) Section 402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR122.34

**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 stormwater 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 ALR040063 is issued to the University of North Alabama.

**Permittee:** University of North Alabama.

**Stormwater:** Defined at 40CFR 122.26(b)(13) as stormwater runoff, snow melt runoff, and surface runoff and drainage.

**Stormwater 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 natural ponds.

## 2.0 CONTROL MEASURES

There are 5 minimum control measures defined in the University of North Alabama's Permit, which are listed below. These BMPs, their applicable measurable goals, scheduled implementation dates, and responsible parties are described in detail in the following sections.

1. Public Education and Public Involvement on Stormwater Impacts
2. Illicit Discharge Detection and Elimination
3. Construction Site Stormwater Runoff Control
4. Post Construction Stormwater Runoff Control
5. Pollution Prevention/ Good Housekeeping

The pollutants of concern for the University of North Alabama are:

Primary Pollutants		Pollutants of lesser concern
• Trash/litter	• Sediment	• Oil and grease

### 2.1 Public Education and Public Involvement on Stormwater Impacts

This control measure consists of several BMPs designed to inform the community about the impacts of stormwater discharges on water bodies and the steps that they can take to reduce pollutants in stormwater runoff to the maximum extent practical.

The University will seek and consider public input each year regarding the

development, revision and implementation of the SWMPP. Options for seeing input include the use of University media (e.g., Email, Newspaper, presentation) and through training. The feedback received will be considered during the annual review process.

The effectiveness of this Minimum Control Measure will be evaluated by counting the number of persons involved with Public events, counting the number of Stormwater brochures distributed at Public events.

- A. Printed Materials - Educational brochures and posters have been developed and printed. Posters have been placed in campus buildings and dormitories. Brochures have been placed in information distribution stands. These are also utilized in public education events and course# ES348, Earth: Sustainability Resources.
- B. Stormwater Drain Labeling - Fifty campus stormwater drains are labeled with markers indicating that the drain discharges to a public water body.
- C. Stormwater Program Website - The Stormwater Management page is on the Facilities Administration and Planning website, <https://www.una.edu/facilities/stormwater/index.html>. The SWMPP and Annual Report are published as well as a method to report stormwater-related concerns, <https://www.una.edu/facilities/stormwater/report-a-storm-water-concern.html>.
- D. Community Involvement - UNA hosts and participates in several litter-reduction events in the community including:
  - i. The annual *Tennessee River Litter Tournament* sponsored by Keep the Shoals Beautiful.
  - ii. The annual *Citywide Clean-Up Day*, sponsored by the City of Florence.
  - iii. Various litter cleanup events in the area.

### Measurable Goals

- 1. Public Education Presentations- UNA will provide training to the campus community on stormwater management plan elements, including the SWMPP, the importance of pollution prevention, and illicit discharge detection and elimination. At least 1 large scale session will be offered and 100% of Project



Managers, Grounds, and Maintenance personnel will be trained. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.

2. Storm Sewer Marking- Quantify the number of new storm drain markers installed on curb drains and replaced on existing storm drains. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.
3. Stormwater Management Webpage - Maintain the Stormwater Management webpage regularly to ensure current information is published. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.
4. Public Involvement - Quantify the number of individuals reached through Public Education or Public Involvement activities. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.
5. Partnerships - Continue partnering with the UNA Center for Sustainability for litter reduction and public education and involvement initiatives. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.

## 2.2 Illicit Discharge Detection and Elimination

The goal of this control measure is to develop and implement a plan to identify and eliminate non-stormwater discharges such as process water, chemical spills, and other non-approved discharges to the storm drain system.

Dry Weather Screening is designed to detect and address non-stormwater discharged to the MS4. Monitoring occurs at a rate to insure a minimum of 15% inspection of outfalls are inspected annually and all outfalls are inspected at least once every 5 years. If any priority areas are identified, they will be screened at least once every 2 years. UNA has identified four outfalls on campus, none of which is in a Priority Area.

Although mercury is identified as a 303(d) pollutant for Cypress Creek, it is atmospherically deposited by other regional sources. UNA is not a contributor.

### 2.2.1 Tracing Illicit Discharges

Once an illicit discharge has been reported or detected through an inspection, the next step is to locate the source. Selection of tracing techniques will depend on the type of illicit discharge detected, information collected during the initial discovery period, observation, and the resources/technology available. Tracing techniques include visual observation, dye testing, smoke testing, sample collection, and televising.

