

The City of Saraland

943 Saraland Blvd.
Saraland, Alabama 36571



Saraland, Alabama

Gateway to Progress

Stormwater Management Program Plan (SWMPP)

NPDES Permit ALR040045

March 2022
Rev. May 2023

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1.0 Regulatory Overview

1.1 City of Saraland's NPDES Permit

The City of Saraland, Alabama was issued its current NPDES Permit for discharges from regulated small municipal separate storm sewer systems (ALR040045) by the Alabama Department of Environmental Management (ADEM) on September 16, 2021. The permit was made effective on October 1, 2021. A Stormwater Management Program Plan (SWMPP) was created to document the efforts of the City's Stormwater Management Program and address recent changes to the permit.

As a condition of this permit, "The Permittee is required to develop, revise, implement, maintain and enforce a SWMPP which shall include controls necessary to reduce the discharge of pollutants from its MS4 consistent with Section 402(p)(3)(B) of the Clean Water Act and 40 CFR Parts 122.30-122.37. These requirements shall be met by the development and implementation of a SWMPP which addresses the BMPs, control techniques and systems, design and engineering methods, public participation and education, monitoring, and other appropriate provisions designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP)."

NPDES Permit ALR040045 is included in Appendix A.

1.2 MS4 Jurisdictional Boundary

NPDES Permit ALR040045 was triggered by the City of Saraland being designated as a Municipal Separate Storm Sewer System, or MS4. This designation is due to Saraland being within and a part of the larger urbanized area of Mobile County, Alabama.

Saraland is generally bordered by the City of Satsuma to the north, the City of Chickasaw to the south, largely unincorporated area to the west, and the Mobile-Tensaw Delta to the east. Approximately 32.4 square miles of residential, commercial, industrial, undeveloped lands and waters make up the MS4 boundary (shown on map in Appendix B). Water makes up approximately 0.22 square miles of the MS4 area.

Population in the City as defined by the 2010 Census is approximately 16,171 people. The overall population density is approximately 503 people per square mile.

1.3 Watershed Information

The City of Saraland receives approximately 66 inches of rainfall annually. Rainfall tends to be evenly distributed throughout the year with slightly drier periods occurring during the fall. Stormwater runoff from the City of Saraland discharges into several named receiving

waters. Among these are: Chickasaw Creek to the west and south, Bayou Sara to the north from west to east, and Norton Creek running west to east through the City to Bayou Sara.

Section 303(d) of the Clean Water Act (CWA), as amended by the Water Quality Act of 1987, and the USEPA Water Quality Planning and Management Regulations (40 CFR 130) require states to identify waterbodies not in compliance with the water quality standards applicable to their designated use classifications. Section 303(d) then requires that total maximum daily loads (TMDLs) be determined for all pollutants causing violation of applicable water quality standards in each identified segment.

Portions of all three of Saraland's named receiving waters are shown on ADEM's 2020 303(d) listing as being impaired because of metals (Mercury) with the source being atmospheric deposition. Chickasaw Creek is impaired from the Mobile River to its source in Citronelle. Norton Creek is impaired from Bayou Sara to the Saraland wastewater treatment plant (WWTP). Bayou Sara is impaired from Norton Creek to Gunnison Creek.

A Total Maximum Daily Load (TMDL) was developed in 1997 to address impairments of organic enrichment and low dissolved oxygen in Norton Creek.

2.0 SWMPP Development and Maintenance

2.1 SWMPP Components

Part III of the Permit requires that the Permittee develop and implement a stormwater management program plan that includes the following five minimum stormwater control measures:

1. Public Education and Public Involvement
2. Illicit Discharge Detection and Elimination (IDDE) Program
3. Construction Site Stormwater Runoff Control
4. Post-Construction Stormwater Management in New Development and Re-Development
5. Pollution Prevention/Good Housekeeping for Municipal Operations

Program details are described with measures of effectiveness, and responsible City departments in Section 3.0 below.

2.2 SWMPP Review and Updates

The Stormwater Management Program Plan will be reviewed by the City annually, at a minimum. Any necessary updates will likely be performed in conjunction with the preparation of the Annual Report required by the permit.

It is the City's intent to solicit and receive public input regarding the SWMPP and its implementation continually. It is anticipated that the SWMPP will be modified annually, accommodating feedback and adjusting as practices are evaluated for effectiveness and practicability.

2.3 Annual Reports

Part VI of the Permit outlines the annual reporting requirements for the program. The defined permit year and reporting period is April 1st to March 31st. Annual reports are required to be submitted to ADEM no later than May 31st following the reporting period.

Annual Reports will include:

- A list of contacts and responsible parties
- An overall evaluation of Stormwater Management Program developments and progress
- A narrative report of the required minimum control measures
- A summary table of controls that are planned for the next reporting cycle
- The results of related data collected and analyzed during the reporting period
- A notice of reliance on another entity to satisfy any permit obligations
- The results of evaluations to determine the influence of discharges to impaired waters
- The results of water quality monitoring

2.4 Recordkeeping

The SWMPP will be retained for at least five years after coverage under the permit is terminated. The following records shall be maintained for at least three years following termination of permit coverage:

- Records of all monitoring information
- Copies of all reports required by the permit
- Records required by the permit
- Records of all other data required by or used to demonstrate compliance with the permit

Documentation and other records used for demonstrating permit compliance will be maintained in the Saraland Inspection Services Department in electronic and paper format.

2.5 Responsibilities

Coordination between City departments is required for successful and complete implementation of the plan. The Saraland Inspection Services Department is responsible for the creation, coordination, and implementation of the SWMPP.

The City relies on ADEM for the setting of standards for the management of stormwater runoff from qualifying construction sites and for ultimate enforcement of such controls. Most initial observances of regulatory noncompliance are typically by the City through its enforcement of stormwater-related City ordinances and policies. The City relies on ADEM for enforcement of state and federal stormwater-related regulations. The ADEM Mobile Central Field Office is the primary contact and resource office for the City: 251-450-3400.

The City requires developers to obtain coverage under ADEM's construction general permit when disturbance thresholds are met.

Comments and questions regarding this plan may be directed to the following:

Mike Black

Inspection Services Director
251.675.5103
943 Saraland Blvd. South
Saraland, AL 36571

Katie McGuyer

Project Engineer
Volkert, Inc.
251.463.7237
katie.mcguyer@volkert.com

2.6 Legal Authority and Enforcement

Chapter 20 - Environment, Chapter 26 - Land Use and Development, and Chapter 44 - Solid Waste of the Saraland Code of Ordinances addresses stormwater management and related topics. These ordinances are not provided in the SWMPP, but may be viewed at the following address - https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=14930
A few references are highlighted below.

Chapter 20:

- ▼ *Article IV, Stormwater Management* addresses construction stormwater runoff management and non-stormwater discharges into the City's storm sewer system.
- ▼ *Article V, Post-Construction Stormwater Management* addresses the required submittal and review and approval of post-construction stormwater management plans and monitoring and enforcement of compliance with such plans
- ▼ *Article VI, Hazardous Materials Discharge* addresses the release or threatened release of

hazardous materials into the environment.

Chapter 26:

- ▼ *Article II, District and Subdivision Regulations* addresses water pollution in section 26-65.
- ▼ *Article III, Drainage and Storm Sewers, Erosion and Sedimentation Control, and Stormwater Detention* addresses the topics cited in the article title.
- ▼ *Article IV, Landscape and Tree Protection* addresses the aesthetic, environmental, land, human values provided by the protection, preservation, and establishment of vegetation, landscape plantings, and trees.

Chapter 44:

- ▼ *Article II, Collection and Disposal* addresses litter, trash, debris, and wastes generated at commercial and residential properties and at construction sites
- ▼ *Article III, Litter Control* addresses the generation, management, storage, handling, and disposal of garbage, trash, and litter.

3.0 Minimum Control Measures

Part III.A of the City's NPDES permit requires the development, implementation, revision, and maintenance of a stormwater management program to reduce the discharge of pollutants into local waterways and streams. The City's program is governed by this plan, the SWMPP, which establishes minimum pollution control measures in five general areas: public education and public involvement; illicit discharge detection and elimination; construction site stormwater runoff control; post-construction stormwater management; and pollution prevention/good housekeeping for municipal operations.

A control measure and best management practice (BMP) summary table is provided below. Control Measures and BMPs are more fully described in the following pages of the plan. Practice goals are also summarized with deadlines/frequencies in Appendix C.

Minimum Control Measure	BMP ID	BMP TITLE
Public Education & Public Involvement on Stormwater Impacts	3.1-1	Stormwater Webpage
	3.1-2	Stormwater Outreach Materials
	3.1-3	Adopt-A-Spot Beautification Program
	3.1-4	Keep Saraland Beautiful
	3.1-5	Alternative Sentencing
	3.1-6	Stormwater Awareness Surveys
Illicit Discharge Detection and Elimination (IDDE) Program	3.2-1	Outfall and Structural BMP Mapping
	3.2-2	IDDE-related Ordinances
	3.2-3	IDDE Training for City Employees
	3.2-4	Illicit Discharge Response
	3.2-5	Dry Weather Screening
	3.2-6	Handling of Spills
Construction Site Stormwater Runoff Control	3.3-1	Construction Site Stormwater Related Ordinances
	3.3-2	Construction Site Plan Reviews and Inspections
	3.3-3	Construction Site Inventory
Post-Construction Stormwater Management	3.4-1	Post-Construction Stormwater Management Ordinance
	3.4-2	Post-Construction Plan

	3.4-3	Post-Construction BMP Operation and Maintenance Agreement
	3.4-4	Promote Low Impact Development (LID)/Green Infrastructure
Pollution Prevention/Good Housekeeping	3.5-1	Inventory of Municipal Facilities
	3.5-2	Housekeeping SOP's and Inspection Schedules
	3.5-3	Structural Controls Maintenance
	3.5-4	Sanitary Sewer Overflow (SSO) Prevention
	3.5-5	City Vehicle Maintenance
	3.5-6	Spraying of Herbicide
	3.5-7	Garbage and Recycling Services

3.1 Public Education and Public Involvement

Permit Requirement: The Permittee must develop and implement a public education and outreach program to inform the public about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff to the maximum extent practicable. The Permittee shall also comply, at a minimum, with applicable State and local public notice requirements when implementing a public involvement/participation program. Each year, the Permittee shall implement a minimum of four BMPs, with two BMP emphasizing public education and two BMP emphasizing public involvement.

BMP ID	BMP TITLE
3.1-1	Stormwater Webpage.
3.1-2	Stormwater Outreach Materials.
3.1-3	Adopt-A-Spot Beautification Program
3.1-4	Keep Saraland Beautiful
3.1-5	Alternative Sentencing
3.1-6	Stormwater Awareness Surveys

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Public Education & Public Involvement on Stormwater Impacts

BMP Identification Number: 3.1-1

BMP Title: Stormwater Webpage
BMP Description: <p>The City of Saraland currently has a webpage within the City's website dedicated to educating the public about stormwater pollution. The webpage can be accessed at the following link: https://saraland.org/stormwater/.</p> <p>The webpage provides links to the City's activities as well as information and tips on stormwater. Tips include how to prevent stormwater pollution "Around the House," specifically with releasing household chemicals into the sanitary sewer system and storm sewers, and "Under the Hood," which discusses vehicle maintenance. There is also a section that discusses the best way to wash cars without polluting stormwater.</p> <p>The webpage also includes links to the following brochures and flyers:</p> <ul style="list-style-type: none">- Erosion and Sediment Control- Stormwater Management- Low Impact Development- Rain Barrels- Pet Waste & Water Quality <p>Additionally, links to the City's Stormwater Management Program Plan (SWMPP), the most recent Annual Report, and Ordinance 664 and 757 (Land Use and Development) are provided for public information.</p> <p>To obtain public input, the City has included Public Works contact information for reporting of stormwater issues and illicit discharges.</p> <p>Copies of the brochures are included in Appendix D.</p>
Target Audiences: <p>Residents, Businesses</p>
Measurable Goals: <ol style="list-style-type: none">1. Provide information and links to stormwater education and outreach materials.2. Provide links to the City's SWMPP, Annual Report, and applicable ordinances.
Performance Measures: <ol style="list-style-type: none">1. An operational webpage.
Responsible Party: <p>Name: Ian Cantrell Department: Building Inspection</p>

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Public Education & Public Involvement on Stormwater Impacts

BMP Identification Number: 3.1-2

BMP Title: Stormwater Outreach Materials
BMP Description: <p>The City of Saraland currently distributes brochures on Grease Clean-Up and Disposal, Erosion and Sediment Control, Nuisance Control and Elimination, Annexation, and Sign Ordinance Compliance to Contractors and Developers at construction pre-development and pre-bid meetings. These brochures are also available for the public at the Building Inspection Department.</p> <p>To further support with the outreach aspect of the SWMPP, the City will distribute additional EPA-developed brochures and pamphlets related to stormwater pollution. These additional brochures will be available at the Building Inspection Department and also at various City offices.</p> <p>The City provides stormwater educational information at Keep Saraland Beautiful meetings, the Breakfast with the Mayor annual event, and Homeowner Association meetings.</p> <p>Copies of the brochures are included in Appendix E.</p>
Target Audiences: <p>Residents, Businesses, Contractors, Developers</p>
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to distribute current brochures to contractors and developers at pre-bid meetings.2. The City will distribute additional EPA brochures and ensure that all brochures are available at the Building Inspection Department and various other City offices.
Performance Measures: <ol style="list-style-type: none">1. Documentation of both current and new brochures and where they are available to the public.2. Sign-in sheets at meetings.
Responsible Party: <p>Name: Ian Cantrell Department: Building Inspection</p>

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Public Education & Public Involvement on Stormwater Impacts

BMP Identification Number: 3.1-3

BMP Title: Adopt-A-Spot Beautification Program
BMP Description: <p>Led by Keep Saraland Beautiful, the goal of the “Adopt-A-Spot” program is to improve the natural beauty of Saraland with landscaping and encourage civic pride in the Central Business District (CBD) of Saraland. This program gives businesses, clubs, and organizations the opportunity to keep a portion of the City’s public area free of litter and properly maintained. The cost to join the program is \$100/month and each participant receives a sign at their “adopted spot” displaying their business or organization name.</p> <p>A description of the “Adopt-A-Spot” program is featured on the Keep Saraland Beautiful website, along with a form to sign up.</p>
Target Audiences: Businesses, Clubs, Organizations
Measurable Goals: <ol style="list-style-type: none">1. Keep Saraland Beautiful will continue to manage the “Adopt-A-Spot” program and encourage additional businesses, clubs, and organizations to commit to keeping a portion of the City litter-free.2. Keep Saraland Beautiful will continue to track the number of participants, their “adopted spot,” and regularly inspect each spot to ensure that they’re being maintained.
Performance Measures: <ol style="list-style-type: none">1. Documentation of the number of participants and their “adopted spots.”2. Pictures of “adopted spots” confirming that locations are being maintained.3. Number of new participating businesses, clubs, and organizations per year.
Responsible Party: Name: Janice Harvison Department: Keep Saraland Beautiful

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Public Education & Public Involvement on Stormwater Impacts

BMP Identification Number: 3.1-4

BMP Title: Keep Saraland Beautiful
BMP Description: <p>The mission statement for Keep Saraland Beautiful (KSB) is: “To encourage people living and working in Saraland to personally contribute to the improvement of our community.” Modeled after the Keep America Beautiful program, KSB aims to improve the aesthetic and ecological value of the City through litter control/prevention, proper handling of solid waste, beautification, public education awareness, recruitment of volunteers, and promotion of voluntary recycling. KSB organizes several activities that involve citizens in cleaning up litter throughout the City and from local waterways. Additionally KSB involves Saraland’s schools through contests and recycling.</p> <p>The Keep Saraland Beautiful membership and sponsorship applications are currently available on the KSB website. The website features all the activities of KSB, including pictures, a schedule of events, and the many ways to volunteer.</p> <p>As required by the NPDES Phase II Permit, Keep Saraland Beautiful complies with applicable State and local public notice requirements when planning a clean-up event.</p>
Target Audiences: <p>General Public, Residents, Businesses, Organizations</p>
Measurable Goals: <ol style="list-style-type: none">1. KSB will continue to comply with public notice requirements and publicize events to help facilitate maximum participation.2. KSB will continue to maintain programs and organize annual city-wide activities that involve cleaning up litter and promote a general awareness of pollution prevention.
Performance Measures: <ol style="list-style-type: none">1. Documentation of public notices for KSB events.2. Documentation of KSB events: dates, pictures, flyers, etc.
Responsible Party: <p>Name: Janice Harvison Department: Keep Saraland Beautiful</p>

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Public Education & Public Involvement on Stormwater Impacts

BMP Identification Number: 3.1-5

BMP Title: Alternative Sentencing
BMP Description: <p>The municipal court system utilizes alternative sentencing to provide workers to remove litter from city streets as a form of community service. An average of 8 to 10 workers are utilized weekly on Saturdays along the most traveled roadways such as Celeste Road, Shelton Beach Road, Shell Street, Kali Oka Road, Lafitte Road, Baldwin Street, Cedar Street, Hwy. 158, Ridge Road, Bayou Sara Avenue, and Spartan Drive. The workers are supervised by City employees.</p>
Target Audiences: Residents
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to use alternative sentencing as a method for removing litter from City streets.
Performance Measures: <ol style="list-style-type: none">1. Documentation of details of each weekly cleaning: number of workers and location.
Responsible Party: Name: Christine Purvis Department: Executive Assistant

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Public Education & Public Involvement on Stormwater Impacts

BMP Identification Number: 3.1-6

BMP Title: Stormwater Awareness Surveys
BMP Description: The City will evaluate the effectiveness of the public education and public involvement program through implementing stormwater awareness surveys. Results of the surveys will be statistically evaluated to determine changes in awareness and knowledge of the City's stormwater management program. If any BMPs are determined to be ineffective, then the SWMPP will be updated to address the ineffectiveness.
Target Audiences: Contractors
Measurable Goals: <ol style="list-style-type: none">1. The City will develop a stormwater awareness survey by March 31, 2023, implement the surveys by March 31, 2024 and statistically evaluate the results by March 31, 2025 to determine program effectiveness.
Performance Measures: <ol style="list-style-type: none">1. Documentation of survey development and implementation.2. Documentation of the number of survey participants.3. Documentation of survey results.
Responsible Party: Name: Ian Cantrell Department: Building Inspection

3.2 Illicit Discharge Detection and Elimination (IDDE)

Permit Requirement: The Permittee shall implement an ongoing program to detect and eliminate illicit discharges into the MS4, to the maximum extent practicable.

BMP ID	BMP TITLE
3.2-1	Outfall and Structural BMP Mapping
3.2-2	IDDE-related Ordinances
3.2-3	IDDE Training for City Employees
3.2-4	Illicit Discharge Response
3.2-5	Dry Weather Screening
3.2-6	Handling of Spills

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Illicit Discharge Detection and Elimination

BMP Identification Number: 3.2-1

BMP Title: Outfall and Structural BMP Mapping
BMP Description: <p>The City of Saraland has an existing map of a stormwater outfall and nineteen (19) field screening locations used in the past to achieve regulatory compliance. The Outfall and Structural BMP map also includes structural BMPs owned, inspected, and maintained by the City.</p> <p>The City's definition of an outfall is as follows: <u>Storm water outfall</u> is defined as the point where a municipal separate storm sewer system discharges to waters of the state.</p> <p>A copy of the map is included in Appendix B.</p>
Target Audiences: <p>Planning and public works staff.</p>
Measurable Goals: <ol style="list-style-type: none">1. Maintain existing map of the major storm water outfall and field screening locations.2. Update map with new detention ponds, as necessary.
Performance Measures: <ol style="list-style-type: none">1. Updated map showing the outfalls and detention pond locations.
Responsible Party: <p>Name: Ian Cantrell Department: Building Inspection</p>

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Illicit Discharge Detection and Elimination

BMP Identification Number: 3.2-2

BMP Title: IDDE-related Ordinances

BMP Description:

The City of Saraland has in place several codes and ordinances that provide enforcement measures for illicit discharges. The codes are further described below and will be reviewed and updated as needed.

Chapter 20 - Environment, Article IV – Stormwater Management, Division 1 addresses illicit discharges. The specific codes are summarized below along with links to each:

- *Sec. 20-200. - Definitions.*
This code defines an Illicit discharge as any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit.
https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTIVSTMA_DIV1GE_S20-200DE
- *Sec. 20-207. - Pollutant discharges.*
This code makes it unlawful to discharge a pollutant into the stormwater system that will have a negative impact on the environment.
https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTIVSTMA_DIV1GE_S20-207PODI
- *Sec. 20-208. - Right of entry by city officials.*
The code authorizes City officials to enter the grounds of any facility suspected of an illegal discharge.
https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTIVSTMA_DIV1GE_S20-208RIENOF
- *Sec. 20-209. - City's right to inspect facilities*
The Ordinance also authorizes City officials to halt any discharge from a facility that is suspected of being illicit.
https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTIVSTMA_DIV1GE_S20-209CIRIINF
- *Sec. 20-210. - Reimbursement for costs incurred by city.*
This code authorizes the City to be reimbursed for the ceasing of a discharge from a facility that is suspected of being potentially harmful.

