

STORM WATER MANAGEMENT PROGRAM PLAN April 2023

Prepared For City of Gardendale 925 Main Street Gardendale, Alabama 35071

Prepared by Jefferson County Department of Health 1400 Sixth Avenue South Birmingham, Alabama 35233 (205) 930-1230

Signatory and Certification Requirements:

I certify under the penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the 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.

Stan Hogeland	Date
Mayor, City of Gardendale	
Address: 925 Main Street	
Gardendale, Alabama 35071	
Phone: (205) 631- 8789	

CONTENTS

INTRODUCTION	10
Regulatory Overview	10
MS4 Jurisdictional Boundary	11
LEGAL AUTHORITY AND ENFORCEMENT	11
STORM WATER COLLECTION SYSTEMS OPERATIONS	16
Structural Controls Map	16
Structural Controls Inspection	16
Standard Operating Procedure (SOP) for Structural Control Inspection and Maintenance Procedures	16
Stabilization and Re-Vegetation of Eroded Areas	16
Floatables, Litter, Sediment and Debris Removal	17
PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORM WATER IMPAC	TS 19
Public Education and Public Involvement BMPs	19
Public Education	19
Public Involvement	19
Development and Implementation of the SWMPP	19
Targeted Pollutant Sources for Public Education	19
Reduction of Litter Floatables and Debris	19
Educating Individuals and Households on Reducing Storm Water Pollution	20
Community Involvement with the Storm Water Program	20
General Public	20
General Public and Businesses, including Home-based and Mobile	20
Homeowners, Landscapers, Property Managers, and City Personnel	21
Engineers, CIty personnel, Review Staff, Land use Planners, Contractors, and Developers	21
Evaluating the Effectiveness of the Public Education Program	21

Public Activities Targeting Litter, Floatables and Debris Removal from area waterways	22
ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)	23
MS4 Map	23
Ordinance/Regulatory Mechanism	23
Dry Weather Screening Program	23
Source Identification	24
Illicit Discharge Elimination	24
ADEM Notification by the City	24
Illicit Discharge Reporting by the Public	25
Personnel Training	25
Ordinance/Regulatory Mechanism Availability	25
CONSTRUCTION SITE STORM WATER RUNOFF CONTROL	26
Ordinance/Regulatory Mechanism	
Site Plan Reviews	26
Construction Site Inspection Schedule	26
Training of MS4 Site Inspection Staff	26
Construction Site Inspection Checklist	26
Enforcement Response Plan (ERP)	27
Construction Site Operator Training	27
POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPME AND RE-DEVELOPMENT	
Ordinance/Regulatory Mechanism	28
LID/GI encouragement procedures	28
Inventory of Post-Construction Structural Controls	28
SPILL PREVENTION AND RESPONSE	29
City Response Protocol	29

Spill Prevention/Spill Response Plan	29
Personnel Spill Prevention/Response Training	29
POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPER	
Municipal Facilities Inventory	30
Strategy Evaluation	
Good Housekeeping Practices SOP	
Inspection Plan	30
Good Housekeeping Training Program	30
APPLICATION OF PESTICIDES, HERBICIDES, AND FERTILIZERS (PHFs)	
Application and Storage	
PHF Training Program	31
OILS, TOXICS, AND HOUSEHOLD HAZARDOUS WASTE	
Public education on proper disposal	33
Annual employee Training	33
INDUSTRIAL STORM WATER RUNOFF	
Inventory of high risk Facilities	34
Inspection of high risk Facilities	34
MONITORING AND REPORTING	
Monitoring Locations	35
Impaired Waterways	35
Monitoring Parameters and Frequency	36
Sample Type, Collection and Analysis	36
OTHER REQUIREMENTS	
SWMPP Plan Review And Modification	
Annual Report	

LIST OF FIGURES

Figure 1: MS4 Boundary	15
Figure 2: Structural Controls	
Figure 3: Sampling Site	37