A single technique or a combination of techniques may be used to identify the source of the discharge. Figure 2.2-1 presents a flow chart for selecting tracing techniques that can be applied to the two categories of potential illicit discharges: (1) transitory or intermittent discharges and (2) continuous discharges. Each circumstance is described below:

1. Transitory or intermittent discharges: These conditions may occur as a result of an inspection or a community complaint. While initial information may have been collected regarding the potential illicit discharge, a return trip may show that the discharge was either intermittent or transitory. The investigative techniques used will depend on whether or not a potential source location was identified during the initial observation:
  - a. Potential source identified - If a potential source for the illicit discharge was initially identified, steps are taken to investigate the potential source site, such as inspecting the site and storm drain system in the vicinity of the site. If floor drains, sumps, or other suspect discharge locations are observed during this inspection, dye testing, smoke testing, or continuous flow monitoring may be used. These techniques should definitively show whether the suspect site was the source of the illicit discharge.
  - b. Potential source not identified - If no source site is suspected, and only the general area of the illicit discharge is known, it may be possible to trace the evidence of the illicit discharge by visual inspection of the storm drain access points. If this catch basin/manhole inspection technique is unsuccessful, some interim steps may be taken to attempt to capture water from an intermittent discharge. For example, sand

bagging, damming or block testing of selected storm drain access points, combined with installation can help reveal the source of the discharge. If these techniques have no positive result (no water pools behind the weir or sand bag), the discharge was likely transitory (one time only), and it may not be possible to determine its origin. In this case, the location of the originally reported illicit discharge is added to the complaint database and tracked for any future incidents. If the original report of the illicit discharge was severe or gross pollution, then smoke testing or televising of the storm drain system may be warranted.

2. Continuous discharges: Tracing continuous discharges is typically easier than tracing transitory/intermittent discharges. The primary difference between tracing this type and tracing a continuous discharge is that sandbagging and weirs are not required for a continuous discharge. Visual observation of the system access points should reveal where the flow is coming from. If visual inspections fail in identification of the source and the original report was severe or gross pollution, then televising, smoke testing, or sample collection would be warranted.

The University will notify ADEM if a suspect illicit discharge enters the University's MS4 from an adjacent MS4. The first method will be by phone (334-271-7700), followed by an email (h2omail@adem.alabama.gov).

Permitted Discharges: As defined in the University's Stormwater Permit, the following non-stormwater discharges are allowed:

- a. Water line flushing
- b. Diverted stream flows
- c. Uncontaminated pumped groundwater
- d. Foundation drains
- e. Irrigation water (not consisting of treated, untreated, wastewater)
- f. Springs
- g. Footing drains
- h. Individual residential car washing, to include charitable carwashes
- i. Discharge or flows from firefighting activities
- j. Dechlorinated swimming pool discharges
- k. Landscape irrigation

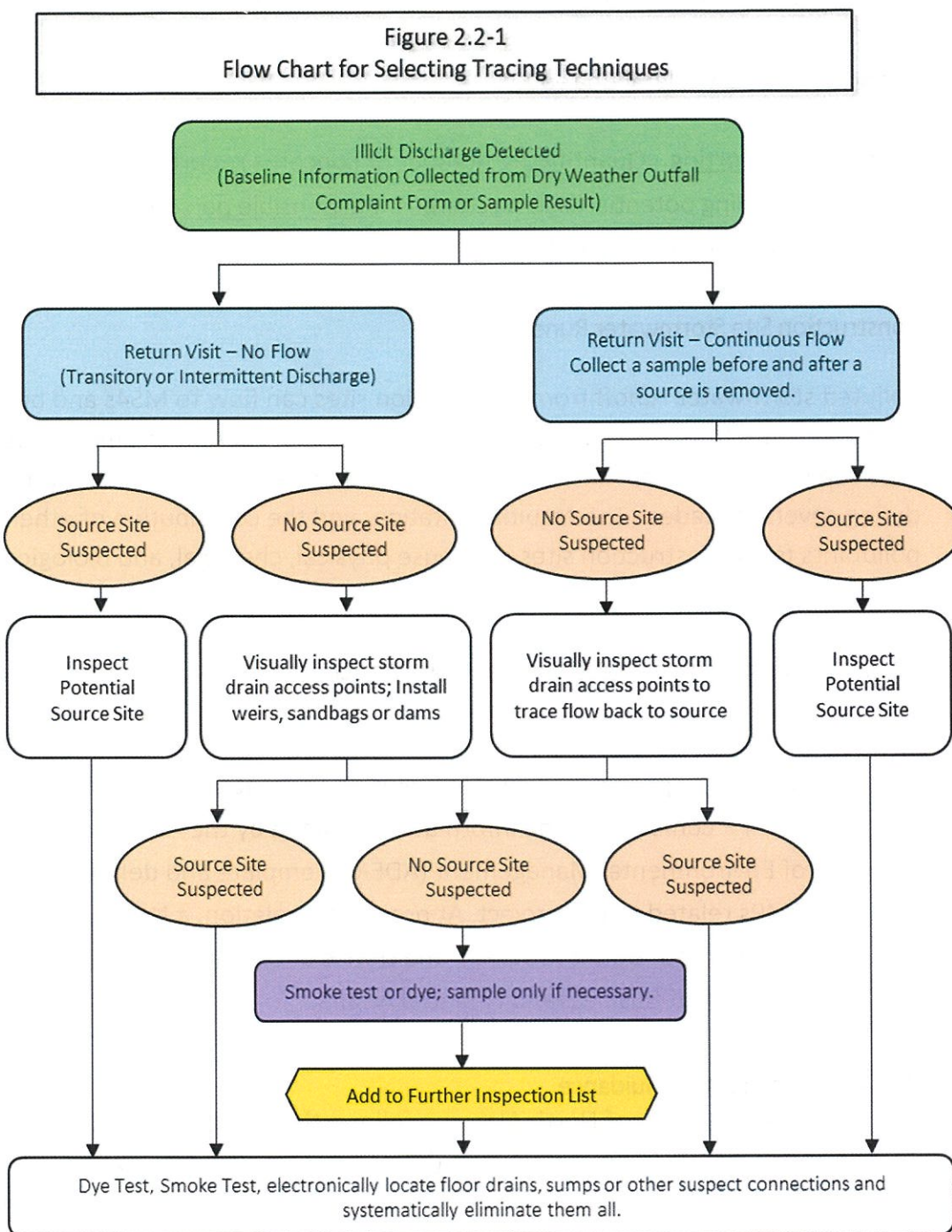
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- l. Uncontaminated ground water infiltration
- m. Discharges from potable water sources
- n. Air conditioning condensate
- o. Rising ground water
- p. Water from crawl space pumps
- q. Lawn watering runoff
- r. Residential street wash water
- s. Flows from riparian habitats and wetlands
- t. Discharges authorized and in compliance with a separate NPDES permit