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTIVSTMA_DIV1GE_S20-210RECOINCI

Chapter 20 - Environment, Article VI – HAZARDOUS MATERIALS DISCHARGE makes any release or threatened release of hazardous materials into the environment unlawful. A link to the code is provided below:

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTVIHAMADI

Target Audiences:

Residents, Businesses

Measurable Goals:

1. The City will continue to update IDDE-related ordinances as needed.

Performance Measures:

1. Documentation of revisions to the IDDE-related ordinances, as needed.

Responsible Party:

Name: Mike Black

Department: Building Inspection

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Illicit Discharge Detection and Elimination

BMP Identification Number: 3.2-3

BMP Title: IDDE Training for City Employees
BMP Description: The City of Saraland makes a concerted effort to ensure that all City employees are properly trained to identify and report illicit discharges. The City will use fact sheets at safety meetings to perform training. Sign-in sheets will be retained from all meetings to confirm employee attendance.
Target Audiences: City Employees
Measurable Goals: <ol style="list-style-type: none">1. The City will use fact sheets at safety meetings to provide IDDE training.2. The City will retain all sign-in sheets.
Performance Measures: <ol style="list-style-type: none">1. Documentation of all training material presented at safety meetings.2. Sign-in sheets to document training attendance.
Responsible Party: Name: Ian Cantrell Department: Building Inspection

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Illicit Discharge Detection and Elimination

BMP Identification Number: 3.2-4

BMP Title: Illicit Discharge Response
BMP Description: <p>As stated in BMP 3.2-2, the codes authorize City Officials to investigate any suspected illicit discharges and issue citations, if necessary. Currently, illicit discharge complaints are either received at the City Hall or reported directly to Public Works. This City has added a form to the stormwater webpage to report illicit discharges. The form requests details of the discharge, including the time and date, closest street or intersection, and any other helpful information that can be used to locate and identify the illicit discharge. There is also an option to either provide name and contact information or remain anonymous. In conjunction with the IDDE-related codes, the City keeps records of all reported illicit discharge complaints and the results of any investigations, including whether citations were issued, and any plans for follow-up.</p> <p>The City will also continue to provide training for City Employees on how to recognize illicit discharges and reporting procedures. These procedures are included in the Dry Weather Screening SOP in Appendix G.</p> <p>Upon identification of any illicit discharge, all measures will be taken to eliminate (or commence the elimination) of the illicit discharge within ten (10) working days in accordance with the MS4 permit. If the source of the discharge is determined to be outside of the City's MS4, ADEM's Mobile Field Office (251-450-3400) will be notified.</p>
Target Audiences: Residents, Businesses
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to train City Employees on detecting and reporting illicit discharges.2. The City will continue to maintain records of reported illicit discharges, including dates, times, locations, and persons responsible.3. The City will continue to promptly respond to and investigate all reports of illicit discharges and take appropriate enforcement measures.4. All warnings and citations for illicit discharges will continue to be recorded and tracked for future follow-up.5. The City will ensure that all measures be taken to eliminate confirmed illicit discharges within ten (10) working days.6. The City will notify ADEM Mobile Field Office if the source of the discharge is determined to be outside of the City's MS4.
Performance Measures: <ol style="list-style-type: none">1. Documentation of illicit discharge complaints and the results of all investigations.
Responsible Party: Name: Mike Black/Warren Stephens Department: Building Inspection/Public Works

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Illicit Discharge Detection and Elimination

BMP Identification Number: 3.2-5

BMP Title: Dry Weather Screening
BMP Description: Dry weather screening will be performed at each outfall as the outfall mapping is updated, as described in BMP 3.2-1. Screening will be performed in accordance with the City's Standard Operating Procedure for Dry Weather Screening. This SOP will be updated prior to beginning the outfall mapping operations for this permit term. Upon detection of any illicit discharge, measures will be taken to identify the potential source of the discharge and eliminate the illicit discharge within ten (10) working days in accordance with the MS4 permit. The City will coordinate with ADEM's Mobile Central Field Office (251-450-3400) when necessary.
Target Audiences: City Public Works and Inspection Services Departments.
Measurable Goals: <ol style="list-style-type: none">1. The City will conduct dry weather screening at the outfalls to detect any potential illicit discharges from or into the storm sewer system.2. The City will continue to keep a record of each dry weather screening, including GPS coordinates and a description of results for each mapped and screened outfall.
Performance Measures: <ol style="list-style-type: none">1. Records of dry weather screenings and results.
Responsible Party: Name: Mike Black Department: Inspection Services

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Illicit Discharge Detection and Elimination

BMP Identification Number: 3.2-6

BMP Title: Handling of Spills
BMP Description: <p>The Saraland Police Department developed and implemented a Procedural General Order (PGO) for the reporting and handling of hazardous and/or toxic material spills and incidents. A copy is provided in Appendix F. In addition, the Saraland Fire Department is home to Alabama HazMat 6, a statewide Hazardous Materials Response Team. The City's HazMat team is fully equipped to handle both large and small incidents. All spills are handled with life safety as the primary goal and environmental conservation as the second objective. Spills are contained with a variety of absorbent materials and booms. All spill control is coordinated with Mobile County Emergency Management, Alabama Department of Environmental Management, and the United States Coast Guard if a spill threatens a waterway.</p> <p>The Saraland Fire Department is also equipped with a Rescue/HazMat truck with onboard computers, chemical identifiers and detectors, decontamination equipment, and full assortment of tools to deal with the highly specialized field of hazardous material containment.</p> <p>Currently, reports of emergency hazardous spills are received through the 911 emergency system. A report of each call is generated in an online reporting system.</p>
Target Audiences: N/A
Measurable Goals: <ol style="list-style-type: none">1. The City will review and update the Procedural General Order for spills and incidents, as needed.2. The City will continue to provide a refresher course on the reporting and handling of spills for PSD employees.
Performance Measures: <ol style="list-style-type: none">1. Documentation of reviews and updates to the PGO for hazardous spills and incidents.2. Documentation of annual refresher course for PSD employees.
Responsible Party: Name: Fire Chief Jeff Ludlam Department: Fire Department

3.3 Construction Site Stormwater Runoff Control

Permit Requirement: The Permittee must develop/revise, implement and enforce an ongoing program to reduce, to the maximum extent practicable, the pollutants in any stormwater runoff to the MS4 from qualifying construction sites.

BMP ID	BMP TITLE
3.3-1	Construction Site Stormwater Related Ordinances
3.3-2	Construction Site Plan Reviews and Inspections
3.3-3	Construction Site Inventory

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Construction Site Stormwater Runoff Control

BMP Identification Number: 3.3-1

BMP Title: Construction Site Stormwater Related Ordinances

BMP Description:

The City of Saraland has in place several codes and ordinances that provide enforcement measures for reducing, to the maximum extent practicable, pollutants in any stormwater runoff from construction sites. The relevant codes are further described below and will be reviewed and updated as needed.

Chapter 20 - Environment, Article IV – Stormwater Management, Division 2 addresses stormwater management facilities and erosion and sedimentation control. The specific codes are summarized below along with links to each:

- *Sec. 20-229. - Facility elements.*

This code defines structural and nonstructural stormwater management facilities. The code also allows stormwater management plans to be rejected by the City Building Inspector if they incorporate structures and facilities that will demand considerable maintenance, will be difficult to maintain, or utilize small structures if other alternatives are physically possible.

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTIVSTMA_DIV2STSP_S20-229FAEL

- *Sec. 20-234. - Erosion and sedimentation control.*

This code provides erosion and sedimentation control plan requirements and requires approval of such plan by the city building inspections department prior to the commencement of any land disturbing activity.

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTIVSTMA_DIV2STSP_S20-234ERSECO

Chapter 20 - Environment, Article IV – Stormwater Management, Division 3 addresses stormwater management plan requirements. The code explains the conditions under which a stormwater management plan is required to be submitted, whether a simplified or extensive SWMPP is required, and also provides a detailed list of the required components of the SWMPP, in addition to the review and approval process. A link to the code is provided below:

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTIVSTMA_DIV3MAPL

Chapter 26 – Land Use and Development, Article III – Drainage and Storm Sewers, Erosion and Sedimentation Control, and Stormwater Detention provides more detailed requirements for construction site stormwater and erosion and sedimentation control.

- *Sec. 26-458. - Construction requirements; erosion and sediment control plan requirement.*

This code requires approval of an erosion and sediment control plan and a site disturbance permit prior to any land disturbing activity.

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH26LAUSDE_ARTIIIDRSTSEERSECOSTDE_S26-458COREERSECOPLRE

- *Sec. 26-459. - Submission and review.*

This code allows the city to require a revised plan if the city determines, either upon review of such plan or on inspection of the job site, that a significant risk of off-site sedimentation or erosion exists.

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH26LAUSDE_ARTIIIDRSTSEERSECOSTDE_S26-459SURE

- *Sec. 26-464. - Design and performance standards.*

This code requires erosion and sediment control measures, structures, and devices to be planned, designed, and constructed to provide control from the calculated peak runoff rates from a ten-year storm.

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH26LAUSDE_ARTIIIDRSTSEERSECOSTDE_S26-464DEPEST

Target Audiences:

Contractors, Builders

Measurable Goals:

1. The City will review and update codes and ordinances related to construction site stormwater as needed.

Performance Measures:

1. Documentation of reviews and updates to codes and ordinances related to construction site stormwater runoff control.

Responsible Party:

Name: Mike Black

Department: Building Inspection

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Construction Site Stormwater Runoff Control

BMP Identification Number: 3.3-2

BMP Title: Construction Site Plan Reviews and Inspections

BMP Description:

The Building Inspection Department and the City's consulting engineers review all new prospective construction project plans for stormwater compliance and drainage. Both construction and post-construction plans are required and reviewed in accordance with City ordinances.

The Building Inspection Department is responsible for approving land disturbance permits, confirming NPDES permits have been obtained, and performing construction inspections to ensure that all City codes are followed. When a permit is obtained, the builder must request inspections at all stages of construction. Inspectors will visit each construction site twelve (12) to twenty (20) times during the building process. These multiple inspections allow the City Inspector to ensure compliance with the city codes and determine the condition and effectiveness of the construction BMP's. The City also requires a Landscape/Stabilization inspection before the Certificate of Occupancy can be issued.

During construction site inspections, the City completes a checklist provided on each building permit which documents the nature of work/use of building; inspection date; inspector ID; location; owner/contractor contact information; and documents the erosion control and landscape/stabilization status.

Periodically, the City employs Consultants to provide in-house and onsite training to City Inspectors in identifying appropriate construction BMP's.

In the event of a violation, the City will provide a written notice to the violator and time to correct the deficiencies. If deficiencies aren't corrected and the violator is convicted, the City will impose a fine of not more than \$500 or imprisoned not more than 30 days for each offense.

Although the City performs inspections related to its own ordinance and permit requirements, it relies on ADEM to provide NPDES permit coverage and enforcement of state and federal laws related to stormwater management and discharge. If a construction site does not have required NPDES permit coverage and when BMP's are determined to be ineffective, the City notifies appropriate ADEM Field Operations Inspectors at 251-304-1176. The location of the construction project, the project contact information, and a summary of the deficiencies are provided for ADEM follow up.

The City also has a procedure in place for receiving public complaints regarding construction site runoff. Construction site complaints are either received directly at the Building Inspection Department or at the City Hall. Details of the complaint, including name of the

owner/operator, location of the construction site, description of the violation, schedule for returning to compliance, description of enforcement response, and documentation of enforcement responses, are kept on file.

The City utilizes the Interactive Wise City Permitting Software to track permit applications and inspections. The software components include online citizen interaction, permitting upgrades and credit card purchases, remote inspector access, a calendar, and a bulletin board.

Target Audiences:

Contractors, Builders

Measurable Goals:

1. The City will continue to follow procedures for construction site plan reviews and ensure that work adheres to approved plans and City ordinances.
2. The City will continue to use the checklist form on building permits during construction site inspections.
3. The City will continue to perform and track the number of inspections of construction sites, as stated above, and provide adequate documentation of inspection results.
4. The City will continue to track the number of non-compliant construction sites and provide notification to ADEM.
5. The City will continue to track the number of public complaints received and document the results of the investigations.
6. The City will track the dates of any BMP training for City Inspectors.

Performance Measures:

1. Documentation of the number of project plan submissions and the number of plan reviews.
2. Documentation of number of inspections and inspection results.
3. Documentation of public complaints and results.
4. Documentation of BMP training and sign-in sheets.

Responsible Party:

Name: Mike Black

Department: Building Inspection

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Construction Site Stormwater Runoff Control

BMP Identification Number: 3.3-3

BMP Title: Construction Site Inventory
BMP Description: <p>The City maintains a list of active construction sites, which is updated monthly. As mentioned in BMP 3-2, the City also utilizes the Interactive Wise City Permitting Software to track permit applications and inspections. The City will utilize this to maintain an inventory of qualifying construction sites containing relevant contact information for each construction site, the size of the construction site, whether the construction site has submitted for permit coverage under ADEM's Construction General Permit ALR100000, and the date the City approved the site construction plan.</p>
Target Audiences: Building Inspection Department
Measurable Goals: <ol style="list-style-type: none">1. The City will maintain an inventory of all qualifying construction sites, including construction stormwater permit coverage status for each site.
Performance Measures: <ol style="list-style-type: none">1. Provide a list of all active construction sites.
Responsible Party: Name: Mike Black Department: Building Inspection

3.4 Post-Construction Stormwater Management

Permit Requirement: Post-Construction Stormwater Management refers to activities that take place after construction occurs, and includes structural and non-structural controls including low-impact development and green infrastructure practices to obtain permanent Stormwater management over the life of the property's use. These post construction controls should be considered during the initial site development planning phase.

BMP ID	BMP TITLE
3.4-1	Post-Construction Stormwater Management Ordinance
3.4-2	Post-Construction Plan
3.4-3	Post-Construction BMP Operation and Maintenance Agreement
3.4-4	Promote Low Impact Development (LID)/Green Infrastructure

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Post-Construction Stormwater Management

BMP Identification Number: 3.4-1

BMP Title: Post-Construction Stormwater Management Ordinance

BMP Description:

The City of Saraland has a Post-Construction Stormwater Ordinance, located in *Chapter 20 - Environment, Article V – Post-Construction Stormwater Management* of the codes. The Ordinance includes the requirement that a post-construction BMP plan be submitted during the plan review process. Also included are procedures for demonstrating and documenting that post-construction stormwater measures have been installed per design specifications, in addition to enforceable procedures for bringing noncompliant projects into compliance. The ordinance also includes maintenance agreement requirements and annual inspections performed by a qualified post-construction stormwater inspector along with the submission of an inspection form.

The ordinance can be found at the link below:

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH20EN_ARTVPONSSTMA

Chapter 26 – Land Use and Development, Article III – Drainage and Storm Sewers, Erosion and Sedimentation Control, and Stormwater Detention provides additional requirements related to post-construction stormwater detention. The specific codes are summarized below.

- *Sec. 26-469. - Minimum requirements for stormwater detention and design criteria.*
This code requires that post-development release rates shall not exceed pre-development rates.

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH26LAUSDE_ARTIIIDRSTSEERSECOSTDE_S26-469MIRESTDEDECR

- *Sec. 26-478. - Method of evaluation.*
This code requires that pre vs post runoff rates and required detention volume design should be based on a minimum of a 25-year storm or a 24-hour event.

https://library.municode.com/al/saraland/codes/code_of_ordinances?nodeId=COOR_CH26LAUSDE_ARTIIIDRSTSEERSECOSTDE_S26-478MEEV

Target Audiences:

Contractors, Developers

Measurable Goals:

1. The City will review and update the Post-Construction Stormwater Management Ordinance as needed.

Performance Measures:

1. Documentation of updates to the Post-Construction Stormwater Management Ordinance, as needed.

Responsible Party:

Name: Mike Black

Department: Building Inspection

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Post-Construction Stormwater Management

BMP Identification Number: 3.4-2

BMP Title: Post-Construction Plan
BMP Description: As explained in BMP 3.4-1, the City has in place a Post-Construction Stormwater Management Ordinance that requires developers and contractors or property owners to submit a post-construction BMP plan with project construction plans. The BMP plan must be designed by a Professional Engineer and include a combination of structural and non-structural controls and a post-construction BMP maintenance agreement. Additional inspection of the BMP plan during and after construction is included in the permit inspection requirements.
Target Audiences: Plan Review Staff, Contractors, Developers, Engineers
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to implement a post-construction BMP plan review process to ensure all projects meet the requirements for long-term stormwater management.2. The City will continue to inspect the post-construction BMP plan during and after construction.
Performance Measures: <ol style="list-style-type: none">1. Documentation of a post-construction plan reviews and inspections.
Responsible Party: Name: Mike Black Department: Building Inspection

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Post-Construction Stormwater Management

BMP Identification Number: 3.4-3

BMP Title: Post-Construction BMP Operation and Maintenance Agreement
BMP Description: <p>The City of Saraland ensures long-term operation and maintenance of post-construction BMP's by requiring a maintenance agreement that allows the City to conduct inspections of post-construction BMP's and also account for the legal transfer of responsibility for maintenance from the developer to the property owner or Homeowner's Association.</p> <p>The maintenance agreement includes the following components: a description of the routine maintenance, inspection requirements, provisions for the City to access structural BMP's and a provision to legally record the maintenance agreement.</p> <p>An inspection of the BMP's is required to be completed by a Qualified Post-Construction Stormwater Inspector by July 1st of each year.</p>
Target Audiences: <p>Contractors, Developers</p>
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to require a maintenance agreement for post-construction BMP's.2. The City will continue to require a yearly inspection of post-construction BMP's.
Performance Measures: <ol style="list-style-type: none">1. Documentation of completed maintenance agreement and yearly inspection results.
Responsible Party: <p>Name: Mike Black Department: Building Inspection</p>

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Post-Construction Stormwater Management

BMP Identification Number: 3.4-4

BMP Title: Promote Low Impact Development (LID)/Green Infrastructure
BMP Description: The City of Saraland will encourage and educate landowners and developers to incorporate the use of low impact development (LID)/green infrastructure where feasible. The stormwater webpage provides a link to a LID brochure describing what LID is and summarizing community benefits. Additional educational material will be developed and attached to permit application forms. The City will also modify the site plan review form to encourage the use of LID/green infrastructure.
Target Audiences: Residents, Contractors, Developers, Engineers
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to provide educational brochures for LID to educate landowners and developers.2. The City will modify the site plan review form to encourage landowners and developers to incorporate the use of LID/green infrastructure where feasible.
Performance Measures: <ol style="list-style-type: none">1. Documentation of LID educational material.2. Documentation of site plan review forms encouraging LID.
Responsible Party: Name: Mike Black Department: Building Inspection

3.5 Pollution Prevention/Good Housekeeping for Municipal Operations

Permit Requirement: The Permittee shall develop, implement, and maintain a program that will prevent or reduce the discharge of pollutants in stormwater run-off from municipal operations to the maximum extent practicable.

BMP ID	BMP TITLE
3.5-1	Inventory of Municipal Facilities
3.5-2	Housekeeping SOP's and Inspection Schedules
3.5-3	Structural Controls Maintenance
3.5-4	Sanitary Sewer Overflow (SSO) Prevention
3.5-5	City Vehicle Maintenance
3.5-6	Spraying of Herbicide
3.5-7	Garbage and Recycling Services

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Pollution Prevention/Good Housekeeping

BMP Identification Number: 3.5-1

BMP Title: Inventory of Municipal Facilities
BMP Description: Below is an inventory of all municipal facilities: <ul style="list-style-type: none">- Saraland City Hall – 943 Saraland Blvd.- Saraland Police Department – 716 Saraland Blvd.- Saraland Fire Rescue Department – 716 Saraland Blvd.- Saraland City Garage – 716 Saraland Blvd.- Saraland Annex Building – 933-939 Saraland Blvd. S. (includes Building Department, Municipal Court, and Chamber of Commerce)- Saraland Senior Center – 718 Mae Street- Saraland Civic Center – 716 Mae Street- Saraland Public Library – 111 Saraland Loop- Saraland Public Works – 30-48 Station Street- Kali Oka Country Club – 7501 Kali Oka Road- Saraland Cleveland House – 845 Norton Ave.- Saraland Safe House – 7794 Celeste Road- Fire Station #2 – 7681 Ridge Road- Fire Station #3 – 7787 Celeste Road <p>The City has developed a set of Standard Operating Procedures (SOP's) detailing good housekeeping practices to be employed at appropriate municipal facilities. The SOP's and the inspection schedule are discussed in BMP 3.5-2.</p>
Target Audiences: N/A
Measurable Goals: <ol style="list-style-type: none">1. The City will maintain an updated list of municipal facilities.2. The City will continue to implement the SOP's at appropriate municipal facilities.
Performance Measures: <ol style="list-style-type: none">1. Documentation of municipal facilities and SOP's.
Responsible Party: Name: Warren Stephens Department: Public Works Department

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Pollution Prevention/Good Housekeeping

BMP Identification Number: 3.5-2

BMP Title: Good Housekeeping SOP's and Inspection Schedules

BMP Description:

Below is a list of the current Good Housekeeping Standard Operating Procedures (SOP's) and their corresponding inspection schedule for the City's Municipal Facilities:

STANDARD OPERATING PROCEDURE	INSPECTION SCHEDULE
1. City Vehicle Maintenance	As needed
2. Detention Pond Cleaning	Yearly or as needed
3. Ditch Maintenance	Monthly
4. Drainage Structure Cleaning	Monthly
5. Herbicide for Weed Control	As needed
6. Storage and Disposal of Chemicals	As needed
7. Vegetation control	As needed

The details for each SOP are provided in Appendix G.