LIST OF TABLES

Table 1: Municipal Facilities		22
	 •••••	 JZ

APPENDICES

- Appendix A Storm Water Program Documents
- Appendix B Storm Water Collection Systems Operations
- Appendix C Illicit Discharge Detection and Elimination (IDDE)
- Appendix D Construction Site Storm Water Runoff Control
- Appendix E Post-Construction Stormwater Management
- Appendix F Spill Prevention and Response
- Appendix G Pollution Prevention/Good Housekeeping for Municipal Operations
- Appendix H Industrial Storm Water Runoff

INTRODUCTION

REGULATORY OVERVIEW

The City of Gardendale (City) was issued by the Alabama Department of Environmental Management (ADEM) a Municipal Separate Storm Sewer System (MS4) Individual Phase I Permit (ALS000026) on July 21, 2017 (**Appendix A**). Previously, the City was included as a Co-Permittee under permit number ALS000001. The current permit was issued and became effective on August 17, 2022.

As a condition of this permit, "The permittee is required to develop, revise, implement, maintain and enforce a storm water management program (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 Part 122.26. These requirements shall be met by the development and implementation of a storm water management program plan (SWMPP) which addresses the best management practices (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)".

Per the requirements of NPDES Permit Number ALS000026, BMPs, measurable goals, and responsibility designations are provided for each of the following program elements:

- Storm Water Collection System Operations
- Public Education and Public Involvement on Storm Water Impacts
- Illicit Discharge Detection and Elimination
- Construction Site Storm Water Runoff Control
- Post-Construction Storm Water Management in New Development and Re- Development
- Spill Prevention and Response
- Pollution Prevention/Good Housekeeping for Municipal Operations
- Application of Pesticides, Herbicides, and Fertilizers
- Oils, Toxics, and Household Hazardous Waste Control
- Industrial Storm Water Runoff

ADEM defines the fiscal year as October 1st to September 30th. Annual reports are required to be submitted to ADEM no later than January 31st following the previous fiscal year.

MS4 JURISDICTIONAL BOUNDARY

Gardendale's MS4 boundary is bound to the north by the cities of Morris and Kimberly, to the south by the cities of Fultondale and Birmingham, and to the east by the City of Tarrant and Jefferson County and west by unincorporated areas of Jefferson County, including Mount Olive. Approximately 42 square miles of residential, commercial, industrial, undeveloped lands, and streams make up the MS4 boundary. See **Figure 1: MS4 Boundary**.

There is one waterbody, Black Creek, which is considered impaired by the U.S. Environmental Protection Agency (USEPA) and ADEM within the municipal boundary for pH. It currently does not have a Total Maximum Daily Load (TMDL). The designated use for this stream is Fish and Wildlife (F&W).

Newfound Creek flows west from Gardendale. Newfound Creek is considered impaired by the USEPA and ADEM for siltation after it exits the municipal limits of Gardendale (from an impoundment east of Brookside Road to Five Mile Creek). The designated use of Newfound Creek is Fish and Wildlife (F&W).

LEGAL AUTHORITY AND ENFORCEMENT

Part II C of the permit requires the City to review and revise its ordinances and regulatory mechanisms as necessary to comply with the permit. Below is a summary of the current ordinances, municipal codes, and regulations related to the management of the Gardendale's MS4. These ordinances are found in **Appendix A**.

- Ordinance 2019-001, Storm Water Management Erosion and Sedimentation Control Ordinance, Controls sedimentation leaving construction sites. The ordinance describes the fees, regulations, and the requirements surrounding a land disturbing permit issuance. <u>Repeals Ordinance 99-009, Erosion and Sedimentation Control Ordinance</u>
- Ordinance 2019-002, Storm Water Management Illicit Discharge regulation of non-storm water discharges to the storm drainage system
- Ordinance 2019-003, Storm Water Management Post Construction, address and enforce post-construction storm water management standards on Qualifying Sites to prevent or minimize water quality impacts and ensure that the volume and velocity of pre-construction storm water runoff is not significantly exceeded for the life of the property's use to the maximum extent practical

- **2015 Subdivision Regulations:** Approved by the Planning and Zoning Board and carry the force of a City Ordinance. They address design requirements for residential and commercial storm water infrastructure.
- Ordinance 98-32, Flood Ordinance: Promotes public health, safety and general welfare by controlling construction and construction practices in and around the floodplain as well as controlling the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of floodwaters.
- Ordinance 97-15, Garbage: Establishes a law requiring premises to be kept free of garbage, trash, and other refuse.
- Ordinance 149, Abandonment of Motor Vehicles: Establishes a law against leaving abandoned and non-usable motor vehicles in the street or within public view.
- Ordinance 2017-017 Property Maintenance Code: Institutes a law against leaving yard trash and debris in the gutter line. It also controls siltation and construction materials.