The public may report complaints regarding discharges either by calling the Department of Environmental Health and Safety at 256-765-4804 or through a link on the Stormwater Management webpage (<https://www.una.edu/facilities/stormwater/report-a-storm-water-concern.html>).

#### 2.2.2 Regulatory Mechanism Prohibiting Non-stormwater Discharges to the MS4

The University of North Alabama has established the Policy On Storm Water Management Compliance – Illicit Discharge Detection and Elimination, Attachment 1, to address illicit discharges, if any are discovered.



#### Measurable Goals:

- a. Map of campus outfalls - Maintain an up-to-date map showing the locations of the outfalls and names and location of water bodies that receive discharges from these outfalls. Responsible person: Director of Environmental Health and Safety,

[azwissler@una.edu](mailto:azwissler@una.edu).

- b. Illicit discharge monitoring - Conduct annual dry-weather screening on at least 50% of campus outfalls. Responsible person: Director of Environmental Health and Safety, [azwissler@una.edu](mailto:azwissler@una.edu).
- c. Concern Reporting - Quantify the number of concerns reported and action taken regarding potential illicit discharges. Responsible person: Director of Environmental Health and Safety, [azwissler@una.edu](mailto:azwissler@una.edu).

## 2.3 Construction Site Stormwater Runoff Control

Polluted stormwater runoff from construction sites can flow to MS4s and be discharged into local rivers and streams. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites can cause physical, chemical, and biological harm to the receiving waters.

### 2.3.1 Construction Projects Greater than One Acre

Construction projects that encompass an area greater than one acre must develop a specific Stormwater Pollution Prevention Plan (SWPPP). The SWPPP conforms to the information outlined by the Alabama Department of Environmental Management (ADEM) Template and defines appropriate BMPs related to the project. At project completion, a Notice of Completion is submitted. Both the SWPPP and Notice of Completion shall be submitted to the VP of Business and Financial Affairs.

### 2.3.2 Construction Guidance

The University of North Alabama follows the guidance based on the Alabama Building Commission (<http://www.bc.alabama.gov/>) for campus construction projects. The Alabama Building Commission's specification package defines the regulator mechanism for ensuring compliance. The standards set forth by in the Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction sites and Urban Areas, 2018, are utilized for guidance on appropriate erosion and sediment controls

(<https://www.dot.state.al.us/dsweb/divped/Stormwater/pdf/AlabamaHandbook-forErosionControl.pdf>). Sanctions which address a lack of compliance with erosion and sediment control parameters are discussed in the Alabama Building Commission guidance, referenced above. These include Article 26, *Owner's Right to Stop Work*, and Article 27, *Owner's Right to Terminate Contract* ([https://dcm.alabama.gov/PDF/forms/C-8\\_Gen\\_Cond.pdf](https://dcm.alabama.gov/PDF/forms/C-8_Gen_Cond.pdf)).

#### 2.3.3 Plan Reviews

Reviews to evaluate construction plans and the potential for water quality impact are conducted by a team composed of the Director of Facilities Administration and Planning, Project Managers, the consulting engineers, and the general contractor.

#### 2.3.4 Personnel Qualification

Personnel with Qualified Credentialed Professional (QCP) or Qualified Credential Inspector (QCI) credentials are utilized for the development of the civil package, preparation of the Construction Best Management Practices Plan (CBMPP), and comprehensive monthly and precipitation event inspections.