Good Housekeeping SOP Training for staff is performed at annual safety meetings and monthly Public Works meetings. Sign-in sheets are retained from all meetings to confirm employee attendance.

Target Audiences:

Public Works staff

Measurable Goals:

1. The City will add to or update the SOP's as needed.
2. The City will continue to implement the SOP's at appropriate municipal facilities.
3. The City will continue to provide SOP training for staff.

Performance Measures:

1. Documentation of inspections for each SOP.
2. Documentation of SOP training.

Responsible Party:

Name: Warren Stephens

Department: Public Works Department

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Pollution Prevention/Good Housekeeping

BMP Identification Number: 3.5-3

BMP Title: Structural Controls Maintenance
BMP Description: <p>The Public Works Department cleans and removes debris from all drains as necessary to assist with maintaining flow through existing infrastructure. The Department maintains a regular inspection and maintenance schedule of the City's drainage system. Major channels are inspected at least once per month and cut or cleaned when needed as allowed by regulatory agencies having jurisdiction. Storm inlets are inspected annually and necessary maintenance is performed. Also, several crews from the Department are sent out to inspect elements of the drainage system before and after rains to ensure proper drainage of the stormwater. Minor repairs are performed as necessary. The Department also maintains two detention ponds located in the Highland Subdivision on Dawson Drive and at Hertz Children Park on 1st Avenue.</p>
Target Audiences: N/A
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to follow a schedule for the inspection and maintenance of all structural controls.
Timeline/Implementation Schedule: <ol style="list-style-type: none">1. The City will continue to inspect, maintain, and repair all structural controls, as needed.
Performance Measures: <ol style="list-style-type: none">1. Documentation of all inspections, maintenance, and repairs.
Responsible Party: Name: Warren Stephens Department: Public Works Department

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Pollution Prevention/Good Housekeeping

BMP Identification Number: 3.5-4

BMP Title: Sanitary Sewer Overflow (SSO) Prevention
BMP Description: <p>The City of Saraland has several tools to assist with properly maintaining and operating the sanitary sewer collection and treatment system. The lift stations are continuously monitored through a Supervisory Control and Data Acquisition (SCADA) system. The SCADA system will send pager alarms to City staff when a critical condition arises at a lift station such as high water level or power outage. The Sewer Department staff also performs a minimum of twice weekly site visits to all lift stations to visibly confirm operational conditions. The Sewer Department also has two portable generators that are stationed at critical lift stations in the case of long term power outages.</p>
Target Audiences: N/A
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to monitor and inspect sanitary sewer system infrastructure to identify problems or deficiencies.
Performance Measures: <ol style="list-style-type: none">1. Documentation of sewer inspections, including date, location, and any issues found.
Responsible Party: Name: Chad Hennis, Utilities Director Department: Saraland Water and Sewer Service

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Pollution Prevention/Good Housekeeping

BMP Identification Number: 3.5-5

BMP Title: City Vehicle Maintenance
BMP Description: The City of Saraland utilizes a collection tank located in the City's garage to collect oil, diesel fuel, antifreeze, and transmission fluids when working on City vehicles and equipment. Additionally, the City washes vehicles with an environmentally safe car wash. The Standard Operating Procedure (SOP) for City Vehicle Maintenance is included in Appendix G.
Target Audiences: Public Works Employees
Measurable Goals: 1. The City will continue to utilize a collection tank when performing vehicle maintenance.
Performance Measures: 1. Documentation of proper disposal of oil collected.
Responsible Party: Name: Daniel Arnett Department: City Garage

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Pollution Prevention/Good Housekeeping

BMP Identification Number: 3.5-6

BMP Title: Spraying of Herbicide
BMP Description: Avenger Weed Killer is applied to the City's rights-of-way by the Public Works Department. The City's applicator follows the label instructions as described in the Herbicide for Weed Control SOP in Appendix G.
Target Audiences: Public Works Employees
Measurable Goals: <ol style="list-style-type: none">1. The City will document the location, date, and applicator name for application of the herbicide.
Performance Measures: <ol style="list-style-type: none">1. Documentation of location, date, and applicator name of each spraying application.
Responsible Party: Name: Warren Stephens Department: Public Works Department

BMP SUMMARY SHEET

MS4 Name: Saraland, Alabama

Minimum Control Measure: Pollution Prevention/Good Housekeeping

BMP Identification Number: 3.5-7

BMP Title: Garbage and Recycling Services
BMP Description: The City contracts with Waste Pro for residential garbage and trash service. Every household has the option to request recycling pick-up through Waste Pro. The City also has two recycling drop-off locations. Additionally, the Mayor has required recycling bins in all City Departments.
Target Audiences: General Public
Measurable Goals: <ol style="list-style-type: none">1. The City will continue to provide garbage and recycling services for residents.2. The City will encourage all residents to recycle.
Timeline/Implementation Schedule: <ol style="list-style-type: none">1. The City provides garbage and recycling services.2. The City promotes recycling to residents.
Performance Measures: <ol style="list-style-type: none">1. Documentation of materials used to encourage residents to recycle.
Responsible Party: Name: Christine Purvis Department: Executive Assistant

4.0 Certification

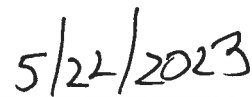
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information 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.

The Honorable Dr. Howard Rubenstein

Mayor, City of Saraland



Signature



Date

Appendix A

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT

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

AREA OF COVERAGE: THE STATE OF ALABAMA

PERMIT NUMBER: ALR040045

RECEIVING WATERS: ALL WATERS OF THE STATE OF ALABAMA

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

ISSUANCE DATE: September 16, 2021

EFFECTIVE DATE: October 1, 2021

EXPIRATION DATE: September 30, 2026


Alabama Department of Environmental Management

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PART I: COVERAGE UNDER THIS GENERAL PERMIT

A. PERMIT COVERAGE

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

B. AUTHORIZED DISCHARGES

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

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

C. PROHIBITED DISCHARGES

The following discharges are not authorized by this permit:

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

D. OBTAINING AUTHORIZATION

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

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

E. IMPLEMENTATION

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

PART II: NOTICE OF INTENT (NOI) REQUIREMENTS

A. DEADLINES OF APPLICATIONS

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

B. CONTINUATION OF THE EXPIRED GENERAL PERMIT

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

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

C. CONTENTS OF THE NOTICE OF INTENT (NOI)

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

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

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

D. WHERE TO SUBMIT MS4 DOCUMENTS

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

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

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

PART III: STORM WATER POLLUTION PREVENTION AND MANAGEMENT PROGRAM

A. STORM WATER MANAGEMENT PROGRAM (SWMP)

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

B. MINIMUM STORM WATER CONTROL MEASURES

1. Public Education and Public Involvement on Storm Water Impacts

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

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

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

2. Illicit Discharge Detection and Elimination (IDDE) Program

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

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

3. Construction Site Storm Water Runoff Control

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

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

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

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

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

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

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

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

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

5. Pollution Prevention/Good Housekeeping for Municipal Operations

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

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

PART IV: SPECIAL CONDITIONS

A. RESPONSIBILITIES OF THE PERMITTEE

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

B. SWMPP PLAN REVIEW AND MODIFICATION

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

C. DISCHARGE COMPLIANCE WITH WATER QUALITY STANDARDS

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

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

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

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

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

E. REQUIRING AN INDIVIDUAL PERMIT

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

PART V: MONITORING AND REPORTING

A. MONITORING REQUIREMENTS

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

B. REPORTING OF MONITORING RESULTS

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

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

PART VI: ANNUAL REPORTING REQUIREMENTS

A. ANNUAL REPORT SUBMITTAL

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

B. ANNUAL REPORT CONTENTS

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

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

PART VII: STANDARD AND GENERAL PERMIT CONDITIONS

A. DUTY TO COMPLY

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

B. CONTINUATION OF THE EXPIRED GENERAL PERMIT

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

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

C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

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

D. DUTY TO MITIGATE

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

E. DUTY TO PROVIDE INFORMATION

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

F. OTHER INFORMATION

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

G. SIGNATORY REQUIREMENTS

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

1. Notice of Intent.

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

2. Reports and other information.

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

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

3. Changes to authorization.

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

4. Certification.

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

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

H. PROPERTY RIGHTS

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

I. PROPER OPERATION AND MAINTENANCE

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

J. INSPECTION AND ENTRY

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

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

K. PERMIT ACTIONS

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

L. PERMIT TRANSFERS

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

M. ANTICIPATED NONCOMPLIANCE

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

N. COMPLIANCE WITH STATUTES AND RULES

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

O. SEVERABILITY

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

P. BYPASS PROHIBITION

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

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

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

Q. UPSET CONDITIONS

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

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

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

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

R. PROCEDURES FOR MODIFICATION OR REVOCATION

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

S. RE-OPENER CLAUSE

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

T. RETENTION OF RECORDS

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

U. MONITORING METHODS

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

V. ADDITIONAL MONITORING BY THE PERMITTEE

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

W. DEFINITIONS

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

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

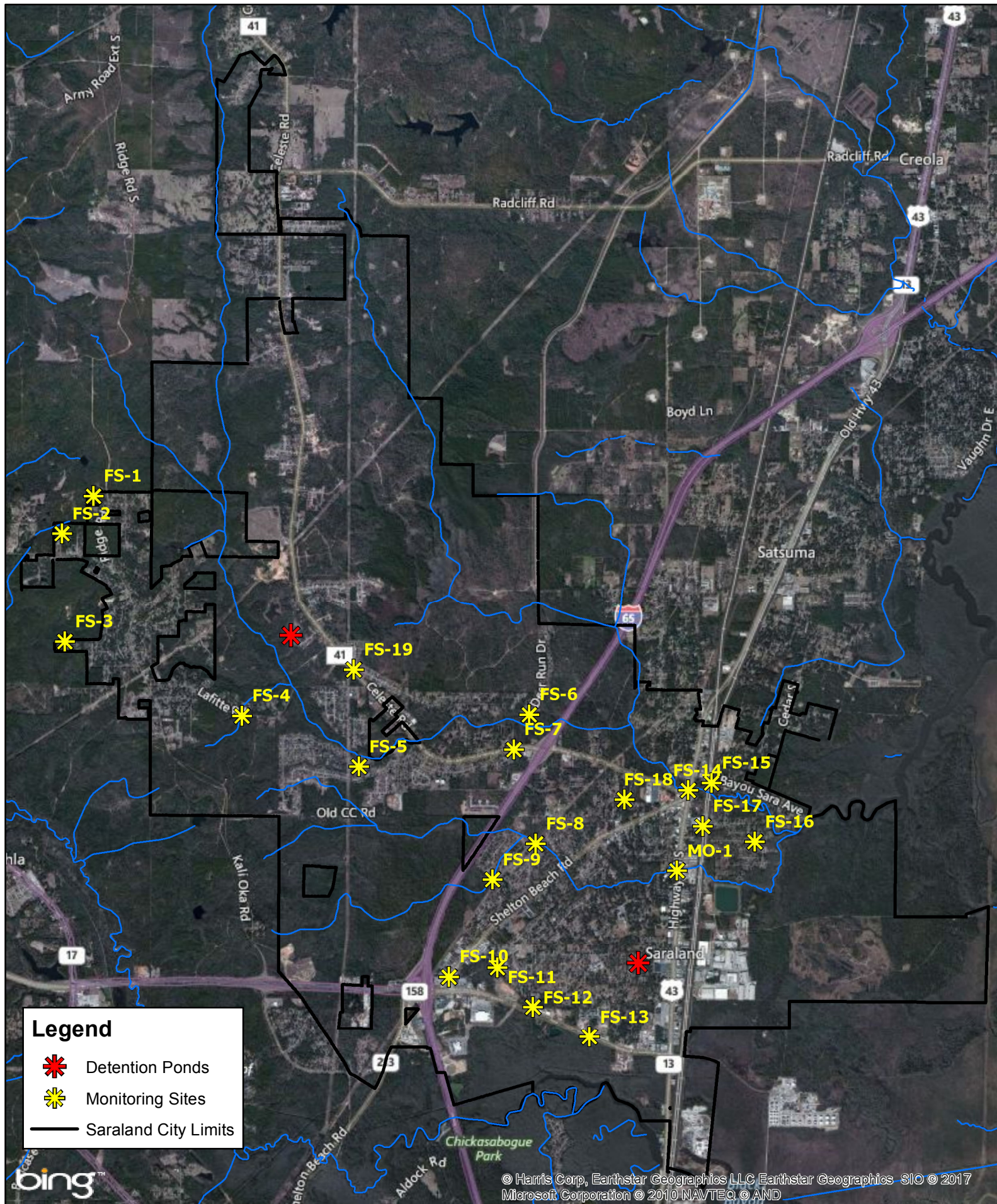
- b. Located in counties (these counties are listed in Appendix I of 40 CFR Part 122, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or
 - c. Owned or operated by a municipality other than those described in Parts VII.W.17.a.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

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

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

Appendix B

CITY OF SARALAND MS4 MAP



Appendix C

CITY OF SARALAND SWMPP SUMMARY

MINIMUM CONTROL MEASURE	BMP ID	BMP TITLE	STATUS	ACTIONS	GOAL DATE/FREQUENCY
Public Education and Public Involvement on Storm Water Impacts	3.1.1	Stormwater Webpage	Implemented and updated as needed	update	3/31 Annually
	3.1.2	Stormwater Outreach Materials	Implemented and Ongoing	distribute brochures	3/31 Annually
	3.1.3	Adopt-A-Spot Beautification Program	Implemented and Ongoing		Ongoing
	3.1.4	Keep Saraland Beautiful	Implemented and Ongoing	maintain programs and organize annual city-wide activities	Ongoing
	3.1.5	Alternative Sentencing	Implemented and Ongoing		Ongoing
	3.1.6	Stormwater Awareness Surveys	New BMP	Develop survey by March 2023, implement by March 2024, analyze results by March 2025	3/31/2025
Illicit Discharge Detection and Elimination (IDDE)	3.2.1	Outfall and Structural BMP Mapping	Implemented and updated as needed	review and update as needed	Ongoing
	3.2.2	IDDE-related Ordinances	Implemented and updated as needed	review and update as needed	Ongoing
	3.2.3	IDDE Training for City Employees	Implemented and Ongoing	perform training	3/31 Annually
	3.2.4	Illicit Discharge Response	Implemented and Ongoing		Ongoing
	3.2.5	Dry Weather Screening	Implemented and Ongoing	perform screening - minimum 15% once per year; 100% once per 5 years	9/30/2026
	3.2.6	Handling of Spills	Implemented and Ongoing		Annually
Construction Site Storm Water Runoff Control	3.3.1	Construction Site Stormwater Related Ordinances	Implemented and updated as needed	review and update as needed	Ongoing
	3.3.2	Construction Site Plan Reviews and Inspections	Implemented and Ongoing	Annual training for inspectors	Ongoing
	3.3.3	Construction Site Inventory	New BMP	maintain an inventory of qualifying construction sites	Ongoing
Post-Construction Storm Water Management in New Development and Redevelopment	3.4.1	Post-Construction Stormwater Management Ordinance	Implemented and updated as needed	review and update as needed	Ongoing
	3.4.2	Post-Construction Plan	Implemented and Ongoing		Ongoing
	3.4.3	Post-Construction BMP Operation and Maintenance Agreement	Implemented and Ongoing		Ongoing
	3.4.4	Promote Low Impact Development (LID)/Green Infrastructure	New BMP	modify the site plan review form to encourage the use of LID/green infrastructure	3/31/2023 / Ongoing
Pollution Prevention/Good Housekeeping	3.5.1	Inventory of Municipal Facilities	Implemented and Ongoing		Ongoing
	3.5.2	Housekeeping SOP's and Inspection Schedules	Implemented and Ongoing	update as needed and perform SOP staff training	Ongoing
	3.5.3	Structural Controls Maintenance	Implemented and Ongoing	follow inspections and maintenance schedule	Ongoing
	3.5.4	Sanitary Sewer Overflow (SSO) Prevention	Implemented and Ongoing		Ongoing
	3.5.5	City Vehicle Maintenance	Implemented and Ongoing		Ongoing
	3.5.6	Spraying of Herbicide	Implemented and Ongoing		Ongoing
	3.5.7	Garbage and Recycling Services	Implemented and Ongoing		Ongoing

Appendix D

What You Can Do

1. Prevent water, other than rain water, from entering storm drains and ditches.
2. Properly dispose of, or recycle motor oil, antifreeze, paint, solvents, and other materials.
3. Keep leaves, grass clippings, pet waste, soil, and litter out of storm drains, ditches, creeks, and ponds.
4. Use no-toxic alternatives and reduce or eliminate pesticide use.
5. Plant native species to protect bare soil and prevent erosion.
6. Participate in activities to learn more about stormwater.



City of Saraland

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City of Saraland

STORMWATER MANAGEMENT

*Building Inspection Department
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www.saraland.org

Impacts of Stormwater

Stormwater runoff is flow generated from hardened surfaces (e.g., streets, driveways, rooftops, and parking lots) agricultural land and other areas as a result of precipitation.



Where does stormwater go?

Stormwater flows over the surface and enters the nearest storm drain or drainage ditch. From the drains and ditches, the water is discharged **Untreated** into the nearest stream or river.



Flooding (Water Quantity)

Increased hardened surfaces in urban areas results in more water draining directly into streams. The increased flow causes flooding and erosion of stream banks



Pollution (Water Quality)

Major Pollutants found in stormwater runoff include:

- Sediment
- Nutrients
- Petroleum
- Litter
- Bacteria
- Fertilizers



Solutions



Education & Outreach



Changes in Local Policies



Best Management Practices

To report stormwater concerns contact:

Saraland Public Works—
251-679-5562 or

Building Inspection Department

933 Saraland Blvd. South
Saraland, AL 36571
Phone: 251-679-5502
Fax: 251-679-3106

Do I Need to Use Erosion Control?

~ Yes ~

You've seen the dirt:

- All over the road from trucks leaving a construction site.
- Running down the streets and into the storm inlets.
- On the neighbor's yard from the house being built next door.
- Running into the creek from the nearby construction.

All these need erosion control.



To report erosion, contact us.



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City of Saraland

EROSION & SEDIMENT CONTROL

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Tel: 251-679-5502

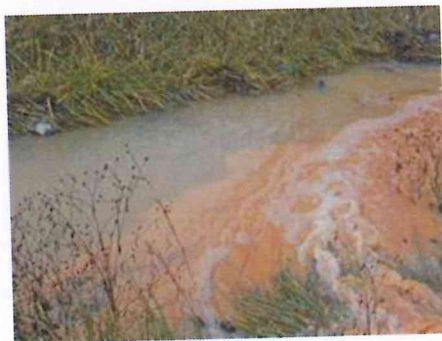
Fax: 251-679-3106

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What is Erosion and Sediment Control?

It is the planning and use of devices that effectively control erosion during land disturbing activities.

- For construction within the City or Planning Jurisdiction, an Erosion and Sediment Control Plan must be submitted to the Building Department.
- A Site Disturbance Permit must be obtained from the Building Department before any land disturbing activity begins.
- If 1 acre of land or more will be disturbed, a permit must be obtained from ADEM.
- Any disturbed site left exposed for 30 days shall be planted or provided with ground cover.
- Failure to control erosion can lead to polluted waterways.



Erosion Control Objectives:

- Identify areas subject to erosion (slopes, near waterways, etc.)
- Minimize the area exposed at one time.
- Minimize the time of exposure.
- Control the surface water running over the exposed area.
- Minimize the amount of sediment leaving the project area.



Erosion Control Devices:

- Silt Fence
- Hay Bales
- Seeding/Sodding
- Rip Rap
- Check Dams
- Storm Drain Inlet Protection
- Geotextiles
- Gravel Construction Entrance



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Benefits of Low Impact Development

How LID Can Protect Your Community's Resources



What Is Low Impact Development (LID)?

LID includes a variety of practices that mimic or preserve natural drainage processes to manage stormwater. LID practices typically retain rain water and encourage it to soak into the ground rather than allowing it to run off into ditches and storm drains where it would otherwise contribute to flooding and pollution problems (see www.epa.gov/nps/lid).

Why Should My Community Adopt LID?

LID Reduces Stormwater Runoff by Emphasizing Infiltration

As a community grows, so does the amount of surface area covered by parking lots, roads and rooftops (Figure 1). Rainfall cannot soak through these hard surfaces; instead, the rain water flows quickly across them—picking up pollutants along the way—and enters ditches or storm drains, which usually empty directly and without treatment into local waterways. Local streams in urban areas are overwhelmed by frequent urban flash flooding and stream habitats are smothered by sediments carried by the excessive flows.