In 2011 the City of Gardendale also adopted a Standard Operating Procedure (SOP) Manual detailing guidelines for addressing many activities associated with the program elements. The SOP Manual is found in **Appendix A**.

The following table reflects which City department is responsible for implementing or coordinating BMPs for each separate program element:

DEPARTMENT	RESPONSIBILITIES				
Storm Water Collection Systems Operations					
Inspections/JCDH	Maintain map of City owned/maintained structural controls				
Inspections	Semi-annual inspection of new and existing structural controls				
Inspections	Develop SOP, inspection checklist, and maintenance procedures				
Public Works	Stabilize and re-vegetate eroded areas as needed				
Public Works	Remove floatable, litter, sediment, and debris from structural controls				
	Public Education and Public Involvement on Storm Water Impacts				
Administration	Seek and consider public input in the development and implementation of the SWMPP				
Administration	Identify targeted pollutant sources				
Administration/Public Works	Post litter signage				
Administration	Educate individuals and households on reducing storm water pollution				
Administration	Encourage community involvement in the storm water program				
Administration	Evaluate the effectiveness of the public education program				
Administration	Organize annual cleanup				
	Illicit Discharge Detection and Elimination (IDDE)				
JCDH	Develop MS4 map of outfalls				
Administration	Develop applicable ordinances and other regulatory mechanisms				
JCDH	Screen at least 15% of the outfalls during dry weather conditions				
City Personnel/JCDH	Identify illicit discharge source				
Code Enforcement Officer or JCDH	Eliminate illicit discharges				
Engineering	Notify ADEM of a suspected illicit discharge entering the MS4 from an adjacent MS4				
Administration	Receive complaints and investigate illicit discharges reported by the public				
Administration	Educate employees on detecting an IDDE, tracing the source of and eliminating illicit discharge				
Administration	Make publicly available ordinances and regulatory mechanisms				
	Construction Site Storm Water Runoff Control				
Administration	Develop applicable ordinances and other regulatory mechanisms				
Engineering	Perform site plan reviews				
Engineering/Inspections	Complete inspections on qualifying sites every other month				
Inspections	Train inspection staff				
Inspections	Provide construction site inspection checklist				
Administration	Document Enforcement Response Plan (ERP) actions				
Administration/ Inspections	Provide construction site operator education				

DEPARTMENT	RESPONSIBILITIES			
Post-Construction Storm Water Management in New Development and Re-Development				
Administration Develop applicable ordinances and other regulatory mechanisms				
Administration/Engineering/Inspections	Encourage the application of LID/GI practices			
Inspections	Inventory post-construction structural controls			
	Spill Prevention and Response			
Fire and Rescue	Follow City response protocol			
Fire and Rescue	Follow spill prevention/spill response plan			
Fire and Rescue/Administration	Educate employees on spill prevention/spill response			
Pollution Prev	ention/Good Housekeeping for Municipal Operations			
All Departments	Inventory municipal facilities			
All Departments	Evaluate strategy for trash removal			
All Departments	Follow good housekeeping practices SOP			
All Departments	Complete municipal inspections			
Administration	Educate employees on good housekeeping			
Applicati	on of Pesticides, Herbicides, and Fertilizers(PHFs)			
Parks and Recreation	Document application and storage of PHFs			
Administration	Educate employees on PHFs usage and storage			
Oils, To	oxics, and Household Hazardous Waste Control			
Administration	Educate public on proper disposal			
Administration	Educate employees on oils, toxics, and household hazardous waste			
	Industrial Storm Water Runoff			
Administration/JCDH	Inventory high risk facilities			
JCDH	Inspect high risk facilities			
	Monitoring and Reporting			
JCDH	Monitor locations			
JCDH	Review identified impaired waterways			
JCDH	Monitor parameters and frequency			
HDJL	Perform sampling and analysis			
	Other Requirements			
All Departments	Perform SWMPP plan review and modification			
JCDH	Prepare annual report for submittal			