#### 2.3.5 Inspections

During the term of the NPDES permit, regular site inspections are conducted and documented as described below.

- Documented daily observations and rainfall measurement - appropriate construction site personnel.
- Monthly (or as specified) inspections - the EHS Department, who provides feedback to the Project Manager.
- Comprehensive monthly and precipitation event inspections – contracted QCP/QCI.
  - a. Non-linear projects - documented inspections occur once each month and after any qualifying precipitation event, commencing as quickly as possible, but no later than 24 hours after resuming or continuing active construction and completed no later than 72 hours following the precipitation event.

- b. Linear projects - with active construction or where perennial vegetation has not been fully established, meeting the definition of final stabilization, inspections will occur after any qualifying precipitation event since the last inspection, commencing as quickly as possible but no later than 24 hours after resuming or continuing active construction and completed no later than 5 days after the precipitation event.

#### 2.3.6 ADEM Notification

The University will notify ADEM if a construction site without a NPDES Permit or with ineffective BMPs is discovered. The first method will be by phone (334-271-7700, followed by an email ([h2omail@adem.alabama.gov](mailto:h2omail@adem.alabama.gov)).

#### 2.3.7 Public Concerns

The public may report complaints regarding construction discharges either by phone (256-765- 4804) or by using a link on the Stormwater Management webpage (<https://www.una.edu/facilities/stormwater/report-a-storm-water-concern.html>).

### Measurable Goals

1. Concern Reporting - Quantify the number of concerns reported and action taken regarding construction projects. Responsible person: Director of Environmental Health and Safety, [azwissler@una.edu](mailto:azwissler@una.edu).
2. Inspections - Quantify the number of inspections performed for construction projects and track findings to completion. Responsible person: Director of Environmental Health and Safety, [azwissler@una.edu](mailto:azwissler@una.edu).

### 2.4 Post-Construction Stormwater Management in New and Redevelopment

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



Post-construction stormwater management is necessary because runoff has been shown to significantly affect receiving waterbodies. This is due to an increase in impervious areas (i.e. roofs, driveways, parking lots) and changes in drainage patterns, thereby increasing the stormwater rate, volume and velocity of runoff from a site. If this stormwater contains pollutants, this can lead to degradation of receiving waters and increases in the occurrence of flooding.

Post-construction stormwater management controls include permanent structural and non-structural BMPs (e.g., conservation of natural and permeable areas, detention ponds, rooftop runoff infiltration galleries, and mechanical storm drain filters) that remain in place after the project is completed and prevent pollution from the new development in the long run.

The University of North Alabama follows the guidance based on the Alabama Building Commission for campus construction projects. A team composed of University Project Managers, the consulting engineer, and the general contractor develops strategies to consider the use of structural and non-structural BMPs, BMP installation and maintenance, and bringing noncompliant project elements into compliance. Projects are designed to ensure the basis for post-construction BMPs address a rainfall event with an intensity up to that of a 2 year-24 hour storm event. The requirement to demonstrate and document that post-construction stormwater measures have been installed per design specifications is addressed in the agreement between the University and the consulting engineers. Post-construction BMP inspections occur as defined in the project's CBMPP.

#### **Measurable Goals**

1. Post-Construction Controls Inventory - Update the Post-Construction Structural Controls Inventory as new controls are established. Responsible person: Director of Environmental Health and Safety, [azwissler@una.edu](mailto:azwissler@una.edu).
2. Inspections - Quantify the number of inspections performed for post-construction projects and track findings to completion. Responsible person: Director of Environmental Health and Safety, [azwissler@una.edu](mailto:azwissler@una.edu).

#### **2.5 Pollution Prevention/ Good Housekeeping for Municipal Operations**

The goal of this minimum control measure is to develop and implement a program

to prevent or reduce pollutant runoff from facilities operation and maintenance activities. Standard Operating Procedures (SOPs), found in Attachment 1, *Good Housekeeping Standard Operating Procedures* have been developed for the following practices:

- Fuel and Oil Handling and Receiving
- Maintenance of Buildings, Facilities and Fixed Structures
- Vehicle Fueling
- Outdoor Material Storage
- Management of Pesticides, Herbicides and Fertilizers
- Equipment Maintenance
- Landscaping and Ground Maintenance
- Vehicle Maintenance
- Vehicle Washing
- Street Sweeping

At the University of North Alabama:

- Pesticide and herbicide applications are conducted by or under the supervision of a certified applicator (Ornamental and Turf Pest Control Supervisor). These products are stored in a locked building in the Grounds Maintenance Equipment Storage Area.
- Recycling containers are located in most campus buildings and picked up on a weekly basis by the City of Florence Recycling Department.
- Outdoor trash containers are emptied daily (M-F) and additional containers are provided for special events.
- A hazardous waste management program is in place on campus. Program information can be found at <https://www.una.edu/facilities/environmental-health-and-safety/policies/chapter-7-hazardous-waste-disposal.pdf>.
- Tree and shrub clippings are sent to the Florence Landfill and grass clippings are mulched in place during mowing.
- Municipal facilities with potential to discharge pollutants via stormwater runoff are inspected quarterly. The inventory is found in Table 1, below.
- A mechanic is employed to conduct and oversee the routine maintenance of University owned vehicles. Improperly maintained vehicles have a greater potential to contribute to water quality impairment due to leaks.
- A dedicated vehicle wash bay is used for washing University vehicles. Wash water goes to an oil/water separator which discharges to the sanitary sewer.
- Training is conducted that focuses on the importance of pollution prevention and good housekeeping measures as defined in Attachment 2, UNA's *Good Housekeeping Standard Operating Procedures*.

- The campus Municipal Facilities with Potential to Discharge Pollutants via Stormwater Runoff are identified in Table 1 and are inspected quarterly (3 months). Action items are tracked to completion.

TABLE 1- UNA Municipal Facilities with Potential to Discharge Pollutants via Stormwater Runoff

1. Campus Roads	2. Cooling Tower-Rice/Rivers Hall
3. Cooling Tower-Bibb Graves Hall	4. Cooling Tower-Wesleyan Hall
5. Cooling Tower-Collier Library	6. Bulk Fuel Pumps
7. Cooling Tower-Computer Room	8. Grounds Dept. Equipment Storage
9. Cooling Tower-Flowers Hall	10. Parking Deck and Lots
11. Cooling Tower-Gulliot University Center	12. SET Mechanical Room
13. Cooling Tower-Kilby School	14. Steam Plant
15. Cooling Tower-LaGrange Hall	16. Vehicle Maintenance Shop

#### Measurable Goals

1. Protection of Sensitive Waters - Regularly review the 303(d) list to determine if UNA is a possible source of pollutants; document findings. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.
2. Litter Reduction - Participate in litter reduction/cleanup events each reporting cycle including the *City Wide Clean Up* and *TN River Litter Tournament*. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.
3. Inspections - Quantify inspections of *Municipal Facilities with Potential to Discharge Pollutants* (Table 1) and track items to completion. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.
4. Training - Ensure all new Municipal Operations personnel are trained on Stormwater SOPs. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.
5. Pollution Prevention - Continue to partner with Center for Sustainability on pollution reduction initiatives. Responsible person: Director of Environmental Health and Safety, azwissler@una.edu.

## 2.6 Procedure for Addressing Ineffective Best Management Practices

The University will notify ADEM if an ineffective BMP is discovered. The first method will be by phone (334-271-7700), followed by an email (h2omail@adem.alabama.gov).

## 3.0 RECORDKEEPING

### 3.1 SWMPP Review and Updating

The University of North Alabama will review the SWMPP annually. The SWMPP will be updated whenever a change in activities or operations occur which may significantly affect the discharge of stormwater pollutants.

### 3.2 Annual Report

The annual report will be submitted to 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 report consists of:

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

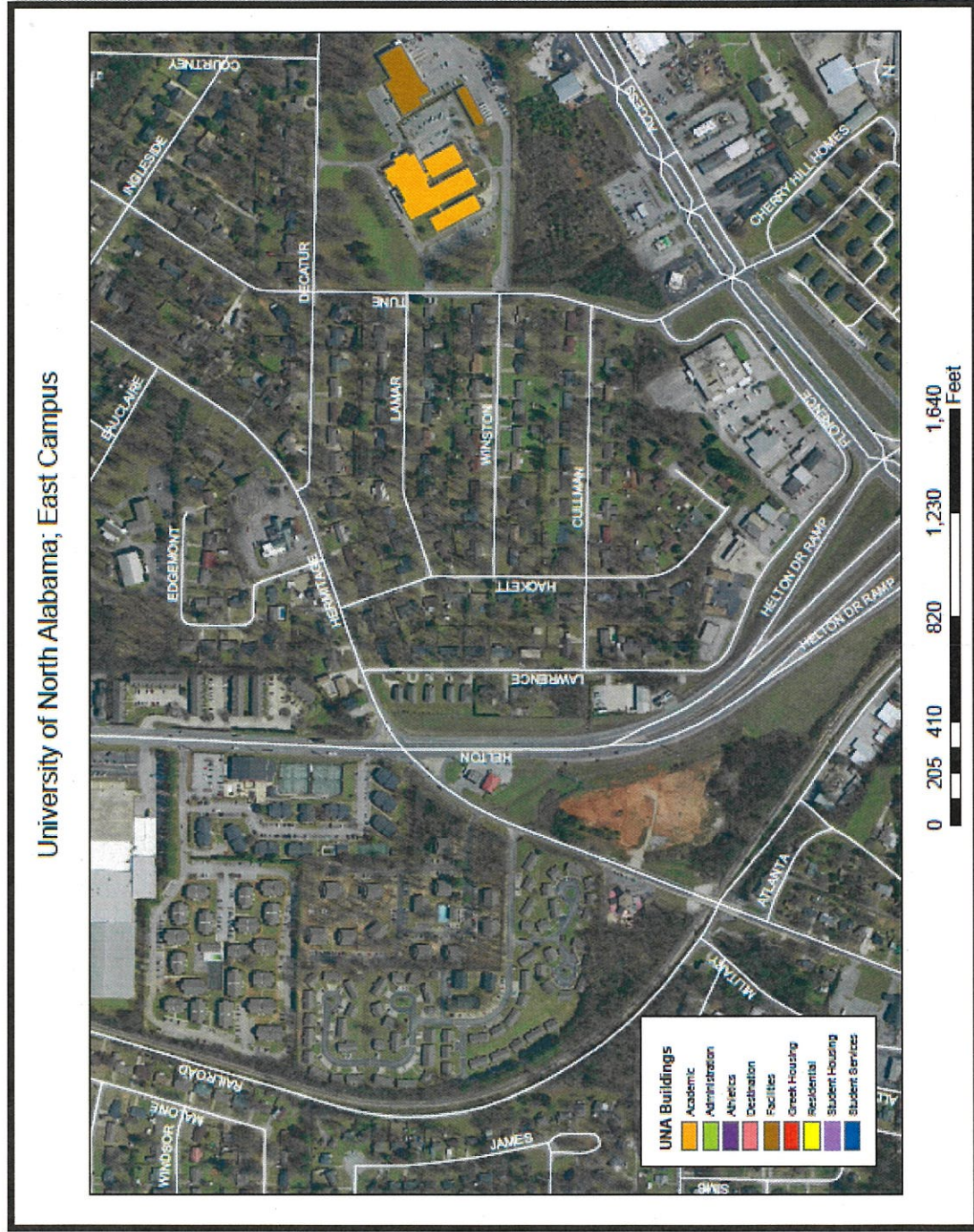
4.0 MAPS OF URBANIZED AREAS

4.1 Map of Main Campus





4.2 Map of East Campus



Attachment 1

**POLICY ON STORMWATER MANAGEMENT COMPLIANCE – Illicit Discharge Detection and Elimination**

Effective Date: May 13, 2020

**PURPOSE:** This policy is intended to define illicit discharges of pollutants to storm water and the consequences of such discharges at the University of North Alabama.

**Illicit Discharge Definition:** As defined at 40 CFR Part 122.26(b)(2), this refers to any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except those authorized under an NPDES permit and those of fire-fighting activities. This can include the discharge of 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 sediment from construction activities, drainage from car washing or cleaning paint brushes in or around a catch basin.

**Illicit Connection Definition:** 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.

**1. Illicit Discharges**

No University employee, student, visitor, contractor, department, or unit shall cause or allow discharges into the University of North Alabama storm drainage system which are not composed entirely of storm water, except for the allowed discharges listed in Section 3.

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

**2. Illicit Connections**

The following connections are prohibited, except as provided in Section 3 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, waste water, or wash water, to enter the storm water drainage system, and any connections to the storm drain system from indoor drains or sinks.

**3. 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 University of North Alabama surface waters and are limited to the following:
  - i. water line flushing
  - ii. landscape irrigation
  - iii. diverted stream flows

**POLICY ON STORMWATER MANAGEMENT COMPLIANCE— Illicit Discharge Detection and Elimination**

- iv. uncontaminated ground water infiltration
- v. uncontaminated pumped groundwater
- vi. discharges from potable water sources
- vii. foundation drains
- viii. air conditioning condensate
- ix. irrigation water (not consisting of treated or untreated wastewater)
- x. rising ground water
- xi. springs
- xii. water from crawl space pumps
- xiii. footing drains
- xiv. lawn watering runoff
- xv. individual residential car washing, to include charitable carwashes
- xvi. residual street wash water
- xvii. discharge or from firefighting activities, including fire hydrant flushing
- xviii. flows from riparian buffers and wetlands
- xix. dechlorinated swimming pool discharges
- xx. discharged authorized and in compliance with a separate NPDES permit

C. In the event that the University of North Alabama 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, the University of North Alabama 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 into the future.

E. Nothing in this SOP shall affect a discharger's responsibilities under federal or State law.

**4. Enforcement and Penalties**

- A. Whenever the University of North Alabama finds that a violation of this SOP has occurred; the 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.



**POLICY ON STORMWATER MANAGEMENT COMPLIANCE – Illicit Discharge Detection and Elimination**

- 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 University of North Alabama to cover remediation cost.
  - vi. The implementation of new storm water management practices.
  - 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 University of North Alabama Environmental Health and Safety Department will initiate work orders for the appropriate corrective actions and the individual or University department will be charged for the cost.