Contrast this to an undeveloped watershed, where vegetation-covered soil soaks up rainfall rather than allowing it to run off the land (Figure 2). Water filters through the soil before reaching the groundwater table or being released slowly into streams. An undeveloped watershed provides clean, safe water.

Fortunately, by adding LID solutions, communities can help their watersheds act more like undeveloped watersheds—despite the ever-expanding numbers of roads and rooftops. LID practices such as natural or man-made swales, depressions and vegetated areas capture and retain water onsite, allowing time for water to soak into the soil where it is naturally filtered.



A green roof absorbs rainwater, reduces energy costs and offers wildlife habitat in urban Portland, Oregon.

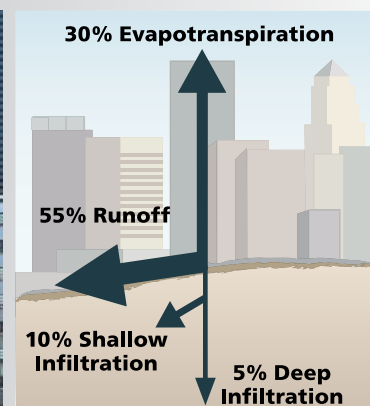
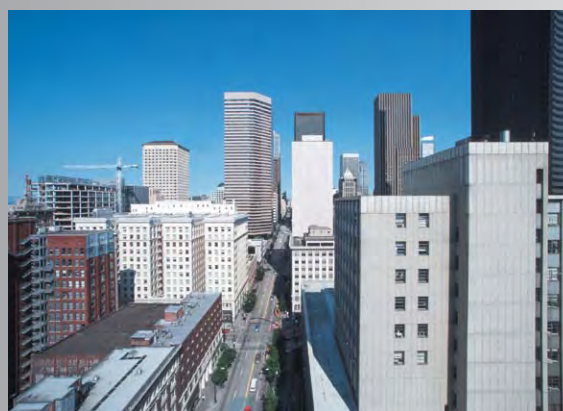


Figure 1. When roads, rooftops and parking lots cover much of the land, more than half of the rainfall runs off and flows directly into surface waters. In highly developed areas, such as in Seattle, Washington (above left), only 15 percent of rain water has the opportunity to soak into the ground.

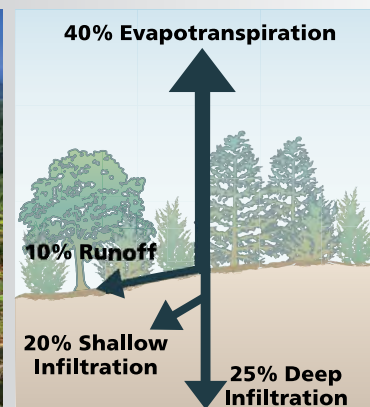


Figure 2. When vegetation and natural areas cover most of the land, such as in Oregon's Upper Tillamook Bay watershed (above left), very little water (only 10 percent) runs off into surface waters. Nearly half of the rainfall soaks into the soil. The remaining water evaporates or is released into the air by vegetation.

LID Provides Many Environmental and Economic Benefits

- **Improved Water Quality.** Stormwater runoff can pick up pollutants such as oil, bacteria, sediments, metals, hydrocarbons and some nutrients from impervious surfaces and discharge these to surface waters. Using LID practices will reduce pollutant-laden stormwater reaching local waters. Better water quality increases property values and lowers government clean-up costs.
- **Reduced Number of Costly Flooding Events.** In communities that rely on ditches and drains to divert runoff to local waterways, flooding can occur when large volumes of stormwater enter surface waters very quickly. Holistically incorporating LID practices reduces the volume and speed of stormwater runoff and decreases costly flooding and property damage.
- **Restored Aquatic Habitat.** Rapidly moving stormwater erodes stream banks and scours stream channels, obliterating habitat for fish and other aquatic life. Using LID practices reduces the amount of stormwater reaching a surface water system and helps to maintain natural stream channel functions and habitat.
- **Improved Groundwater Recharge.** Runoff that is quickly shunted through ditches and drains into surface waters cannot soak into the ground. LID practices retain more rainfall on-site, allowing it to enter the ground and be filtered by soil as it seeps down to the water table.
- **Enhanced Neighborhood Beauty.** Traditional stormwater management infrastructure includes unsightly pipes, outfalls, concrete channels and fenced basins. Using LID broadly can increase property values and enhance communities by making them more beautiful, sustainable and wildlife friendly.

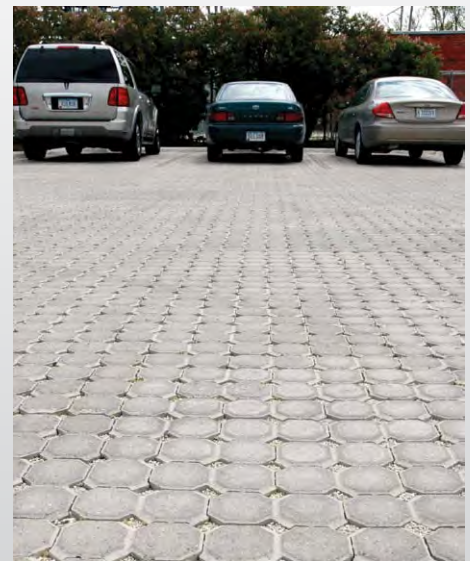
When implemented broadly, LID can also **mitigate the urban heat island effect** (by infiltrating water running off hot pavements and shading and minimizing impervious surfaces), **mitigate climate change** (by sequestering carbon in plants), **save energy** (from green roofs, tree shading, and reduced/avoided water treatment costs), **reduce air pollution** (by avoiding power plant emissions and reducing ground-level ozone), **increase property values** (by improving neighborhood aesthetics and connecting the built and natural environments), and **increase groundwater recharge**, potentially slowing or reversing land and well field subsidence.

LID Techniques Can Be Applied at Any Development Stage

- **In undeveloped areas, a holistic LID design can be incorporated in the early planning stages.** Typical new construction LID techniques include protecting open spaces and natural areas such as wetlands, installing bioretention areas (vegetated depressions) and reducing the amount of pavement.
- **In developed areas, communities can add LID practices to provide benefits and solve problems.** Typical post-development LID practices range from directing roof drainage to an attractive rain garden to completely retrofitting streets with features that capture and infiltrate rainwater.



A landscaped curb extension calms traffic and captures and infiltrates street runoff in Portland, Oregon.



Rainfall soaks through permeable pavement and into the ground below in this parking area in west Des Moines, Iowa.



Street runoff collects in stormwater planters in Portland, Oregon.



August 2009

What is a Rain Barrel?

Environmental Assessment & Innovation Division
EPA Region 3, Philadelphia, PA

A rain barrel is a system that collects and stores rainwater from your roof that would otherwise be lost to runoff and diverted to storm drains and streams. Usually a rain barrel is composed of a 55 gallon drum, a vinyl hose, PVC couplings, a screen grate to keep debris and insects out, and other off-the-shelf items, a rain barrel is relatively simple and inexpensive to construct and can sit conveniently under any residential gutter down spout.



A rain barrel used to collect rooftop runoff using a gutter / downspout system

What are the advantages of a rain barrel?

Lawn and garden watering make up nearly 40% of total household water use during the summer. A rain barrel collects water and stores it for when you need it most -- during periods of drought -- to water plants, wash your car, or to top a swimming pool. It provides an ample supply of free "soft water" to homeowners, containing no chlorine, lime or calcium making it ideal for gardens, flower pots, and car and window washing.

A rain barrel will save most homeowners about 1,300 gallons of water during the peak summer months. Saving water not only helps protect the environment, it saves you money and energy (decreased demand for treated tap water). Diverting water from storm drains also decreases the impact of runoff to streams. Therefore, a rain barrel is an easy way for you to have a consistent supply of clean, fresh water for outdoor use, FREE.

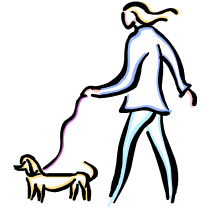
Where can I buy a ready-made rain barrel?

Ready-made rain barrels can be purchased from a number of companies, including hardware stores and garden supply stores. In addition, local governments sometimes offer them for a reduced price as part of their environmental education programs. Below are just a few sources (this listing does not constitute an endorsement by EPA). All links below exit EPA.

- [Ace Hardware](#) has a couple of models, 866-290-5334
- [Gaiam](#) produces the Great American Rain Barrel, 877-989-6321
- [Plow & Hearth](#) has several rain barrels including a pop-up barrel that folds flat when not needed, 800-494-7544
- [Rain Barrel Source](#) offers an extra large system, 866-912-9719
- [Spruce Creek Company](#) produces the Spruce Creek Rainsaver, 800-940-0187
- [Urban Garden Center](#) sells the Urban Rain Barrel, 866-923-1992

Pet Waste and Water Quality:

It's Not Just on the Lawn, It's in Your Water



What is the problem?

Scooping your pooch's poop isn't just a courtesy for those walking behind you; it is also the healthy and environmentally sound thing to do. Pet waste can be a significant source of water pollution. When pet waste is not properly disposed, it can be carried by rain or snow runoff directly into nearby waterbodies or into storm drains. Storm drains in streets and neighborhoods usually flow directly to a stream, river, or estuary without any treatment. Untreated animal fecal matter and wastes can become a source of harmful bacteria and nutrients in water. Just as we don't want human sewage in our water, it is important to prevent pet waste from being carried into our waterways because of negligence.

What you can do:

You can follow these easy steps to be part of the solution to pet waste contamination.

1. The first step is to **always carry a plastic bag** with you when you walk your dog. Re-using an old newspaper delivery bag or plastic grocery bag works well.
2. Using the bag like a glove, you can then pick up the pet waste, turn the bag inside out around the waste, seal the bag, and **dispose of it in a trash can**. You can also flush un-bagged pet waste down the toilet.
3. **Don't place the bagged or un-bagged pet waste in a storm drain** or hose the pet waste towards storm drains as they drain directly to a stream, river, lake or other waterbody.
4. If you have a large yard, you may **bury un-bagged pet waste** in the yard at least 5 inches in the ground and away from vegetable gardens and waterways.

Are you risking your health?

People are at risk of getting sick from drinking or swimming in water contaminated by pet waste. Dogs can be significant hosts of disease causing organisms, including Giardia and Salmonella, which are protozoan and bacterial infections transmitted to humans by animals. Some swimming beaches and shellfish beds in New Hampshire are commonly shut down due to bacteria contamination.

The latest research

The environmental impact of dog waste has gone unrecognized for decades. Scientists recently developed a new lab technique of fingerprinting DNA to match bacteria found in the water to the bacteria from specific animals, including humans and domestic animals. Using this type of forensic science, New Hampshire scientists have found that dogs are a significant contributor of bacteria in several New Hampshire surface waters.

Other neighborhood water pollutants

Dog waste is only one of many pollutants from our neighborhoods that add to water pollution. Lawn fertilizers, motor oil, driveway sand and salt, and soapy water from washing cars in driveways commonly end up in streams and lakes.

Tell friends and neighbors about the affect of animal waste on the environment and our health. Encourage them to clean up after their pets and to dispose of the pet waste properly.

Appendix E

Do I Need to Use Erosion Control?

~ Yes ~

You've seen the dirt:

- All over the road from trucks leaving a construction site.
- Running down the streets and into the storm inlets.
- On the neighbor's yard from the house being built next door.
- Running into the creek from the nearby construction.

All these need erosion control.



To report erosion, contact us.



City of Saraland

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City of Saraland

EROSION & SEDIMENT CONTROL

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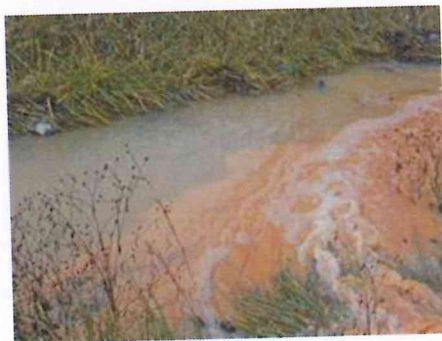
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What is Erosion and Sediment Control?

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- Failure to control erosion can lead to polluted waterways.



Erosion Control Objectives:

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- Minimize the area exposed at one time.
- Minimize the time of exposure.
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- Minimize the amount of sediment leaving the project area.



Erosion Control Devices:

- Silt Fence
- Hay Bales
- Seeding/Sodding
- Rip Rap
- Check Dams
- Storm Drain Inlet Protection
- Geotextiles
- Gravel Construction Entrance



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Do I Need to Clean up My Yard?

~ Yes ~

If you can answer Yes to Any of the following:

- Do you have trash in the yard?
- Are there electrical appliances (refrigerators, etc.) on the porch?
- Are there abandoned vehicles in the yard?
- Does the grass need cutting?
- Do the shrubs need pruning?
- Is the fence falling down?



Let's Build a Strong Community-
Offer to Help your Neighbor.

To report a nuisance, contact us.

5 Easy Ways to Improve Your Home's Curb Appeal

- Clean Up: One of the least expensive things you can do is to put away the clutter and throw away the trash.
- Green up your lawn: Since the front lawn is one of the first things seen from the street, keep it mowed, raked, edged, weeded, and watered. Also consider fertilizing it if necessary.
- Landscape: Start by pruning trees and adding a few new shrubs or flowers.
- Wash the siding: A clean house can make a world of difference.
- Paint: If cleaning doesn't revive your house, try a new paint job.



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City of Saraland

NUISANCE CONTROL & ELIMINATION

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Fax: 251-679-3106

www.saraland.org

What is Nuisance Control & Elimination?

It is the process of removing items that are unsightly or that may pose as a safety hazard to the general public. There are various nuisances that are unlawful according to the Saraland Code of Ordinances.

- Any growth of weeds, bushes or grass exceeding 12 inches in height may present a fire hazard, a safety hazard or otherwise endanger surrounding areas.
- It is unlawful to make unreasonable noise or vibration within the city limits that can be heard 25 feet or more away.
- It is unlawful to occupy or to lease any recreational vehicle or mobile home at any location other than a duly licensed and zoned mobile home park or sales lot.



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Am I a Nuisance?

~ YES ~

IF you have ANY of the following:

- Abandoned vehicles



- Debris/trash on porch or in yard
- Junk on porch or in yard
- Overgrown grass or bushes



- Someone living in a camper or RV
- Fences falling down
- Illegal signs
- Unreasonable noise or vibration

Is it Illegal?

~ YES ~

You may receive one of the following:

- A notice to clean up on the first contact.
- A citation for up to \$500.
- You may be issued a citation for a court appearance.



How much trash or limbs will the city pick up?

- Three cubic yards per week (3'x 3'x 9').
- No construction debris.
- Place trash on your property (on or near the curb). Do not put it in the street or cover water meters, fire hydrants, etc.

Can I pay if I have more than 3 cubic yards of trash to pick up?

- You may choose to have it removed privately, or you can contact the city contractor (Advanced Disposal, 443-8555) to remove excess trash for a fee.

How Can I Help?

- Scrape all food scraps and grease solids into the garbage, not down the sink, drain or toilet.
- Never pour solvents/gasoline down the drains, sewers or onto the ground outside.
- Clean up grease spills using an absorbent material (e.g. cat litter, paper towels) and place it in the dry trash bin.
- Train your family members in good environmental practices.



It's Sleazy To Be Greasy

To report a problem, contact us.



City of Saraland

Building Inspection Department

933 Saraland Blvd. South
Saraland, AL 36571
Phone: 251-679-5502
Fax: 251-679-3106
www.saraland.org

City of Saraland

**GREASE
CLEAN-UP &
DISPOSAL**

*Building Inspection Department
933 Saraland Blvd. South
Saraland, AL 36571*



**Tel: 251-679-5502
Fax: 251-679-3106
www.saraland.org**

What is the Grease Clean-Up and Disposal Effort?

It is the process of relaying information to the community about the harmful affects grease has on the environment and the City's infrastructure and how these damages can be avoided.

- Nearly 50 percent of all sewage overflows nationwide are caused by homeowners who improperly dispose of everyday fats, oils and grease.
- Local governments in the U.S. spend more than \$25 billion a year to keep sewers running, and most of the blockages are caused from improperly disposed grease from fried food.



Where Does Grease Come From?

- Meat Fats
- Cooking Oil
- Lard and Shortening
- Butter and Margarine



What Happens?

When grease is washed down the drain, it sticks to the inside of sewer pipes (both on your property and in the streets.) Over time, it builds up and can block an entire pipe . Garbage disposals do not keep grease out of the pipes. They only shred it into smaller pieces.

What Affect can Grease have on the Sewer System?

- Grease build-up clogs pipes and traps other debris.
- The Sewer System can overflow and potentially harm the public or the environment.
- If the overflow is into your home , the cleanup could cost thousands of dollars.
- An overflow could provide contact with disease-causing organisms.
- An increase in maintenance could result in higher operating costs.



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Illegal Signs

Illegal Signs, Sign Abatement

You've seen the signs:

- On a utility pole announcing weight loss services or legal aid.
- On sidewalks advertising easy credit card memberships.
- On the shoulder of the road or on bike paths announcing a new business around the corner.
- Signs giving directions to an apartment complex or new housing development.

All these signs are illegal.

The Illegal Sign Removal Program removes illegal signs from public rights-of-way.

To report illegal signs or learn how to obtain a permit contact us.



Temporary Promotional Banners & Flags

- No Permit Needed.
- Can stay up for a **MAXIMUM of 30 days.**
- Can be attached to and parallel to the face of a building.
- Can be No Greater than 20 square feet.
- If the banner/flag is deteriorated, it is **Illegal.**



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SIGN ORDINANCE

*Building Inspection Department
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Saraland, AL 36571*



Tel: 251-679-5502

Fax: 251-679-3106

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What is the Sign Ordinance?

The Sign Ordinance is part of The City of Saraland Land Use and Development Ordinance. Its purpose is to protect and promote public safety and welfare by governing the types of signs used, their sizes, locations, etc. Through this process, we will encourage a positive visual environment, minimize adverse effects on public and private property, and prevent hazardous disruptions to traffic.

- One existing on-premise sign per property will be Grandfathered in to be considered "Legally Nonconforming".
- If an existing off-premise sign or billboard is updated or replaced, it shall be in conformance with the sign ordinance. No new off-premise signs or billboards will be permitted.
- If a sign is 50% or more deteriorated, the replacement sign must meet the requirements of the sign ordinance.



Do I Need a Sign Permit?

~ YES ~

ALL signs require a permit **EXCEPT** for the following:

- Real Estate signs for sale, rent, open house, or signs for real estate improvements
- Temporary Promotional Signs and Banners
- Holiday Signs
- Political Signs
- Directional Signs
- Memorial & Historical Markers after City Council Approval
- Professional/Occupational Signs
- Temporary Yard Sale Signs
- Signs Incorporated on Machinery
- Indoor window signage



Even these types of signs have restrictions. Please call us or reference The City of Saraland Land Use and Development Ordinance for specific guidelines.

Is My Sign Illegal?

~ YES ~

If it meets the following:

- Any structure within the street right-of-way.
- Any sign on a sloped roof, fence, tree, etc.



- Any sign using the words "Stop" or "Danger".
- Flashing signs unless illuminations change only once every 5 minutes or which display time, date, and temperature.
- Billboards and off-premise signs.
- Portable, sandwich, and ladder type signs.



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Appendix F



STANDARD OPERATING GUIDELINE

FOR

HAZARDOUS MATERIALS RESPONSE

April 2006

Alabama HazMat Six

City of Saraland Fire Rescue Department

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PURPOSE

The following are the Operating Guidelines for hazardous materials incident response by the Saraland Fire Rescue HazMat Team. They are to be used by certified first responders at the Operations and Technician level in accordance with 29 CFR 1910.120 and NFPA 472. They are the basic procedures to be followed with the understanding that an emergency scene may require some modification to the Guidelines, but all efforts should be made to adhere to these.

Safety of responders and the public is paramount and will be foremost in all hazardous materials operations. The goal of all responders is to protect the public and the environment without becoming part of the problem.

These procedures shall be reviewed and up-dated as necessary. The updates shall be dated to reflect the time of adoption and implementation.

TRAINING LEVEL LIMITATIONS

Operations level

Response at the operations level shall be limited to defensive measures such as:

Identifying the material from a safe distance by available means (using binoculars, asking nearby personnel, etc.)

Reporting the situation to the Fire Alarm and the other appropriate agencies (i.e. EMA.)

Securing the area and establishing control zones.

Performing defensive control measures such as diking, damming, diverting, vapor suppression.

Performing emergency decontamination.

Most operational level tasks will be performed in the cold zone.

Technician level

May perform all the operations level tasks and all tactical measures inside the operating area including:

Select and use the appropriate personal protective equipment, including specialized splash and vapor protective clothing.

Select the appropriate decontamination procedures. Set up a decontamination corridor (Contamination Reduction Corridor-CRC) and perform decontamination procedures.

Mitigate the incident using offensive actions such as plugging, patching, neutralization, etc.