Attachment 2 - Good Housekeeping Standard Operating Procedures

**UNIVERSITY OF NORTH ALABAMA STORMWATER MANAGEMENT PROGRAM  
GOOD HOUSEKEEPING STANDARD OPERATING PROCEDURES**

Date: February 12, 2021

SOP Review: Annually

Prepared By: Angela Zwissler, Director, Environmental Health and Safety

Purpose: Establish municipal operations procedures for good housekeeping practices designed to prevent the entry of pollutants into the storm sewer system.

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**1. EXTERNAL BUILDING MAINTENANCE**

- a. Prior to job start up, assess area's sensitive receptors and drainage, determine where waste water and/or chemicals will run, and identify a method(s) to protect inlets with appropriate absorbent sock/pad or mat. Coordinate the management of used absorbent materials through the Dept. of Environmental Health and Safety (EHS) as necessary.
- b. Communicate with the Maintenance and/or Grounds Department to determine if wash water can be directed to vegetated areas.
- c. Do not undertake pressure washing and surface cleaning activities during rain events or when rain is forecasted.
- d. When feasible, minimize water use by using high pressure, low volume nozzles; this reduces the volume of wastewater generated.
- e. Instead of and/or in advance of pressure washing, employ dry methods to address surface stains (sweep, vacuuming, and use of absorbents).

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- f. Consider surface cleaning only using water; when using detergents and cleaning agents, use the least toxic product needed to get the job done.
- g. Send all wastewater, including water containing detergents or chemicals, to the sanitary sewer.
- h. Do not allow discharges from chemical fire suppression systems to enter the storm sewer system.
- i. Discharges from certain line tests, fire pumps and hydrant flushing may be discharged to the storm sewer system under the following conditions:
  - Discharge does not contain chemicals, solids, or residual chlorine.
  - Discharge water has not been used for another process such as washing, heat exchange or manufacturing.
  - Discharge does not cause erosion.
- j. Elevator sump pump discharge must not enter the storm sewer system.
- k. Upon discovery, repair and clean-up hydraulic fluid leaks from elevators or lifts.
- l. Mop water and cleaning water should be disposed of through the sanitary sewer never by the storm drains.
- m. Materials should not be poured, transferred or handled outdoors near a storm drain.
- n. Use a ground cloth or secondary container for paint opening, mixing, and tool cleaning.
- o. Enclose spray-painting operations to minimize wind drift and overspray.
- p. Do not clean paintbrushes or tools near a storm drain.
- q. Promptly clean any spills of paints, cleaners, solvents or chemicals.

**2. VEHICLE FUELING**

- a. Know the location of emergency shutoff mechanism.
- b. Minimize drips to the ground surface as much as possible.
- c. If fuel spills occur, immediately use dry cleanup methods.
- d. Regularly inspect fuel equipment and secondary containment for corrosion, leaks, and structural failure.
- e. Spill containment and cleanup supplies should be stored on site and available for use.

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- f. Do not top off fuel tanks.
- g. Do not hose down a fuel spill.

**3. MATERIALS STORAGE FACILITIES AND STORAGE YARDS**

- a. If possible, materials stored outdoors should be stored under cover of a permanent structure.
- b. If a permanent cover is not feasible, cover materials with a tarp or similar waterproof durable covering when the material is not being actively worked.
- c. Do not locate storage areas adjacent to or within 50 feet of storm drain inlet or water conveyance.
- d. When covering storage piles is not feasible, the storage area should be sloped to prevent runoff.
- e. Clean around material handling areas at the end of loading activities to prevent spilled material from entering the storm sewer.
- f. Use secondary containment for stored liquid materials to prevent unintended leaks or spills from entering the storm sewer system.

**4. EQUIPMENT AND VEHICLE WASHING**

- a. Wash equipment and vehicles only in designated areas.
- b. Regularly maintain the water collection system.
- c. Clean up spills and leaks of vehicle fluids and chemicals as soon as discovered and do not allowed to enter the drain system.

**5. VEHICLE AND EQUIPMENT MAINTENANCE AND REPAIR**

- a. Move leaking vehicles indoors or under cover.
- b. Use drip pans for leaking vehicles.
- c. Clean parts in the appropriate parts washer.
- d. Clean all spills and leaks promptly with dry methods.
- e. Maintain oil/water separators according to manufacturer's recommendations.

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- f. Develop a routine maintenance schedule for all vehicles.
- g. Place used oil into the labeled oil containers in the Vehicle Maintenance Shop. Other vehicle fluids such as antifreeze, hydraulic fluids, and fuel, must be collected in separate containers and labeled. Containers must be kept closed and stored in a manner that prevents stormwater pollution, such as within secondary containment. Contact the EHS Department if there are questions.
- h. Inspect vehicle parking areas regularly for spills, trash and debris. Trash and debris can become floatable litter, which is one of the primary pollutants of concern at UNA.