INITIAL ACTIONS

1.01.01 Purpose

To describe those procedures and considerations the responder shall use for initial actions when approaching a suspected hazardous materials release.

1.01.02 Rationale

A safe approach will allow the responder to maintain personal safety in order to perform recognition and identification at a hazardous materials release.

1.01.03 Initial Precautions

The following initial precautions shall be taken by **all** personnel before response to, and arrival at, the scene:

- A. Available PPE in ready condition and accessible.
- B. Briefing on zone locations and size, command post location, staging, etc. (if not first on scene).
- C. Incident assignments made (if not first on scene).
- D. Note wind direction and speed.
- E. Approach scene from up-hill/up-wind/up-stream.
- F. Stop vehicle at a safe distance from incident.

NOTE: For unknown substances, approach no closer than 330 feet before initiating assessment process.

1.01.04 Action Items Upon Arrival

The following considerations or actions shall be taken upon arrival:

- A. Establish a command post and staging areas well away from the scene on the uphill/upwind side only.
- B. Attempt to identify the material. Use binoculars, verbal reports, preplanning information, etc. If spill or wet area seen, stay well away. Park uphill/upwind from spills.
- C. If vapor release is suspected stay away from them (invisible cloud is usually much larger than visible cloud).
- D. If no release is seen look at spectators to spot any people who are ill or unconscious. If people are down stay away until you know what the situation is and can protect yourself.
- E. Always go in slowly to avoid getting in too deeply before you know as much as possible about

the situation.

F. If necessary, stop well back from the scene and send two people in a minimum of Level B PPE and equipment to check the situation. They should go in slowly, approach from upwind/uphill and use monitoring equipment as necessary. Use explosion proof lights and stay out of the observed chemicals (Entry shall not be made until Decon is operational). Two backup personnel in minimum level B PPE shall be standing by for rescue of the first two responders.

G. If it cannot be determined what chemical is involved, treat it as highly toxic, violently reactive, and highly explosive. Consult Emergency Response Guidebook guide # 111.

CAUTION: IF YOU ARE NOT SURE YOUR PPE IS ADEQUATE, REMAIN AT A SAFE DISTANCE.

1.01.04 Isolate and Deny Entry

1. At known or suspected hazardous materials incidents, the responder shall keep the public and emergency personnel at a safe distance so that they do not become contaminated or suffer injury. **Do not** allow anyone to enter a hazardous material incident site until the material has been identified. Use the following methods for isolation:

- A. Barrier ribbon
- B. Road cones
- C. Firefighters
- D. Police
- E. Block entry with apparatus

2. Control Zones

Control zones shall always be established at HazMat incidents. Responders will establish initial control zones to maintain distance between potential victims and the release. Access shall be limited by control points. The incident site shall be divided into three control zones; **HOT ZONE**, **WARM ZONE**, and **COLD ZONE**.

1. HOT ZONE

The Hot Zone is the inner most of the three areas, and is where contamination could occur. All personnel entering this zone shall wear prescribed levels of protection. An access control point shall be established to regulate entry by personnel, and these personnel shall be briefed on the location of the emergency exit corridor. The boundary line shall be well defined and established by one or more of the following methods:

- a. Visually surveying the area.

- b. Air sampling/monitoring.
- c. Information from references such as initial isolation distances from the ERG, ADASHI, or CAMEO.
- d. Need to isolate ignition sources.
- e. Potential for airborne contaminants.

NOTE: Responders at the operations level will not enter the hot zone!

2. WARM ZONE

The Warm Zone is where the Contamination Reduction Corridor (CRC) is located. This area provides a transition between contaminated and clean areas. The size is dictated by the area needed for the CRC and the distance needed between the HOT ZONE and COMMAND POST. All personnel exiting the HOT ZONE shall go through the CRC. All personnel entering this zone shall wear prescribed levels of protection. An access control point shall be established to control entry and exiting personnel. The boundary line shall be well defined.

3. COLD ZONE

The Cold Zone is the outermost part of the operation area at the incident site. It is considered a clean area. The Command Post is located here along with support personnel and equipment. This zone is restricted to authorized personnel only. Most work performed by operations level personnel will be in this zone.

RECOGNITION AND IDENTIFICATION

1.02.01 Purpose

The first unit on the scene of hazardous materials incidents could be any first responder. This portion of the standard operating guide will help to collect and evaluate data and conduct an assessment of the incident.

1.02.02 Rationale

Because of the potential for injury to responders, the complexity of many hazardous materials incidents and the lack of obvious information, the assessment process is of vital importance.

1.02.03 Determine If Hazardous Materials Are Present

Responders shall be aware of the following indicators when assessing the potential presence of hazardous materials. Maintain safe distance when making assessment.

- A. Type of occupancy
- B. Information from bystanders, employees, drivers
- C. What is happening at the incident?
- D. Types of containers
- E. Placards
- F. Labels
- G. Way bills and bills of lading (inside the cab, drivers side)
- H. Train consists and wheel reports (inside locomotive or caboose)
- I. Dangerous cargo manifests (in wheel house of tugboats and on barge)

1.02.04 Identify Hazardous Material

When it is determined that a known or suspected hazardous material is present, the responder shall attempt to identify the material using one or more of the following methods:

- A. Use the information gathered (placards, labels, bills of lading, waybills, airbills, manifests)
- B. Ask the owner, site specialist, or employee
- C. Contact shipper
- D. Contact the manufacturer
- E. Call **CHEMTREC** (You need to identify as much information as possible including train or truck number and/or the manufacturer's name)
- F. The North American Emergency Response Guide (NAERG)

G. Use CAMEO, ADASHI™, or WISER©

ESTABLISH THE INCIDENT COMMAND SYSTEM

1.03.01 Incident Command Structure

Federal law 29 CFR 1910.120 requires the establishment of an Incident Command System (ICS) at a hazardous materials incident. The first responder will utilize this system in accordance with this law.

A. The first responder shall initiate the incident command system upon arrival at the scene.

B. Notification of the incident, its location, the situation, what is being done and who the incident commander is shall be given to **Fire Alarm and Mobile County EMA** by any available means.

1.03.02 Command Post

A Command Post shall be established upon arrival of the first responder. It should be located up-hill, up-wind, up-stream and a safe distance from the incident.

1.03.03 Duties and Responsibilities

A. Incident Commander - (Shall be "incident street or facility name Command")

Duties and responsibilities as prescribed in the ICS

1. Establish Command and Control structure.
3. Establish the initial Cold Zone, or operate under the direction of the IC.
4. Establish the incident action plan, or operate under the direction of the IC.
5. Re-evaluate control zones and operational objectives, or operate under the direction of the IC.

Command of the incident shall be relinquished only to someone who is at least as qualified to perform this duty as person being relieved of command. The fire department will assume command upon its arrival. The exception to this is out of jurisdiction responses where our team will integrate into an established ICS.

ASSESSING THE INCIDENT (ICS Operations)

1.04.01 Assess the Potential

The responder shall assess the potential danger by estimating the amount of hazardous material that may be released and what rate, where it will go, and what its effects will be. This information will help determine the response procedures and what resources will be needed. Use the following methods to assess the potential:

- A. Container size and the amount of material inside.
- B. Type of hazardous material.
- C. Damage to the container and amount of material leaking.
- D. Weather conditions.
- E. Geographical location and demographics of the area where incident has occurred.
- F. Is fire involved?
- G. Is the hazardous material migrating by runoff or vapor cloud?
- H. Are there any contributing factors?

1.04.02 Call For Assistance

A. Notification

The responder must **contact Fire Alarm and M.C.E.M.A. by any means available.**

The responder may determine that additional help is needed. Assistance can come from both emergency and non-emergency organizations. The need for assistance can be associated with requirements for additional manpower, equipment and technical experts. Resources may come from the following areas and/or organizations:

1. Fire Department
2. Police (crowd control and/or evacuation)
3. Public Works Department (spills that enter drains)
4. Public Works Department (equipment, dirt, sand, and road barricades)
5. Coast Guard (spills into waterways)
6. Alabama Department of Environmental Management (ADEM) (clean-up assistance and information on environmental concerns)
7. Alabama Department of Transportation (ALDOT)(spills involving State roadways)

8. Chemists and/or Industrial Hygienists
9. Public Health
10. Private hazardous materials clean-up contractors
11. Red Cross (human services)

B. Response Levels

The following guidelines shall be used by the responder or Incident Commander as assistance in determining required resources to control a hazardous materials incident. See attachment 1.

A. Level I Incident (Potential Emergency Condition)

Level I incidents can be effectively managed and mitigated by first response units without an involvement from other special units. The incident is not an immediate threat to life, property or the environment. Evacuation is limited to the immediate area and/or involved structure only.

1. Spills that can be properly and effectively contained and/or abated by equipment and supplies immediately accessible to the first responder or the fire department.
2. Leaks and ruptures that can be controlled using equipment and supplies immediately available to the fire department.
3. Fires involving toxic materials that can be extinguished and cleaned up with resources immediately available to the fire department.

B. Level II Incident (Limited Emergency Condition)

Level II incidents require the special technical assistance of a hazardous materials response team, Industrial Specialist, or industry/government response team. This incident involves a greater hazard or potential for threat to life, the environment and property and may require limited evacuation of surrounding area.

1. Spills that can be properly and effectively contained and/or abated by specialized equipment and supplies immediately available to the fire department and surrounding departments.
2. Leaks or ruptures that can be controlled using specialized equipment and supplies immediately available to the fire department and surrounding departments.
3. Fires involving toxic and/or flammable materials that are permitted to burn.
4. Haz-Mat incidents where specialized technical information is required.
5. Haz-Mat incidents that can be contained and controlled using the available resources of the fire department and surrounding departments and/or other specially trained units.

C. Level III Incidents (Full Emergency Condition)

Level III incidents are major disasters that pose a severe hazard or threat to life, property and the environment or cover a large area requiring large scale evacuation. The incident may require the resources of local, county, state, federal and private agencies.

1. Spills that cannot be properly and effectively contained and/or abated by specialized equipment and supplies immediately accessible to the fire department and surrounding departments.
2. Leaks and ruptures that cannot be controlled using specialized equipment and supplies immediately available to the fire department and surrounding departments.
3. Fires involving toxic materials that are allowed to burn because water is ineffective or dangerous, or because there is a potential of large container failure, or because a large explosion, detonation or BLEVE could or has occurred.

NOTE: These LEVEL designations are in compliance with the Mobile County GMEPC.

1.05.01 Purpose

Gather and review as much information as possible about the hazardous material that has been released and other substances that may react with or have an impact (positive or negative) on the situation.

1.05.02 Hazardous Materials Analysis

After the hazardous material has been identified, as much information as possible about the hazardous material and its physical properties shall be collected. Sources of information include, but are not limited to:

- A. Container labels.
- B. Materials Safety Data Sheets (MSDS)
- C. DOT Emergency Response Guide Book (ERG)
- D. OSHA/NIOSH Pocket Guide To Chemical Hazards
- E. CHEMTREC
- F. Manufacturer
- G. Available NFPA standards

1.05.03 Incident Event Sequence Analysis

The responder shall conduct an events analysis to define the following:

- A. Identify nature and extent of incident.
- B. Identify who or what is involved.
- C. Determine what is happening now.
- D. Determine what is likely to happen. (Probabilities and possibilities)

1.05.04 Analyze Courses Of Action

The responder shall identify incident response actions. All practical options shall be considered before action is taken. When strategic objectives have been identified, they will be weighed against the available resources. Such things as response times, personnel, specialized equipment and technical expertise shall be considered.

A. Priority for direct involvement shall be based on:

- 1. People
 - a. Are people exposed to risk?

- b. Can people trapped or exposed to risk be safely removed from the danger areas?
- c. If you must enter the danger area, can you do so without becoming trapped, injured, or killed yourself?
- d. How can you protect yourself and those you hope to rescue from the harmful effects of the hazardous material?

2. Environment

- a. Can you safely prevent or reduce the environmental damage?
- b. Can you safely stop a leak or contain a spill?
- c. Do you have the proper safety equipment to do the job?
- d. Do you have adequate personnel, supplies and equipment on scene?
- e. Do you have the expertise to safely accomplish what needs to be done?

3. Property

Will your direct involvement prevent or reduce damage to exposed property or systems without harm to yourself or others? Is involvement worth the risk?

1.05.05 The DECIDE Process

A systematic decision making process that may be used is called the **DECIDE** process. **DECIDE** is an acronym that stands for:

- D** Detect hazardous material presence
- E** Estimate likely harm without intervention
- C** Choose response objectives (strategy)
- I** Identify response options (tactics)
- D** Do the best option
- E** Evaluate the progress

Is the response working? Is the situation getting worse or better? Have the control zones changed? Revise your plan as necessary to keep up with changing situations.

IMPLEMENTING THE RESPONSE (ICS Operations Chief)

1.06.01 Defensive Tactical Considerations

CAUTION: For all tactical situations, if you are not sure your training and PPE is adequate - **DON'T** attempt the action. Remain at a safe distance and take no action other than isolation.

A. Rescue

Rescue can only be successful if it can be accomplished without creating another victim. Any victim that has been rescued should be considered contaminated unless determined otherwise. Victims should be handled with care so that additional persons are not contaminated.

This section outlines items to be considered before committing responders to rescue operations. It assumes that the first responding units were unable to safely perform rescue due to lack of knowledge, resources or personnel. Factors affecting rescue operations:

A. Rescue only if you have the proper level of protection. Failure to consider this may result only in adding yourself and crew to the number of persons requiring rescue.

B. Shall work in pairs.

C. Consider urgency and reason for rescue.

D. Is there a likelihood of a viable patient? (DO NOT TAKE RISKS FOR A BODY RECOVERY)

E. Consider non-chemical trauma that patient may have suffered. Should patient be moved on a backboard?

F. If only two persons can be provided an adequate level of protection and the patient must be moved a substantial distance, consider utilizing wheeled transport.

G. Prepare for decontamination of rescued patient and rescuers.

H. Prepare for EMT and or Paramedic support of field decontaminated patient. Provide adequate level of protection to aid/transport personnel.

I. Prepare transport vehicle for chemical incident transport. Be liberal with visqueen.

J. Have MCEMA notify all hospitals of possible self dispatched patients as well as patients transported from the scene. Advise them of all the characteristics of the chemical involved.

1.06.02 Control and Containment

A. Control and containment of a hazardous material shall consist of all efforts toward limiting the effects of a release on people, property and the environment. The type and amount of hazardous material and the specific situation will determine your actions for control and containment. The smaller the release or spill the better off you will be. There are many contributing factors to spill control and you may have needed to use some innovation when determining how to control a spill. Available containment materials:

1. Dirt and/or sand
2. Visqueen
3. Booms for waterways
4. Absorbent pads
5. Ditching or pit

B. Methods

Control and containment shall consist of those actions and or operations which limit the size of the initial release. These actions will be classified as techniques required to stabilize releases for life safety.

1. Size up
 - a. Nature of material; physical and chemical characteristics, toxic effects.
 - b. Volume of release
 - c. Site specific parameters: topography, populations, and sensitive areas
 - d. Safety - Protection of responders
2. Containment on land
 - a. Stop release from reaching a drain system or water source.
 - b. Spill movement; on ground surface, into ground, release to air.
3. Resources
 - a. Personnel
 - b. Fire Department equipment
 - c. Public Works equipment
 - d. All listed in the Saraland/Mobile County Disaster Response Plan

4. Techniques

- a. Earthen barriers
- b. Excavations and underwater dams
- c. Commercial barriers

5. Containment on Water

- a. Materials that sink
 - 1. Excavations and overflow dams
 - 2. Natural barriers
- b. Water soluble materials
 - 1. Total containment
- c. Materials that float
 - 1. Booms
 - 2. Underflow dams
 - 3. Weirs/filter fences

6. Containment on Land

- a. Dams
- b. Dikes
- c. Diversion

C. Spill Stabilization Techniques

- 1. Considerations
 - a. Stop gap measures
 - b. Life safety - vs - environmental concerns
 - c. Usually makes release larger
- 2. Techniques
 - a. Dispersion - dilution of vapors with water
 - b. Water spray knock down - effective with water soluble vapors

- c. Dilution - mix spilled product with water

Remember: Adding water to the affected area will create more hazardous waste or may have an adverse reaction with the material. Consult guides before taking action.

- d. Burial - cover product with dirt or sand

- e. Absorbents - booms, pads, pigs, etc.

1.06.03 Extinguishment (Fire Department Personnel Only)

One of the properties of many hazardous materials is flammability. It is possible when fire is involved at a HazMat incident, a decision will have to be made whether to attack or let a fire burn out. The type of HazMat, life hazard, and the situation at hand will determine your action. Some situations will worsen if you extinguish the fire, such as flammable gas which continues to leak and may reignite or explode. Always check the references before extinguishment.

A. Items for Proper Extinguishment

1. The responder needs the proper protective equipment to match the thermal and chemical hazard.
2. The responder needs the proper extinguishing agent in sufficient supply.
3. The responder needs to confirm that the extinguishment will not create a larger problem.

B. Proper Equipment

Before attempting extinguishment the IC shall ensure that responding members have the proper protective equipment and clothing. Consider the following:

1. Chemical suits with integral thermal protection
2. Wear chemical resistant gear under gear that protects against heat.
3. Use distance and/or un-manned nozzles

C. Proper Extinguishing Agent

The IC shall consult reference materials and/or resources such as CHEMTREC before selecting an agent or attempting extinguishment.

1. The most common types of agents are as follows:
 - a. Water
 - b. Dry chemical
 - c. Foams (3%, 6%, universal ARC A.F.F.F.)

d. Carbon Dioxide

e. Combustible metal agents.

2. For any fire attack to be successful, a sufficient supply of agent must be available.
3. Extinguishing agents applied to some HazMat's may become contaminated and be considered hazardous. An effort shall be made to contain runoff for later clean up.
4. In some cases the best way to stop a fire will be to shut off the flow of HazMat. In other situations the fire will have to burn itself out due to possible contaminated runoff or the HazMat may be so reactive that putting out the fire is impossible. If the material is allowed to burn, all efforts shall be made to protect the exposures.
5. Should fire impinge on other containers of hazardous materials and it is safe to approach, the responder shall protect the containers from rupture by cooling with water streams, provided the needed supply is available.

D. Will Extinguishment Create Problems?

1. Extinguishment can create additional problems; the largest being contaminated runoff. All runoff shall be considered contaminated and treated in the same manner as hazardous material.
2. Some pesticides may breakdown when they burn and be less toxic (provided temperatures are high enough). Contamination at the incident will be lessened if allowed to burn.
3. HazMat's like flammable gases that are on fire should not be extinguished unless the flow can be stopped. Unburned gases can travel and create a fire hazard remote from the initial incident.
4. Some HazMat's are reactive to the extinguishing agents. The problem can grow if the wrong agent is used.
5. Consider all options and check references and resources before attempting extinguishment.

NOTE: Extinguishing Agents

There is no one agent that will extinguish all hazardous materials fires. The only way to find the correct one will be to consult reference materials, MSDS and resources such as CHEMTREC.

KNOW YOUR OPTIONS! Check references, resources and experts before attempting to extinguish.

1.06.04 Protect in place

Protect in place is the preferred method over evacuation whenever possible. It is the process of keeping people indoors or enclosed, for the duration of the emergency. The following procedures should be followed by the occupants.

1. Close all doors and windows.
2. Seal openings with any available materials to keep out hazardous materials.
3. Turn off ventilation in the building.

1.06.05 Evacuation

The need for, and size of, the evacuation zone can be determined by use of reference materials. Specific information for large scale evacuations can be found in the Mobile County Emergency Operations Plan. For large scale (e.g. entire blocks of people) the **Saraland All Hazards Plan Annex E will be initiated**. Considerations include:

1. Type of hazardous material and its characteristics
2. Container size
3. Quantity in container
4. Damage to container (Is it leaking? At what rate?)
5. Weather
6. Time of day
7. Is there fire involved?
8. Area of incident and downwind exposures
9. Is the hazardous material migrating by run off, vapor cloud or plume? How long will the release last?
10. Is there a possibility of explosion?
11. Other factors

NOTE: Resources necessary for evacuation:

1. Time
2. Personnel
3. Shelters for evacuees (Contact MCEMA for shelter needs.)
4. Food, water sanitary and sleeping area for evacuees
5. Transportation (cars, busses, trucks)

6. Police assistance
7. Assistance from other departments
8. Communications

1.06.06 Passive Actions

Passive does not mean that the responder is inactive; it simply means that the responder will not be taking direct action on the HazMat. The responder may not have the necessary equipment to handle the situation so it has to take a hands off approach until the proper agency has been contacted and is on location. During the time it takes for the proper agency to arrive the responder shall secure the area and monitor the HazMat for movement. When the agency arrives, the IC shall brief the agency leader. At this time it shall be determined if the responder will be part of any further actions. The following describes PASSIVE ACTIONS:

A. Secure the Area

When waiting for the proper agency to arrive at the HazMat incident the responder shall secure the area. The purpose is to prevent additional injury or contamination to personnel at the incident site. This step may be long or short term depending on the hazardous material involved and the location from which the support agency is responding from. The responder shall monitor by visual means and instrumentation the hazardous material for additional movement or changes in release amounts. Securing the area shall be accomplished by the same methods used in 1.01.04 but may be more extensive.

B. Notification of Proper Agency

If the incident is not within the scope of the local capabilities, an outside agency will have to be called in. The agency or firm that is called is dictated by the type of hazardous material. Remember that the firm involved may have a clean up team or have a designated private firm to handle it. If the company has a contingency plan for hazardous materials incidents, it should be consulted for information in this area.

- The on-scene Incident Commander shall retain command.

EVALUATION AND SELECTION OF PROTECTIVE EQUIPMENT

1.07.01 Purpose

To establish the procedures for evaluation and selection of protective clothing and equipment

when responding to incidents involving known or suspected hazardous materials.

1.07.02 Personal Protective Equipment (PPE) Guidelines

PPE shall be selected based on the protection it provides for the specific hazards to be encountered. Selections of specific PPE shall be based on the criteria of at least two (2) reference/resource sources. When in doubt, always go to the next higher level of protection. If it cannot be determined what chemical is involved, treat as highly toxic, violently reactive, and highly explosive. Selection will take into account:

- A. Identification and physical properties of the hazard.
- B. Routes of potential hazard entry.
- C. Performance of PPE materials against the specific hazard (chemical resistance and durability).
- D. Work requirements and task specific conditions.
- E. Effects of PPE in relation to heat stress.

1.07.03 Protection Levels

Equipment to protect the body against contact with known or anticipated contaminants are divided into four categories according to the degree of protection afforded:

- **LEVEL A** - Should be worn when the highest level of respiratory, skin and eye protection is required. Level A suits provide vapor protection for responders. **NOTE:** Level A PPE shall not be worn by responders at the operations level.
- **LEVEL B** - Should be worn when the highest level of respiratory protection is required, but a lesser level of skin protection is warranted. Level B will provide splash protection.
- **LEVEL C** – Should only be worn at the direction of the IC.
- **LEVEL D** - Should only be worn at the direction of the IC. This is a work uniform and offers NO protection. Firefighter's structural gear is also considered to be Level D.

NOTE: Protection level selection shall be based on the following:

- Type and measured concentration of the chemical substance in the ambient atmosphere and its toxicity.
- Potential for exposure to other substances in the air, splashes of liquids, or other direct contact with materials.
- Safety conditions of the incident.

1.07.04 Level A

A. Criteria

Level A protection will be used when a HazMat event meets the following criteria:

1. The HazMat involved has been identified as one whose properties require the highest levels of protection for skin, eyes and the respiratory system.
2. Operations and response functions involve high potential for splash, immersion, or exposure to unexpected vapors, gases, or particulates of material highly toxic to the skin.
3. Substances with a high degree of hazard to the skin are known or suspected to be present, and skin contact is possible.
4. Operations must be conducted in confined, poorly ventilated area until the absence of substances requiring Level A protection is determined.
5. Direct readings on detection instruments indicate high level of unidentified vapors and/or gases in the air.
6. Unknown substance release.
7. All suit material may be rapidly permeated and degraded by certain chemicals, from extremely high air concentrations, splashes, or immersion of boots or gloves in concentrated liquids or sludges. These limitations shall be recognized when specifying material of suit to be worn.

B. Composition

1. SCBA
2. Fully encapsulated chemical resistant suit.
3. Gloves (inner), chemical resistant
4. Boots, chemical resistant, steel toe and shank.
5. Hard hat (under suit)
6. Disposable over-gloves and over-boots (worn over fully encapsulated suit).
7. Tyvek Level B suit
8. Radio with throat microphone

1.07.05 Level B

A. Criteria

1. The type and atmospheric concentrations of toxic substance HAS BEEN IDENTIFIED and requires a high level of respiratory protection, but less skin protection than Level A. These

would be atmospheres with concentrations IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH), but substance or concentration in the air does not represent a severe skin hazard.

2. The atmospheric contains less than 19.5% oxygen.
3. It is highly unlikely that response activities will generate high concentrations of vapors or splashes of material that will affect the skin of the response personnel.
4. Atmospheric concentrations of unidentified vapors or gases are indicated by direct readings on instruments but vapors and gases are not suspected of containing high levels of chemicals toxic to the skin.
5. Level B clothing should be matched against the hazard. Level B may be used for initial entry and reconnaissance approaching whenever possible from upwind, providing the conditions for selection of Level A are judged to be absent.

B. Composition

1. SCBA or external airline (with escape bottle for IDLH atmospheres).
2. Chemical resistant clothing (overalls and long sleeved jacket; hooded, one or two piece chemical splash suit; disposable chemical resistant, one piece suits).
3. Gloves (inner), chemical resistant.
4. Gloves (outer), chemical resistant.
5. Boots (outer), chemical resistant, steel toe and shank.
6. Level B Tyvek inner suit.
7. Hard hat.
8. Radio with throat microphone.

1.07.06 Level C

Should only be worn at the direction of the IC.

1.07.07 Level D

A. Criteria

1. HazMat has been identified.
2. HazMat is non-toxic and not destructive to the skin.
3. Work will not create contact with HazMat.

B. Composition

1. Full bunkers
2. Nomex hood
3. Helmet, with face shield
4. SCBA
5. Gloves
6. Radio
7. Street clothes, coveralls, work uniform

NOTE: Level D offers no protection from HazMat, and will not be permitted in any area other than what is directed by the IC. Generally, only in the cold zone and outside the operating theater.

1.07.08 Emergency Hand Signals

- A. Thumbs up: OK - I'm all right - I understand
- B. Thumbs Down NO - Negative - I don't understand
- C. Hand On Top Of Head I need assistance.
- D. Hand Gripping Throat Out of air, cannot breath.
- E. Leave area immediately! - Grip partner's wrist or place both hands around waist:

DECONTAMINATION

1.08.01 Purpose

To provide the general guidelines for designing and selecting decontamination procedures at an incident site, and provide a process for evaluating the health and safety aspects of

decontamination methods.

1.08.02 Introduction

A. Methods of Contamination

Personnel responding to hazardous material incidents may become contaminated in a number of ways including:

1. Contacting vapors, gases, mists, or particulates in the air.
2. Being splashed by materials while sampling or opening containers.
3. Walking through puddles of liquids or on contaminated surfaces.
4. Using contaminated instruments or equipment.

B. Prevention of Contamination.

To minimize contact with hazardous materials the following Operating Guideline's should be observed:

1. Avoid walking through areas of obvious contamination; do not directly touch potentially contaminated items or hazardous substances.
2. Protect monitoring and sampling instruments by bagging. Make openings in the bags for sample ports and sensors that must contact materials.
3. Wear disposable outer garments and use disposable equipment when and where appropriate.
4. Cover equipment and tools with a removable coating which can be removed during decontamination.
5. Encase the source of contaminants (e.g. with plastic sheeting or overpacks).

1.08.03 Decontamination Plan

A decontamination plan shall be developed as part of the Site Safety Plan and be in place before any personnel or equipment enter areas where the potential for exposure to hazardous materials exists (HOT ZONE). The initial plan shall be based on the contaminate, its toxicity, the amount, level of protection required, or work functions.

1.08.04 Emergency Field Decontamination

Treatment beyond the ABC's and basic life saving measures cannot be started until the patient has been decontaminated. Decon cannot be started until the patient has been removed from the area of contamination by personnel in the appropriate level of protective clothing. If decontamination can be performed without interfering with essential life-saving techniques or first aid, or if a patient/firefighter has been contaminated with an extremely toxic or corrosive material that could cause severe injury or loss of life, decontamination must be performed

immediately. The WASH - STRIP - WASH method of decon shall be used when the treatment of a medical problem is more important than decontamination. For minor medical problems or injuries, the normal decontamination procedure shall be followed. **NOTE: All possible measures will be taken, when ever possible and does not interfere with medical care, to provide for patient modesty concerns.** It may require the construction of opaque shower facilities, the use of simple garbage bags with holes cut for the head and slipped over, allowing the patient to disrobe while under the bag, to some other means. This right to privacy **MUST** be considered.

NOTE: THIS IS THE ONLY TYPE OF DECONTAMINATION TO BE PERFORMED BY OPERATIONS LEVEL RESPONDERS.

A. Ambulatory Patients

1. From a distance, instruct the patients to move away from the material, if they are still in contact with it.
2. If obviously contaminated patients approach you seeking aid, **ORDER** them to stay away from you until you can protect yourself.
3. Direct emergency decon WASH - STRIP - WASH.

B. Non-Ambulatory Patients

1. Insure protection of emergency care providers.
2. Patients may or may not be victims of trauma. Care before decon should be limited to evaluation of ABC's, opening of the airway and spine immobilization with trauma.
3. With highly toxic materials, assess risk of delaying decon to stabilizing the spine.
4. Emergency decon with WASH - STRIP - WASH.

SAFETY AND SITE PLAN

(ICS Incident Commander, Safety Officer)

1.09.01 Purpose

To establish policies and procedures for protecting the health and safety of response personnel during all operations conducted at an incident. It contains information about the known or suspected hazards, routine and safety procedures that must be followed and other instruction for

safeguarding the health of responders.

1.09.02 Concept of Operation

To insure the safety of response personnel, they shall be trained on and shall conduct operations at hazardous materials incidents in accordance with the Standard Operating Guidelines found in this document.

1.09.03 General Safety Rules and Equipment.

In addition to the procedures contained thusfar in this guideline, the following general safety rules shall be followed:

- A. There will be no eating, drinking, or smoking in the warm or hot zones at hazardous materials incidents.
- B. All personnel shall pass through the designated zone control points to enter or leave the zones.
- C. All personnel shall ensure that they are properly decontaminated.
- D. Where practical, all tools shall be of the non-sparking type.
- E. Fire equipment shall be on hand and operable when the situation warrants such support. At a minimum, fire extinguishers shall be available.
- F. When incident evacuation may be necessary (potential explosion, fire, or catastrophic release) an individual shall be assigned to sound an alert to all site personnel. The evacuation signal shall be continuous blasts on an air horn and a concurrent announcement over the radio to evacuate. Response personnel shall evacuate immediately upon this alarm. The IC shall account for all personnel by "Roll Call" immediately following and emergency.
- G. Responders shall ensure that the PPE required for an operation is used at all times during the operation.
- H. Responders shall know the limitations of their training and abilities and operate within the scope of each.

1.09.04 Safety Briefing

Before any incident actions are taken, a briefing from the Command Staff shall be accomplished with all Section / Team Leaders, at a minimum, present. Topics shall include known and unknown hazards, and the goals, objectives and procedures of the operation.

1.09.05 Emergency Actions Conditions

- A. Code Word - **GO**

All conditions are normal and incident work may continue.

B. Code Word - **HOLD or HALT**

All or specific work activities must cease at once due to the following:

1. Indications of a hazardous condition outside the hot zone.
2. Current or projected meteorological data indicates that a probable impact on working conditions could occur.
3. If monitoring reveals that conditions require corrective actions or control zone modifications, the incident commander shall take the appropriate actions to ensure scene safety.

1.09.06 Incident Safety Plan

The incident Safety Officer shall monitor all activities on the incident scene to assure that all Standard Operating Guidelines are followed and shall prepare the Incident Safety Plan.

1.09.07 Injuries

All injuries and exposures will be documented and submitted to the Safety Officer or Team Leader. All injuries and /or exposures will be investigated and corrective actions taken. A record of the injury/exposure will be placed in the person's file for documentation. See SOP 1800 for complete instructions.

1.09.08 Accidents

Any accident involving response personnel and or equipment will be documented and investigated. It will be the responsibility of the individual(s) involved to see that the documentation is completed and sent to the Safety Officer or Team Leader. A review board will be established to investigate the accident and issue corrective actions needed. Any vehicular accident involving significant damage or any injury will be investigated by law enforcement officers. An accident packet will be kept on each piece of apparatus, which will provide guidelines to be followed. See SOP 1750 for complete instructions.

Appendix A
Saraland Fire Rescue Department
HazMat Team Deployment
Standard Operating Procedure

Scope:

The Alabama Mutual Aid System (AMAS) program was developed to assist cities and counties to more effectively exchange services and resources in response to a disaster when assistance needs to be provided from one area or region of the state to another.

Purpose:

In order to prepare and deploy the HazMat team and its cache as rapidly as possible, a systematic procedure will be followed. Each team member will be familiar with these procedures and follow them to the best of their ability to insure Saraland Fire-Rescue Department can take on its assigned mission in an orderly and timely manner.

Goal:

The Saraland Fire-Rescue Department's HazMat team must be capable of deployment within short notice (2-4 hours), be capable of 24 hour operation, be completely self-sufficient for three days. This must be done without causing any adverse affect on regular Saraland Fire-Rescue Department Operations.

Procedures:

- I. Notification of Deployment
 - A. AEMA will notify the department and MCEMA that assistance has been requested.
 - B. The Fire Chief or Asst. Fire Chief will ascertain the department's ability to respond.
 - C. The department will gather as much information as possible concerning the incident.
 1. What has happened
 2. What is needed from Saraland
 3. Where is the incident, directions to the incident, and who to report to
 4. Acquire communications with requesting party
 - D. Assign Incident Commander and HazMat Response Team Leader for Saraland Fire-Rescue Department's HazMat Deployment
- II. Actions Taken Prior to Deployment
 - A. The Incident Commander and HazMat Response Team Leader assign the following positions/duties:
 1. **Safety** (actions prior to deployment and throughout incident)

- Coordinate with HRT Leader the safety of all operations
- Report/Record all accidents/exposures
- Ensure injured personnel seek and find medical attention and follow up with FD Physician upon return to Saraland
- Perform a scene survey
- Identify Hazards/ Eliminate Hazards
- Ensure proper use of equipment and PPE
- Monitor conditions and personnel
- During demobilization check all personnel for injuries

2. Logistics/Equipment

- Gather inventory sheets of all apparatus deployed and track use during deployment.
- Keep a log of all supplies and equipment used for reimbursement purposes.
- Ensure food, clothing, and shelter are provided for during the first 72 hours of deployment.
- Coordinate with Logistics Sector to obtain additional necessary specialized equipment and/or resources.
- Report/Repair any damaged tools and equipment.
- Upon demobilization inventory all apparatus/equipment.

3. Personnel/Finance

(This positions might be assumed under the Logistics Chief)

- Complete roster of personnel – time deployed, time dismissed.
- Ensure assignment has adequate # of trained personnel.
- Ensure personnel have all equipment, PPE, extra clothing, toiletries, accountability tags.
- In conjunction with Logistics/Equipment document supplies and equipment used. Track expenditures.
- Ensure timesheets and log pages are correct.
- Prepare billing to receiving agency- approved by HRT Leader, IC, and Fire Chief.
- Make arrangements for personnel to contact their home and their homes have a way to contact the scene in case of an emergency.

4. Incident Commander-Saraland Asst. Chief

- A Chief from the Saraland FD will be deployed with the team.
- The SFRD IC will get a briefing of the incident, assignment, duration, supplies/equipment/personnel needed.

- The SFRD IC will identify who is the overall IC and the staging location.
- The SFRD IC will ensure communications are maintained with the requesting party by radio, phone, Nextel, etc.
- The SFRD IC will acquire proper directions to the site.
- The SFRD IC will coordinate with the Fire Chief, EMA, the HRT Leader.
- The SFRD IC will report the team's activities to the AEMA and give frequent status reports back to the SFRD.
- The SFRD IC will supervise and have responsibility for all SFRD personnel.
- The SFRD IC will act as a Liaison Officer to other agencies.

5. HazMat Response Team Leader

- Coordinate with SFRD IC on mission needs-personnel, equipment, supplies, apparatus, time.
- Supervise hazmat efforts.
- Coordinate with the SFRD IC demobilization efforts.

- B. The Fire Chief and the SFRD IC will develop Saraland Fire-Rescue Department's acknowledgement of commitment to the mission in writing per the AMAS Concept of Operations.
- C. The SFRD IC will ensure that procedures are underway to make certain that normal Saraland Fire-Rescue Department operations will not be adversely affected during deployment. (See Maintaining Adequate Coverage Procedure)

III. Arrival at Staging

- E. Receive a briefing from staging/operations officer. What is the overall Incident Action Plan?
- F. Inform requesting party of team's resources, capabilities, and length of commitment.
- G. Receive team assignment- brief team, develop plan of operation, make necessary assignments.
- H. Set up team base- shelter, food, clothing.
- I. Establish communications with incident site personnel, Saraland FD, and personnel's homes.

IV. Rescue Site Operations

- A. SFRD IC will report to Staging/Operations and act as a Liaison Officer for the SFRD.

- B. SFRD personnel will work under the NIMS following Saraland Fire-Rescue Department's Standard Operating Procedures in conjunction with the requesting parties Incident Action Plan.
 - C. The SFRD HRT Leader will supervise SFRD rescue operations and team members.
 - D. The assigned job duties previously discussed in this SOP will be carried out. (IC, HRT Leader, Safety, Personnel/Finance, Logistics/Equipment)
 - E. Consider environmental conditions and effects on personnel.
 - F. Review operations addressing body recovery and preservation of evidence.
- V. Demobilization
- A. **Will be done when:**
 - 1. The mission is completed
 - 2. SFRD's response commitment has been fulfilled
 - 3. Situation(s) in Saraland require the team to return to the city. If at all possible a 24 hour notice will be given before departing the incident as per the AMAS Concept of Operations.
 - B. **Assignments completed**
 - 4. All inventories done
 - 5. All reports completed
 - 6. Apparatus prepared for travel
 - 7. Notify Saraland the team is returning and expected arrival time
 - 8. Coordinate demobilization with Operations Chief and AEMA
 - C. **Upon arriving back in Saraland**
 - 1. Is C.I.S.D. necessary?
 - 2. Report any accidents, injuries, mechanical problems
 - 3. Return all apparatus/equipment in a "ready state" for future use
 - 4. Complete all documents- accident reports, personnel time logs, billing information, incident report.
 - 5. Schedule a critique within 24 hours.

Saraland Fire-Rescue Department

Maintaining Adequate Coverage During HazMat Team Deployment

1. Coverage will be determined case by case on an as needed basis depending upon:
 - a. Rescue Operations
 - b. The number of personnel deployed
 - c. The length of deployment
2. If deployment is for a 24 hour shift:
 - a. Inform the rest of the department and dispatch of the situation so responses can be adjusted.
 - b. Notify Automatic and Mutual Aid departments
 - c. Call in the next days assigned personnel to operate stations
3. If deployment is greater than 24 hours
 - a. Inform the rest of the department and dispatch of the situation so responses can be adjusted.
 - b. Notify Automatic and Mutual Aid Departments
 - c. Use overtime to cover the positions. Stations may have to move personnel around to ensure adequate positioning of officers, drivers, medics, and specialized personnel.
4. The on duty District Chief will ensure documentation of the roster, timesheets. and log pages of personnel filling in is accurately completed each 24 hour shift.
5. The on duty District Chief will ensure the next day's shift has the appropriate personnel assigned.

Saraland Fire-Rescue Department

Deployment Personnel Checklist

The key to a successful deployment is advance planning and preparation. It is important for each individual to keep personal and legal affairs in order so as to be able to provide for your family's welfare and peace of mind during deployment.

The checklist below can help prevent you and your family from feeling overwhelmed.

Personal History

- The department has your full name, address, phone number, social security number
- The department has the full name of your spouse and children and their address and telephone number, if different than yours.
- The department has two emergency contacts for you
- The department has a complete and updated list of your medical history, current medications, allergies, blood type, physician's name.
- The department is aware of religious preference
- Spouse has fire department telephone numbers, copies of all insurance policies, bank accounts, etc.

Legal

- You and your spouse have current wills
- If needed, spouse has Power of Attorney

Single Personnel

- Have you ensured that your bills will be paid, pet fed, mail or newspaper delivery stopped, and residence secured?

What Should I Bring On A Deployment?

Uniforms: work pants, t shirts, pullover, ballcap, PPE, extra shoes and socks, accountability tag, jacket, enough for up to 7 days.

Toiletries: soap, towel, shower shoes, shampoo, shaving supplies, deodorant, toothpaste, toothbrush, insect repellent, sun screen, lip balm, skin powder.

Medical: current medications, glasses, contact lenses, prescriptions.

Miscellaneous: Water-proofing bags, sunglasses, cold weather clothing as needed, extra

underwear, driver's license, money, credit card personal flashlight and batteries, cellular phone with charger.

Saraland Fire-Rescue Department

Deployment Checklist

Safety

The designated Safety Officer will be accountable for the following actions from pre-deployment through demobilization and return to Saraland.

- Coordinate with Team Leader the safety of all operations.
- Report/Record all accidents and exposures.
- Ensure injured personnel seek and find medical attention.
- Follow up with SFRD Physician and Risk Management upon return to Saraland.
- Perform a Scene Survey.
- Identify and Eliminate Hazards.
- Ensure proper use of equipment and PPE.
- Monitor Conditions and personnel.
- During demobilization check all personnel before returning to Saraland.

Saraland Fire-Rescue Department

Deployment Checklist

Logistics/Equipment

The designated Logistics/Equipment Officer will be accountable for the following actions from pre-deployment through demobilization and return to Saraland.