**6. STREET SWEEPING**

- a. Perform street sweeping as needed to prevent the entry of sediment or other pollutants into the storm sewer system.
- b. If powered street sweepers are used, operate and maintain sweepers according to manufacturer's recommendations.
  - Make sure baskets and hoses are functional prior to beginning route.
  - Do not release wastewater/debris into the storm sewer system.
  - Clean out solid debris and manage them as solid waste.

**7. MAINTENANCE OF MUNICIPAL ROADS**

- a. Locate and block storm drain inlets (within 25 feet and/or down gradient from) during maintenance work such as concrete curb and gutter work, resurfacing, paving, striping/markings, or saw cutting.
- b. Place covers, wattles, sand bags, or filter fabric around inlets to protect them from entry of wastes, dusts, overspray or slurry.
- c. Inspect site at the beginning of the day and end to ensure operations are not contributing sediment or other pollutants to the flow line or storm drain.

**Concrete Cutting and Pouring**

- d. When saw cutting concrete, use the minimum amount of water. Let the waste slurry dry and then sweep it up before leaving the location. A wet vacuum may also be used to pick up the waste slurry immediately after cutting is complete. Do not allow slurry to reach storm drains.
- e. Designate a "Concrete Washout Area" that is as far as possible from any surface waters, storm drain inlets or drainage ditches and is located in a low area where wash water will pool and soak into the ground.
- f. Concrete trucks must washout in the wash out area or into a container such as a kiddie pool or wheelbarrow. They may also washout at the concrete plant.
- g. Maintain the wash out area, inspect it for clean out needs, and check for run-on and run-off.

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- h. The debris from the wash out area must be taken to a permanent disposal site when the washout is full and when the project is complete.

Painting and Striping

- i. Schedule painting, marking, and striping projects during dry weather only. Cease all activities when rain threatens
- j. Block nearby storm drain inlets (within 25 feet and/or down gradient of project).
- k. Promptly clean up any spills of paints, cleaners or other chemicals.

Re-surfacing or Paving

- l. Re-seal or pave only on dry days when no rain is expected. Cease all activities when rain threatens.
- m. Protect or block downstream storm drain inlets (within 25 feet) from debris from maintenance work (asphalt cap, chip sealing, concrete breaking, or saw cutting). Leave covers or berms in place until the job is complete

**8. FUEL AND OIL HANDLING AND RECEIVING**

Bulk Delivery

- a. There shall be no smoking or open flames while fuel is being handled or managed.
- b. No flammable liquid shall be transferred while the engine is running unless the vehicle engine is required for pump operation.
- c. Immediately address and clean up spills and leaks with dry material and disposed of properly. Spill cleanup supplies shall be on hand where bulk deliveries are received.
- d. Protect storm drains from fueling areas using control devices such as covers, berms, and dikes.
- e. The person responsible for scheduling fuel deliveries is also responsible for putting the control device(s) in place on the day of the delivery, as well as removing the control device(s) and storing when fueling is complete.
- f. Bulk delivery drivers must remain at the truck during the entire delivery process.

Drum Delivery

- g. Carefully unload and handle drums to prevent damage.
- h. Inspect drums immediately following unloading for damage and leaks.



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- i. Damaged drums shall not be accepted for use and any leaks or spills immediately corrected.
- j. Waste oil vendors must have the appropriate permits in order to pick up, haul, and recycle waste oil.

**9. STORAGE AND DISPOSAL OF PESTICIDES, HERBICIDES, FERTILIZERS, CHEMICALS, & WASTE MATERIAL**

- a. Materials should be stored under cover and tightly sealed. Liquids should be stored within secondary containment.
- b. Properly label all materials; keep them in the original containers when possible.
- c. Spills and leaks should be immediately cleaned using dry cleanup methods.
- d. Do not use water to remediate spills.
- e. Sweep pavement or sidewalks where solid fertilizers or other products have fallen.
- f. Application shall be performed by or under the direction of a certified applicator.
- g. Train employees regarding handling, storage and use of pesticides, herbicides and fertilizers and the proper method of container disposal.
- h. Triple rinse all pesticide and herbicide containers prior to disposal. Contact the EHS Department if excess herbicides or pesticides need to be disposed and for storage and disposal questions.

**10. VEGETATION CONTROL, CUTTING, REMOVAL, AND DISPOSAL OF CUTTINGS**

- a. Avoid disturbing underlying soil when removing vegetation if possible.
- b. If soil is disturbed when removing vegetation, assess the area for the need for erosion and sediment control.
- c. Removed vegetation should be disposed of at least daily.
- d. Use mulch or other appropriate erosion control measures on exposed soils.
- e. If possible, mow when the area is dry.
- f. Inspect sidewalks, streets and other hard surface areas for grass clippings following mowing or trimming. Use a blower or broom to collect and remove clippings from hard surfaces.
- g. Mulch grass clippings in place whenever possible.
- h. Equipment should be periodically cleaned to prevent the buildup of material that could become dislodged and enter the storm sewer system.