- Gather inventory sheets of all apparatus deployed.
- Track use of equipment used during deployment.
- Keep a log of all supplies and equipment used for reimbursement purposes.
- Ensure food, clothing, and shelter are provided for during the first 72 hours of deployment.
- Using emergency purchase orders to acquire supplies if possible.
- Coordinate with Logistics Sector to obtain additional necessary specialized equipment and/or resources.
- Report/Repair any damaged tools and equipment.
- Upon demobilization inventory all apparatus/equipment.

Saraland Fire-Rescue Department

Deployment Checklist

Personnel/Finance

The designated Personnel/Finance Officer will be accountable for the following actions from pre-deployment through demobilization and return to Saraland.

- Complete Roster of Personnel- Time Deployed- Time Dismissed.
- Ensure assignment has adequate number of trained personnel.
- Ensure personnel have all equipment, PPE, extra clothing, toiletries, and accountability tags.
- Working in conjunction with Logistics/Equipment Officer document supplies and equipment used. Track **ALL** expenditures.
- Ensure timesheets and log pages are correct at the fire station.
- Make arrangements for personnel to contact their home and their homes have a way to contact the scene in case of an emergency.
- Prepare billing to receiving agency- approved by Team Leader, SFRD IC, and Fire Chief.

Saraland Fire-Rescue Department

Deployment Checklist

HazMat Response Team Leader

The HazMat Response Team Leader will be accountable for the following actions from pre-deployment through demobilization and return to Saraland.

- Coordinate with SFRD IC on mission needs- personnel, equipment, supplies, apparatus, and time.
- Supervise all hazmat efforts performed by Saraland Fire-Rescue Department personnel.
- Coordinate with the SFRD IC demobilization efforts.

Saraland Fire-Rescue Department

Deployment Checklist

Incident Commander

The Saraland Fire-Rescue Department Chief assigned to deploy with the HazMat Team will be accountable for the following actions from pre-deployment through demobilization and return to Saraland.

- The SFRD IC will get a briefing of the incident, assignment, duration, supplies/equipment/personnel needed
- The SFRD IC will coordinate with the Fire Chief, EMA, and the HazMat Response Team Leader.
- The SFRD IC will acquire proper directions to the site.
- The SFRD IC will, upon arrival at the incident, identify the overall Incident Commander and location of staging.
- The SFRD IC will ensure communications are maintained with the requesting party by radio, phone, Nextel, etc.
- The SFRD IC will report the team's activities to the AEMA and give frequent status reports back to the SFRD.
- The SFRD IC will supervise and have responsibility for all SFRD personnel.
- The SFRD IC will act as a Liaison Officer to other agencies as needed.

Saraland Fire-Rescue Department
HazMat Deployment

Roster

	<u>Deployment Assignment</u>	Name	Date / Time Deployed	Date / Time Dismissed
1	Incident Commander			
2	Team Leader			
3	Safety			
4	Logistics			
5	Finance			
6	Decon			
7	Entry/Recon			
8	Research			
9	Medical			
10				
11				

Appendix B

STATE OF ALABAMA

SUMMARY OF THE ALABAMA MUTUAL AID SYSTEM AGREEMENT

General

- The agreement is between each political subdivision, the State of Alabama, Emergency Management Agency, Alabama Association of Fire Chiefs, and Alabama Law Enforcement Association for disaster response and recovery.
- (Code of Alabama 1975 Statute 31-9-7), authorizes the State and political subdivisions to take appropriate actions to respond to extreme emergencies and disasters. The items include: Inter-local and statewide agreements, legal concerns, obtaining equipment, contracts, services, facility use and coordination which would otherwise not be appropriate in day to day operations.
- Recognize that no one party can carry out all necessary activities alone.
- The parties agree to work together, become familiar with each other's operations and promote joint planning to provide effective mutual aid.
- Provide definitions for a common understanding of terms used.
- The term of the AMAS shall be for 1 year and automatically renews unless otherwise terminated in writing to the Director of AEMA.

The Requesting Party Shall:

1. Make verbal requests for mutual aid assistance followed up in writing.
2. Keep AEMA advised of activities.
3. Pay for cost of assistance.
4. Provide information either to AEMA or the assisting party concerning the need and assistance required.
5. Acknowledge a commitment to the mission to the assisting party in writing.
6. Provide food and lodging to the assisting party.
7. Provide a means of communications with the assisting party.
8. Reimburse the assisting party 60 days from receipt of an invoice.
9. Carry adequate insurance, providing documentation of such including [a letter of insurance carrier risk manager stating coverage for mutual aid activities to AEMA file.](#)
10. Responsible for ones own liability.

The Assisting Party Shall:

1. Keep AEMA advised of activities.
2. Invoice the requesting party for services rendered.
3. Upon request for assistance, evaluate resources and advise AEMA of availability.
4. Provide assistance as requested as available.
5. Maintain adequate coverage for home territory.
6. Acknowledge commitment to mission in writing.

7. Supervise own personnel, equipment and materials use.
8. Maintain labor and equipment logs and track materials.
9. Pay own employees and maintain workers' compensation claims.
10. Supervisor is responsible for assigning work to own employees under mission.
11. As practicable, give 24-hour notice prior to withdrawing forces.
12. Prepares to be self-sufficient for the first 72 hours of operation.
13. Provide communications between units.
14. When billing for services provided use either pre-established rates or FEMA cost codes.
15. Bill for materials not associated with repairing equipment or equipment fuel.
16. Invoice the requesting party within 60 days of completion of the mission.
17. Carry adequate insurance to cover mutual aid response, provide letter to file at AEMA stating such.
18. Responsible for ones own liability.
19. The duration of response shall be in 7-day increments.

AEMA Shall:

1. Route requests from a requesting party to an assisting party.
2. Serve as a clearinghouse for information on what resources are available, who has a need, and what was deployed where to fulfill those needs.
3. Provide written confirmation to the requesting party as to who the assisting party will be with what resources and the duration of availability.
4. Serve as a central point of contact to execute and maintain mutual aid agreements.
5. Provide technical assistance and mission support.
6. Provide technical support for cost tracking and reimbursement.

Appendix C

EMERGENCY OPERATIONS

Chapter: IX – Hazardous Materials Incidents
Subject: Flammable Fuel Spill (Liquid or Gas)
Code: 3-IX-2
Revised: 04-30-02

2.01 PURPOSE

- A. To establish guidelines for the handling of flammable fuel spills (liquid or gas).

2.02 POLICY

- A. It shall be the policy of the fire department to follow these guidelines in the handling of flammable fuel spills and to insure the safety of the personnel and citizens.

2.03 PROCEDURE

- A. UPON ARRIVAL
1. When approaching area, slow down or stop if necessary to assess any visible action taking place. It may be necessary to “stage” incoming units away from the scene.
 2. Attempt to determine hazardous area (flammable vapor area).
 3. Give report on conditions and request additional equipment or special equipment, if needed.
 4. Determine if rescue or evacuation problem exists.
 5. Formulate a plan of action based on initial size-up plan – plan of action must provide for:
 - a. Safety of citizens and firefighters.
 - b. Evacuation of endangered area if necessary.
 - c. Control of situation.
 - d. Stabilization of the spilled material.
 - e. Disposal or removal of spilled material by a licensed contractor.
 6. Coordinate with law enforcement personnel for evacuation and traffic control.

B. SAFETY

1. Avoid commitment of personnel and apparatus until a complete size-up has been made.
2. All personnel shall be in full protective clothing and breathing apparatus.
3. Keep all bystanders a minimum of two thousand (2000) feet away from the hazardous area.
4. Remove all ignition sources in the hazardous area. This may mean closing a highway.
5. Some flammable liquids give off toxic vapor whether they are burning or not.
6. If flammable liquid/gas is leaking from burning tank or cylinder, keep clear of the container ends. If the whistling sound from pressure relief valves on the container becomes louder, evacuate the area: explosion is imminent.
7. In the case of a tank fire, fire streams must be used to cool the vapor area of the tank (area above liquid level).
8. Do not extinguish tank or cylinder fire unless shut-off can be effected.
9. If personnel must operate in a precarious position, they must be protected with another fire stream.
10. Do not park apparatus in low areas – flammable vapors may have accumulated there.

C. CONFINEMENT

1. Unless immediate hazard to life is involved, any efforts to remove spill by flushing into any drainage system should be restricted. If a spill is flushed, it will have to be picked up downstream.
2. Isolate the spill by the use of dikes and absorbent materials (i.e. sand, dirt or sawdust).
3. Spill fires which are flowing to an area where they can burn safely should be allowed to do so.
4. Direct spill away from exposures.
5. The biggest problem with spills is containment of spilled material; the more water you add, the larger the containment problem becomes.

D. CONTROL

1. Use fog streams to dissipate the vapors if possible, without disturbing the liquid.
2. Determine if water can be used based on specific gravity of the spilled material.
3. The use of foam (proper type) can prevent ignition of spilled material.
4. Attempt to shut-off leak – shutting off valves, plugging container.
5. Heavy streams can be used to divert flames from exposures. Burning fuel must be flushed from under and around tanks.
6. Recover the fuel by absorption or use of vacuum trucks.

Appendix D

EMERGENCY OPERATIONS

Chapter: IX – Hazardous Materials Incidents
Subject: LPG Emergencies
Code: 3-IX-3
Revised: 04-30-02

3.01 PURPOSE

To establish guidelines for the response, operations, and safety of personnel in the handling of L.P.G. (Liquefied Petroleum Gas) emergencies

3.02 POLICY

- A. It shall be the policy of the fire department to follow these guidelines in the response and operations in the handling of liquefied petroleum gas incidents in conjunction with the Saraland Fire Department Hazmat S.O.G.
- B. It shall be the policy of this department to follow these guidelines to insure the safety of fire personnel and citizens.

3.03 PROCEDURE

Whenever a report of a possible Liquefied Petroleum Gas (LPG) leak is received the appropriate tank owner shall be notified at their emergency number and furnished with the following information:

- A. Name and address of individual reporting leak.
- B. Address where the leak exists if different than A.
- C. Exact location of odor (inside building, outdoors, at an appliance, in street, etc.).
- D. When odor was first detected.

3.04 GENERAL INSTRUCTIONS

If the caller can detect a strong odor of gas or can hear gas escaping they should be instructed to leave the building immediately by walking, not running. They should also be instructed **not** to:

- A. Hang up the telephone.
- B. Operate any electrical switches, television sets, appliances or other devices.
- C. Pull any circuit breakers.
- D. Re-enter the building.

3.05 RESPONSE

A single company shall respond on all L.P.G. leaks. One company may enter the block of the reported leak; all other companies will stand by at least one block away.

3.06 UPON ARRIVAL

- A. Attempt to determine the hazardous area (flammable vapor area).
- B. Remember that L.P.G. is heavier than air, so avoid low lying areas and do not approach from a down hill direction.
- C. Give a report on conditions, and request additional equipment or special equipment if needed.
- D. Determine if rescue or evacuation problems exist.
- E. Formulate plan of action based on initial size-up. Plan of action must provide for:
 - 1. Safety of citizens and firefighters.
 - 2. Evacuation of endangered area if necessary.
 - 3. Control of situation.
 - 4. Stabilization of the spilled or leaking material.
 - 5. Disposal or removal of the spilled or leaking container.
 - 6. Coordinate with law enforcement personnel for evacuation and traffic control.

3.07 SAFETY

- A. Avoid commitment of personnel and apparatus until a complete size-up has been made.
- B. All personnel should be in full protective clothing and SCBA's.
- C. Keep all bystanders a minimum of two thousand (2000) feet away from the hazardous area.
- D. Remove all ignition sources in the hazardous area.
- E. Keep clear of tank ends if fire is impinging on the tank.
- F. During L.P.G. tank fires, if whistling from pressure relief valve becomes progressively louder, evacuate the area, explosion is imminent.
- G. If tank is burning, fire streams must be used to cool the vapor area of the tank (area above liquid level).
- H. Do not extinguish tank or cylinder fires unless shut-off can be effected.
- I. Use at least two crews with fog streams to cover the men attempting to close the valves or effecting the shut-off.
- J. L.P.G. tank that has rolled over (such as vehicle accident) may have rendered the relief valve inoperable.
- K. If personnel must operate in a precarious position, they must be protected with another fire stream.
- L. Do not park apparatus in low area – flammable vapors may have accumulated there.

3.08 CONFINEMENT

- A. If vapor is leaking use fog streams to protect exposures and direct vapor cloud.
- B. If ignition has occurred, use streams to protect the container from over heating and protect exposures from radiant and convected heat.

3.09 CONTROL

- A. Approach the fire or leak from upwind.
- B. Use heavy fog streams to dissipate the vapors if possible without disturbing the liquid. Disperse vapor to safe location.
- C. Attempt to shut off leak by shutting off valves, plugging hole in container or crimping lines. Consult driver of vehicle or plant personnel as to possibility of shutting off fuel supply.
- D. Heavy streams should be used to divert flames from exposures.
- E. Apply heavy streams to all areas of the tank exposed to heat.
- F. The controlled burning of escaping LP Gas (which cannot be shut off by closing a valve) is a commonly accepted firefighting practice.
- G. Dry chemical and CO2 extinguishers are effective for extinguishing small L.P.G. fires.

Appendix E

EMERGENCY OPERATIONS

Chapter: IX – Hazardous Materials Incidents

Subject: Fumigation Emergencies

Code: 3-IX-4

Revised: 04-30-02

4.01 PURPOSE

A. To establish guidelines for handling of emergency incidents involving fumigation material.

4.02 POLICY

A. It shall be the policy of this fire department to follow these guidelines in the response and operations in the handling of emergency incidents involving fumigation material and to insure the safety of fire personnel and citizens.

4.03 PROCEDURE

- A. Identify the fumigant involved. Many fumigants are highly toxic both through inhalation and skin absorption.
- B. Check placards and signs for information.
- C. Attempt to determine if a rescue problem exists.
- D. Use the Department Hazmat S.O.G.

4.04 SAFETY

- A. All personnel involved in firefighting or rescue operations should be in full protective clothing including breathing apparatus.
- B. Evacuation of adjoining buildings and/or the surrounding area should be considered, especially down wind.
- C. Bystanders and curious observers should be kept back at a safe distance. Police assistance may be necessary
- D. Never trust your sense of smell since many fumigation gases may quickly paralyze your sense of smell.
- E. Any department personnel or bystander who begins to feel sick or notices any unusual feeling after exposure to fumigants shall receive medical attention.
- F. Personnel shall only enter the involved structure after it has been thoroughly ventilated.

4.04 OPERATIONS

- A. Ventilation of the structure should be done from the outside while wearing breathing apparatus.
- B. Request that the dispatcher notify the fumigation company and have them respond a representative.
- C. If the structure is on fire, it is important to be aware that poison gas cylinders exposed to fire may explode as they have no relief device or soft plugs to prevent over pressure.
- D. If gas cylinders have been exposed to heat but have remained intact, fog streams can be used to cool them down but they must not be disturbed without consulting with the supplier.

Appendix F

EMERGENCY OPERATIONS

Chapter: IX – Hazardous Materials Incidents
Subject: Explosives and Bombs
Code: 3-IX-5
Revised: 04-30-02

5.01 PURPOSE

To establish guidelines for the fire department for incidents involving bombs or explosives.

5.02 POLICY

This policy shall be followed when the department receives a bomb threat for another location, explosives brought to the station, and for explosives encountered during routine operations.

5.03 PROCEDURE

A. BOMB THREATS

1. The fire department will not respond on bomb threats when notified by the police department or by anonymous caller unless a chief fire officer gives permission.
2. Fire Alarm shall notify the fire department by radio if an emergency response is requested.
3. If an engine company is dispatched to standby, spot the apparatus well clear of the exact location.
4. Make contact with the law enforcement officer in charge and coordinate with the same.
5. Do not become involved in the police functions of search and evacuation unless there has already been an actual explosion.
6. Do not become involved in bomb disposal operations.
7. Coordinate with law enforcement personnel concerning the establishment of an operational perimeter. (Remember unauthorized persons shall not be allowed inside the operational perimeter).

8. Standby and await instructions.
9. If an explosion and/or fire occurs, be aware that secondary explosions will likely occur. Utilize any available protective cover during firefighting operations.
10. In bomb threat situations, normally the decision to search for the bomb or to evacuate the building rests with the management of the occupancy and the law enforcement agency involved.
11. Remember that the radio transmitter may initiate detonation of some types of explosive devices.
12. During emergency operations and during overhaul, be alert for additional explosive devices (this could be anything that may seem out of place). If an object is suspected of being an explosive device, do not touch it or allow anyone else to touch it. Notify (not by radio) the bomb squad and the Incident Commander immediately.

B. EXPLOSIVES BROUGHT TO THE FIRE STATION

In the event that any person brings a suspected bomb, explosive device, or any amount of explosives into a Fire Station, Fire Department members shall be guided by the following:

1. Secure the area around the device.
2. Notify the Police Department by telephone, not by radio.
3. Evacuate personnel and apparatus from the station.
4. Obtain identification and all pertinent information from the caller or person(s) at the scene until the Police Department arrives.
5. Do not use radios in the immediate area as they could possibly initiate detonation of the suspected device.

C. EXPLOSIVES ENCOUNTERED DURING ROUTINE ACTIVITIES.

Whenever explosives, suspected bombs or explosive devices are encountered during the course of routine operations, Fire Department personnel shall be guided by the following:

1. Refrain from touching or moving the suspected device.
2. Evacuate the immediate area and establish an operational perimeter.
3. Allow no unauthorized personnel within an operational perimeter.
4. Contact Fire Alarm (utilize radios only from a distance of at least two hundred (200) feet away to avoid possible detonation) and request the following:
 - a. Response of the Police Department.

Appendix G

EMERGENCY OPERATIONS

Chapter: IX – Hazardous Materials Incidents
Subject: PCB's
Code: 3-IX-6
Revised: 04-30-02

6.01 PURPOSE

To establish guidelines in the protection of personnel and citizens during operations involving Polychlorinated Biphenyls (PCB's).

6.02 POLICY

Fire department personnel shall follow these guidelines to insure their protection, citizen's protection, and the handling of an incident involving (PCB's).

6.03 PROCEDURE

- A. Report on conditions.
- B. Notify the owner (or owner's representative) of the involved facility.
- C. Request response of power company, via Fire Alarm, I public utilities are involved. (Be sure that the power company is aware of the situation as this will facilitate obtaining a higher priority of response).
- D. Attempt to keep personnel and apparatus upwind of the spill or fire. (The wind will have a tendency to contaminate a somewhat larger area on the leeward side of the incident).
- E. Wear FULL PROTCTIVE CLOTHING including breathing apparatus; (You may not be able to smell the harmful vapors which are released during the PCB leak or spill and airborne particles or mist.).
- F. Request notification of the Emergency Management Agency.

6.04 THE CHEMICAL

- A. Polychlorinated biphenyls (PCB's) are a group of organic chemicals.
- B. PCB's have been most commonly used as heat transfer fluids.

- C. They can range in appearance from straw colored, oily liquid to a white or yellowish waxy solid. PCB from a capacitor which has exploded may be black.
- D. PCB's may be encountered wherever there are transformers or capacitors. These can range from electrical transformers on diesel electric train engines to utility company equipment to capacitors in old television sets and home air conditions. Any transformer or capacitor containing an oily liquid or white or yellowed solid is likely to contain PCB's.
- E. PCB's are highly toxic. They can enter the body by inhaling vapors, through skin or eye contact and/or by swallowing food or other PCB contaminated materials.
- F. PCB's can cause cancer.

6.05 OPERATION

- A. Avoid contact (if at all possible) with the material.
- B. Establish an operational perimeter.
- C. Do not flush with water or allow to enter storm drains. (Dike with sand, if necessary.)
- D. Utility company incidents will have an environmental safety expert dispatched to the scene; the expert will coordinate spill cleanup and proper disposal procedures of all contaminated materials, clothing, etc. For all non-utility incidents, you should notify the owner of the PCB's or facility. It is their responsibility to arrange for spill cleanup, decontamination and disposal assistance. If the spill has, or will, contaminate any waterway, including flood control channels, etc., the Environmental Protection Agency must also be notified. Spill cleanup and disposal of contaminated equipment and clothing is not a Fire Department responsibility.

6.06 EXPOSURE

- A. If PCB's contact any skin areas, remove the contaminated clothing and wash the exposed skin immediately. Waterless hand soap works well and should be followed by an application of hand or facial cream to alleviate possible irritation. Be careful not to expose others.
- B. Eye contact – the liquid, or vapors, are moderately irritating to the eyes. Eyes exposed or contaminated by PCB's **SHOULD BE IRRIGATED IMMEDIATELY WITH LARGE QUANTITIES OF WATER FOR AT LAST 15 MINUTES – THEN WASH YOUR FACE WITH SOAP AND WATER AND SEE A PHYSICIAN.**
- C. In cases of contaminate or suspected contaminated clothing (protective clothing or uniform) and/or footwear, it should be removed as soon as possible and stored in sealed plastic bags until disposal instructions are received from the Environmental Protection Agency or other authorized agency responsible for proper disposal. Never take home or send to a commercial laundry any contaminated clothing, as this will spread the contamination.

- D. Apparatus and equipment contaminated by PCB's shall be thoroughly washed. On metal or non-absorbing surfaces, use rags moistened with Metrasolv or Kerosene and continue the cleanup process with rags moistened with soapy water, because all water, solvents and rags used in the cleanup process must be retained for proper disposal.
- E. Notify all parties involved with victims of exposure (i.e. hospital, rescue squad personnel, etc.).

Appendix H

EMERGENCY OPERATIONS

Chapter: IX – Hazardous Materials Incidents
Subject: Pesticide Procedures
Code: 3-IX-7
Revised: 04-30-02

7.01 PURPOSE

To establish guidelines for the handling of incidents involving pesticides and the safety of personnel and citizens at pesticide incidents.

7.02 POLICY

All fire department personnel shall follow these guidelines when handling pesticide incidents to afford the personnel and citizens the greatest degree of safety.

7.03 PROCEDURE

- A. Identify the pesticide involved. Most pesticides are readily absorbed by way of inhalation, ingestion or through the skin. (Most rapid absorption is through the eyes)
- B. Check containers or packages for placards or other pertinent information.
- C. Use Emergency Response Guidebook and Department Hazmat S.O.G.
- D. Notify Fire Alarm to contact ChemTrec with the following information:
 - a. What happened?
 - b. Where.
 - c. Chemical(s) involved (chemical or trade name).
 - d. EPA registered number.
 - e. Type if containers.
 - f. Shipper.
 - g. Carrier.
- E. Make contact with facility management.
- F. Make contact with appropriate law enforcement agency and coordinate with same.

7.04 SAFETY

- A. All personnel involved in operation should be in full protective clothing, including self-contained breathing apparatus.
- B. Should wear rubber boots instead of leather. (Leather is unable to be decontaminated)
- C. May have to utilize acid suit or Level B suits if useable.
- D. Stay upwind.
- E. Keep spectators out of the area.
- F. May have to evacuate surrounding area (downwind).
- G. Any personnel experiencing any unusual feeling, tightness in the chest, nausea, etc., should receive medical attention immediately.
- H. Any personnel involved in spill or fire involving pesticides should be under surveillance for twenty-four (24) hour period because symptoms of poisoning may be delayed as long as twelve (12) hours.
- I. Decontamination of apparatus, equipment and clothing should be done immediately following incident using a strong detergent.
- J. Decontamination of personnel should be done using plenty of soap and water.
- K. Pesticides can be detoxified if allowed to burn freely (complete combustion).

7.05 OPERATIONS

- A. Make the necessary notifications to the various agencies.
- B. Evacuate personnel and civilians to an upwind area.
- C. Isolate area and keep personnel out of smoke.
- D. Attack fire from upwind (at a safe distance).
- E. Remember possibility of BLEVE exist – pesticide containers are not vented.
- F. Use minimum amount of water and contain the run-off.
- G. Should the facility or area containing pesticides become totally involved in fire, the Incident Commander should consider letting the fire burn and protect exposures. If he/she determines to continue water application, it might have one of the following effects:
 - a. Result will be extensive contaminated run-off.
 - b. Result could be incomplete combustion of chemicals, resulting in a release of toxic compounds into the air.

Appendix I

EMERGENCY OPERATIONS

Chapter: IX – Hazardous Materials Incidents
Subject: Radioactive Materials
Code: 3-IX-8
Revised: 04-30-02

8.01 PURPOSE

To establish guidelines for the handling of incidents involving radioactive material and providing for the safety of personnel and citizens.

8.02 POLICY

All fire department personnel shall follow these guidelines in the handling of incidents involving radioactive material.

8.03 PROCEDURE

- A. Size-up:
 - 1. Determine nature and extent of problem.
 - 2. Use Department Hazmat S.O.G.
 - 3. Determine if radioactive materials are present.
 - 4. If a vehicle is involved, check bills of lading, placarding and talk with driver, if possible.
- B. Report on conditions.
- C. Request notification of the Assistant Chief or other Chief Officer
 - 1. Provide the Chief Officer with a situation status report and the exact location of the incident.
- D. Establish an operational perimeter. The distance involved should be at least five hundred (500) feet, except for downed military aircraft which shall be two thousand (2000) feet, minimum.
- E. Establish a command post.
- F. Request radiological monitoring equipment be brought to the scene.
- G. Request other resources as may be required.

8.04 SAFETY

- A. Keep personnel as far away as is possible from the involved material.
- B. Fire personnel shall wear proper protective clothing. (FULL PROTECTIVE CLOTHING including breathing apparatus, while inside the operational perimeter.).
- C. Food, Water, Smoking. DO NOT EAT. DO NOT DRINK. DO NOT SMOKE IN THE AREA. Do not use any food or water that may have come into contact with suspected materials of the incident.

8.05 OPERATIONS

- A. Perform (if possible) a primary search and rescue of trapped persons. If any person is alive and trapped in wreckage, make every possible effort to rescue them.
- B. Segregate and detain personnel who have had possible contact with the radioactive material until they can be examined further. Obtain names and addresses of all involved in the incident.
- C. Remove injured from the area of the accident with as little contact as possible and hold at a transfer point. Take any measures necessary to save life but carry out minimal first aid and Para-medical procedures until help is obtained from radiological team physicians or other physicians familiar with radiation medicine. When recommended by a doctor, an injured person should be removed to a hospital for treatment and the doctor or hospital should be informed when there is a reason to suspect that the injured person has radioactive contamination on his/her body or clothing.
- D. Firefighting. Fight fires from as far upwind as possible, keeping out of smoke, fumes, or dust arising from the incident. Treat in the same manner as fire involving toxic chemicals. Do not handle suspected material; segregate clothing and tools used at fire until they can be checked with radiological monitoring equipment.
- E. Request response of the appropriate law enforcement agency and coordinate with same.
- F. Traffic Control. In the event of a radiological incident involving a vehicle, detour all traffic away from the scene.
- G. Upon their arrival coordinate and cooperate with the members of the radiological assistance team.

8.06 ZONE CONTROL

- A. Zone controls will be established within the operations perimeter.
- B. Effective zone controls are the basis of a good emergency plan where radiation is involved. Three main zones should be roped off: **HOT ZONE**; **WARM ZONE**; and **COLD ZONE**. Numerous means may be employed to mark these zones; rope,

stanchions, flares, tape or even imaginary boundary markers can be used. The amount and type of materials released and weather conditions should play an extremely important role in determining zone boundaries.

- C. The **HOT ZONE** – the innermost area – centers where radioactivity is greatest. The boundaries of this zone should be flexible and large enough to encompass all radiation and suspected areas of contamination. This zone, which should include wet areas (run-off water); can be reduced in size later as portions are judged safe.
- D. Downwind areas should be monitored continuously. If airborne radiation is particularly heavy, the downwind area may be included within the **HOT ZONE**.
- E. The **WARM ZONE** serves as a buffer between the hot and cold zones. Emergency gear is passed from this zone to rescuers in the Hot Zone. The **WARM Zone** also serves as a collecting point where victims (once they have been removed from the **Hot Zone**) are given additional first aid and decontamination treatment.
- F. The **COLD ZONE** includes areas that are free of contamination. The rescue operations are directed from this area. Officials and utility crews stand by here also.

Appendix J

EMERGENCY OPERATIONS

Chapter: IX – Hazardous Materials Incidents
Subject: Natural Gas Filled Structure – No Fire
Code: 3-IX-9
Revised: 04-30-02

9.01 PURPOSE

To establish guidelines for the receipt and handling of incidents involving natural gas leaks in a structure.

9.02 POLICY

- A. All personnel shall follow these guidelines when called for a natural gas leak in a structure.
- B. All personnel shall follow these guidelines to insure the safe handling of an incident involving natural gas in a structure.

9.03 RECEIPT OF CALL

- A. If the caller can detect a strong odor of gas or can hear gas escaping they should be instructed to leave the building immediately by walking, not running. They should also be instructed not to:
 - 1. Hang up the telephone.
 - 2. Operate any electrical switches, television sets, appliances or other electrical devices.
 - 3. Pull any circuit breakers
 - 4. Re-enter the building.

PROCEDURE

- A. Notify Fire Alarm to respond Mobile Gas Company to the suspected leak.
- B. Spot apparatus safe distance from the address of the leak, the first due apparatus may enter the block area of the leak and all other responding apparatus shall stage one block from the address of the leak.

- C. Request traffic control by the Police Department if needed.
- D. Consider immediate evacuation of the structure and other exposures.
- E. Try and determine if there is a gas leak and the area of involvement with the Rae™ PID Detector prior to the Gas Department arrival.

9.04 SAFETY

- A. All personnel involved in the operation shall be in full protective clothing and breathing apparatus.
- B. Ventilate structure by opening windows and doors from outside.
- C. If using electric or gas fans to ventilate, make sure they are explosion proof type and keep generators clear of the area.
- D. Do not operate electric switches in the building.
- E. Natural gas does not contain carbon monoxide or other toxic products, but in sufficient amount it is suffocating.
- F. Natural gas is lighter than air so always check upper levels above the leak site and place apparatus accordingly.

9.05 CONTROL UTILITIES

- A. Shut off gas supply at meter or curb valve.
- B. Shut off electric power to building to prevent appliances (i.e. refrigerator, etc.) from coming on.
- C. Suppress or remove any other sources of ignition in the immediate area.
- D. Do Not attempt to shut down main line gas valves. Gas Department personnel only will do this procedure.

9.06 OPERATIONS

- A. Shut off utilities. (See Control Utilities).
- B. Ventilate structure from outside.
- C. Consider water supply in case of explosion and fire.
- D. Evacuate any endangered occupants in the building as well as the immediate area.
- E. Use combustible gas indicator to determine if building is safe to enter. (Natural gas is lighter than air, therefore, if confined in a structure or carport it will generally be concentrated at ceiling levels).
- F. Shut off or plug leak.
- G. Restoration of gas service should be done by Gas Department personnel only.
- H. Allow occupants back into the structure only after levels have been reduced to 0% and the Gas Department concurs.

Appendix K

Saraland Fire Rescue Department

White Powder Response S.O.P.

The following guidelines were developed using recommendations from the Centers for Disease Control. Information was also gathered from the National Domestic Preparedness Office and F.E.M.A.

A: Receiving the call for a suspicious envelope or package containing a powdery substance or other odd contents.

- A. Start the White Powder Response sheet.
- B. If package is deemed a threat from the response sheet, Alert the caller to not handle the package, and to leave the room containing the package and close the door to the room.
- C. Dispatch call as a Signal 77. Dispatch as a Hazardous Materials Response. Alert units en-route as to possibility of Anthrax.
- D. Dispatch police and have them stage with the first arriving Fire Dept. unit. No one shall enter the building or be within 80 feet of the package without full PPE and SCBA. Refer to Emergency Response Guide # 158 for isolation recommendations.

Isolating the package and decon of anyone involved with it.

- A. First arriving Fire unit will establish a unified command and call for Asst. Chief Stringfellow and Fire Dept. P.I.O. if needed.
- B. Notify the F.B.I. @ 1-202-324-6180.
- C. All personnel that enter the building shall wear all PPE including SCBA and 2 pair latex gloves including taped cuffs.
- D. The building the package is in shall be considered the Hot Zone due to the HVAC system.
- E. The parking lot or yard shall be the warm zone where decon and immediate treatment takes place.
- F. The Police shall secure the Cold Zone.
- G. Decon shall be done by a person wearing full PPE and SCBA.
- H. Decon of patient or entry team shall be done in a clearly marked area marked with cones or scene tape.
- I. I.C. should contact the hospital and advise them of the situation so they can prepare for the patient before we transport.
- J. HazCat Tests should be run on the powder as soon as possible.

C: Package recovery and scene stabilization

- A. Entry team shall place package in a bio-hazard bag and seal. Place this bag in another Bio-hazard bag and seal. Place bags in 1 or 5 gallon can and seal.
- B. Personnel should exit the structure with the can and shut the door to the room containing the package.

C. Personnel should then come to the warm zone for decon and decon the sealed can with a spray disinfectant.

D: Scene termination

A. During the incident and afterward police might need to photograph the scene. This can be done by the entry team in the hot zone or after the incident has been stabilized.

B. This is a crime and Haz-Mat scene and nothing should be moved unless documented or P.D. gives permission.

C. Police should document all persons involved with the scene.

D. All turnout gear should be washed on scene with soap and water. A 5% bleach solution can be used to decon turnout gear and equipment.

Appendix G

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Standard Operating Procedure

City Vehicle Maintenance

This SOP covers the process for maintaining City vehicles without discharging pollutants to the City's MS4.

Vehicle Maintenance

1. Transport the vehicle to the City's garage to perform any maintenance activities.
2. Use a collection tank or drip pan to collect oil, diesel fuel, antifreeze, transmission fluids, and all other vehicle fluids when working on City's vehicles.
3. Repair leaking vehicles as soon as possible to avoid discharging into the storm drain system.

Standard Operating Procedure

Detention Pond Cleaning

This SOP covers the process for cleaning the City's detention ponds.

1. Schedule detention pond cleaning during a time when dry weather is expected.
2. Visually inspect grates and other structures to determine whether they're in good working order.
3. Install erosion controls, as necessary, prior to cleaning the detention pond.
4. Provide outlet protection, if feasible, to reduce the amount of debris that may leave during the cleaning process.
5. Remove debris and settlement from the detention pond. Use appropriate equipment, such as a backhoe or vacuum truck, as necessary.
6. Transport the debris to an approved disposal site.
7. Re-grade the pond bottom and slopes, as needed, after cleaning is complete.
8. Keep a record of the cleaning, including date, location, crew members, amount of debris collected, and comments.

Standard Operating Procedure

Ditch Maintenance

This SOP covers the process for maintaining City ditches.

1. Monitor ditches at least once a month to determine if maintenance is needed.
2. Contact affected property owners and utilities, if necessary, prior to performing maintenance.
3. Determine what equipment will be needed.
4. Install erosion controls as necessary prior to performing maintenance.
5. When performing maintenance, take all necessary precautions to avoid damaging the ditch channel and adjacent properties or utilities.
6. Remove all collected material and transport to an approved dumping site.
7. Clean up any tracked sediment material from paved surfaces.
8. Keep a record of all maintenance activities, including date, location, crew members, amount of material collected, and comments.

Standard Operating Procedure

Drainage Structure Cleaning

This SOP covers the process for cleaning the City's drainage structures.

1. Visually inspect the structure and determine what needs to be cleaned or replaced.
2. Record any deficiencies such as cracks and broken or missing pieces.
3. Remove any trash, debris, and sediment. Use appropriate hand tools, as necessary.
4. Use a vacuum truck if a more extensive cleaning is needed.
5. Transport all collected material to an approved disposal site.
6. Keep a record of the cleaning, including date, location, crew members, amount of debris collected, and comments.

STORM WATER STRUCTURAL CONTROLS
INSPECTION FORM

LOCATION INFORMATION

Date: _____ **Inspector:** _____

Time: _____

Outfall Location: _____

Weather: Sunny and Dry Overcast but Dry Light Rain Heavy Rain Other

Precipitation in the last 3 days: Yes No

Flow: None Visible Flow Moderate Flow High Flow

Color: _____

INSPECTION INFORMATION (Circle all that are applicable)

<u>Debris/Pollution</u>	<u>Odor</u>	<u>Water Clarity</u>	<u>Sediment</u>
None	None/Natural	Clear	Open
Foam	Musty	Cloudy	1/4 Full
Oil/Sheen	Sewage/Septic	Opaque	1/2 Full
Plant Debris	Other: _____	Other: _____	3/4 Full
Dead Animals			Plugged
Trash			
Sewage Material			

Other: _____

<u>Structure Condition</u>	<u>Notes and Comments</u>
Excellent	_____
Good	_____
Fair	_____
Poor	_____
Grate/Cover Missing	_____
Grate/Cover Damaged	_____
Broken Concrete	_____
Other: _____	_____

Actions Taken: _____

Follow Up Required: Yes No

Corrective Action (if required)	Initials	Date Completed
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Standard Operating Procedure

Herbicide for Weed Control

The SOP covers the use of herbicide for weed control. The City Employee shall be aware that the spraying of the herbicide in the Waters of the State is prohibited.

General

1. Follow all Manufacturer's recommendations for mixing, applying, and handling herbicides.
2. All materials should be properly stored under cover when not in use.
3. Materials should be stored in an adequately ventilated and secured building to prevent unauthorized use or access.
4. Keep materials properly covered and contained in tight fitting containers.
5. Properly label all materials.
6. Keep a record of the Safety Data Sheet (SDS) for the product being used.

Mixing

1. Provide adequate containment when mixing materials. This includes an area with impervious surface and adequate perimeter control to prevent the discharge of pollutants in the event of a spill.
2. All mixed material containers shall be labeled with the specific contents.
3. Mix the minimum amount of material needed for the immediate job.

Application

1. Time the application of materials to coincide with the manufacturer's recommendation for best results.
2. Do not apply pesticides or herbicides during precipitation or if precipitation is expected. Do not apply before an irrigation cycle.
3. Do not apply fertilizers when heavy rain that could cause significant runoff is anticipated.
4. Do not apply when wind conditions could result in spray drift to waterbodies or areas not targeted for application.
5. If possible, limit the application of herbicides to a specific problem area.

Spills and Leaks

1. Spills and leaks should be cleaned up immediately.
2. Dry clean-up methods should be used to clean up spilled material. This includes the use of absorbent pads, granular absorbent, booms, and similar measures.
3. Waste sorbent material must be disposed of properly.
4. Water should never be used to clean up spilled material.
5. Wash down of pavement should not occur until all spills and leaks have been cleaned up.

Standard Operating Procedure

Storage and Disposal of Chemicals

This SOP covers the process for storing, handling, and transporting chemicals and how to handle spills.

1. Understand the MSDS sheets for the storage and handling of each chemical.
2. Determine the proper location for storing and handling the chemicals, primarily in a location that will not be affected by rainfall or storm water.
3. Always keep containment and spill kits onsite in an easily accessible location.
4. When transporting chemicals; discontinue operations if spills occur.
5. Remove and store handling equipment.
6. Contain and clean up spills with appropriate spill kits.
7. Dispose of contaminated material at appropriate facility.

Standard Operating Procedure

Vegetation Control

This SOP covers the process for mowing and trimming around drainage structures.

1. Check the oil and fuel levels of the equipment; refill if needed.
2. Wear appropriate clothing and safety equipment, including eye and hearing protection.
3. Locate all drainage structures in the mowing/trimming area.
4. Mow and trim the area while minimizing the amount of clippings blown to pavement and drainage structures.
5. Bag and dispose of clippings or sweep clippings onto grass areas.
6. Wash equipment in an approved wash station.

STANDARD OPERATING PROCEDURE DRY WEATHER SCREENING

Pursuant to the MS4 Phase II General Permit, the following Standard Operating Procedure has been developed for conducting dry weather screening and tracing the source of suspected illicit discharges.

Background

A dry weather screening program is recommended by the EPA as an effective method for discovering illicit discharges. A dry weather period is considered to be a time interval in which less than 0.1 inch of rain occurs across a minimum of 72 hours. Ideally, the field screening locations should show no flow during this dry weather period. Any observed flow should be investigated as a potential illicit discharge.

ADEM has given permittees some latitude in how they define what constitutes an outfall. For the purposes of outfall mapping and screening, Saraland has decided to define outfall as follows:

Outfall - a location where concentrated stormwater runoff discharges, primarily from constructed conveyances, leave the influence of land uses within developed areas of the City's MS4 boundary, flowing toward the boundary of another MS4 or to a water of the State, as identified on the most current version of the National Hydrography Dataset maintained by the USGS.

Outfalls will generally include pipes (or closed conveyance systems) with an effective diameter of 36" or greater and open channel conveyances with drainage areas greater than 50 acres.

Procedure

- The structures selected for field screening should be chosen based on their proximity to major stream systems, drainage basins, and urban development. Document the location, including Street Name and GPS coordinates.
- Dry weather screening should be conducted at all screening structures at least 72 hours after a rain event.
- Record the time, date, weather conditions, and condition of the structure. Picture documentation should be included.
- If a flow is present, document the characteristics, including clarity, color, odor, and the presence of any of the following:
 - Foam
 - Oil sheen
 - Substantial Sediment
 - Trash
 - Sanitary waste
 - Orange stain
- If the flow is determined to be a sanitary sewer discharge, notify the proper utility or City personnel immediately.
- If the flow is determined to be hazardous or could potentially affect health and safety, leave the area immediately and notify the proper emergency response agency.

- If a chemical analysis is required to confirm an illicit discharge, a sample should be collected (or arranged to be collected) for laboratory testing.
- The source of the discharge should be traced using the City's contour maps and as-built drawings, if available. The investigation should continue at upstream structures until the discharge is no longer observed.
- Upon identification of any illicit discharge, all measures will be taken to eliminate (or commence the elimination) of the illicit discharge within ten (10) working days in accordance with the MS4 Permit.
- If the source of the discharge is determined to be outside of the City's MS4, notify ADEM's Mobile Central Field Office at (251) 450-3400.