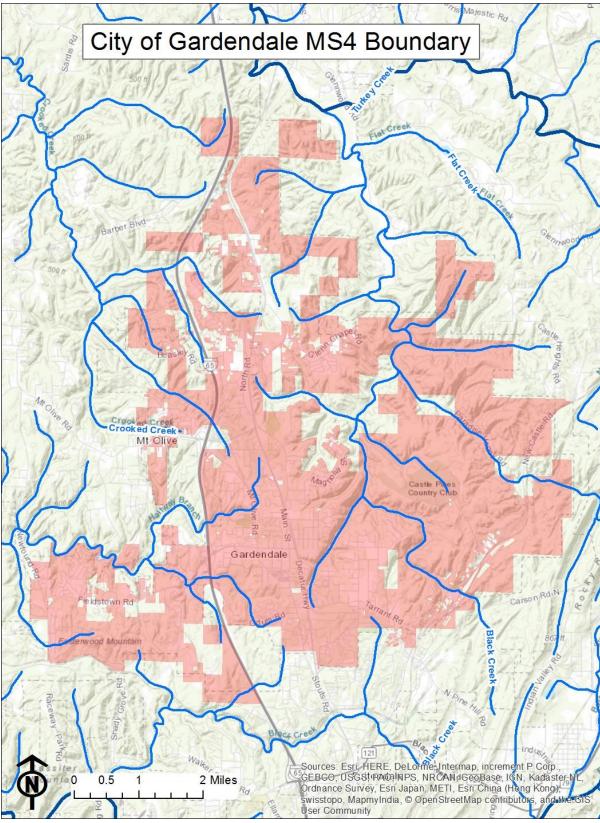


Figure 1: MS4 Boundary

STORM WATER COLLECTION SYSTEMS OPERATIONS

STRUCTURAL CONTROLS MAP

The City currently has one city-owned structural controls within the MS4 boundary limits (see **Figure 2: Structural Controls**). The City will monitor the addition of any City owned/ maintained structural controls.

Responsible Departments: Inspections/JCDH

STRUCTURAL CONTROLS INSPECTION

As stated in the permit, all existing and new structural controls owned/maintained by the Permittee shall be inspected using a standard inspection form found in **Appendix B** on a semiannual basis, at a minimum. Maintenance activities will also be documented using the provided maintenance form found in **Appendix B**. The completed forms should be uploaded to the Storm Water Online Activity Record (SOAR) program. The City owns no structural controls currently. A city inspector and/or a contractor will perform inspections. Any deficiencies or maintenance recommendations listed on the inspection form in regards to the structural control will be addressed and documented by Public Works.

Responsible Department: Inspections

STANDARD OPERATING PROCEDURE (SOP) FOR STRUCTURAL CONTROL INSPECTION AND MAINTENANCE PROCEDURES

The standard operating procedure for structural control inspection and maintenance is found in **Appendix B**.

Responsible Department: Inspections

STABILIZATION AND RE-VEGETATION OF ERODED AREAS

During the inspection of the structural controls, areas of erosion will be documented. The Public Works Department will receive a copy of the inspection documentation noting the eroded areas and will stabilize and re-vegetate these areas. Activities are to be documented and submitted as described.

Responsible Department: Public Works

FLOATABLES, LITTER, SEDIMENT AND DEBRIS REMOVAL

All floatables, litter, sediment, and/or debris found during the structural inspection will be documented. The Public Works Department will receive a copy of the inspected documentation and will address the noted items. Public Works will also complete documentation of the estimated amounts of floatables, litter, sediment and debris removed during maintenance activities and upload to SOAR.

Responsible Department: Public Works

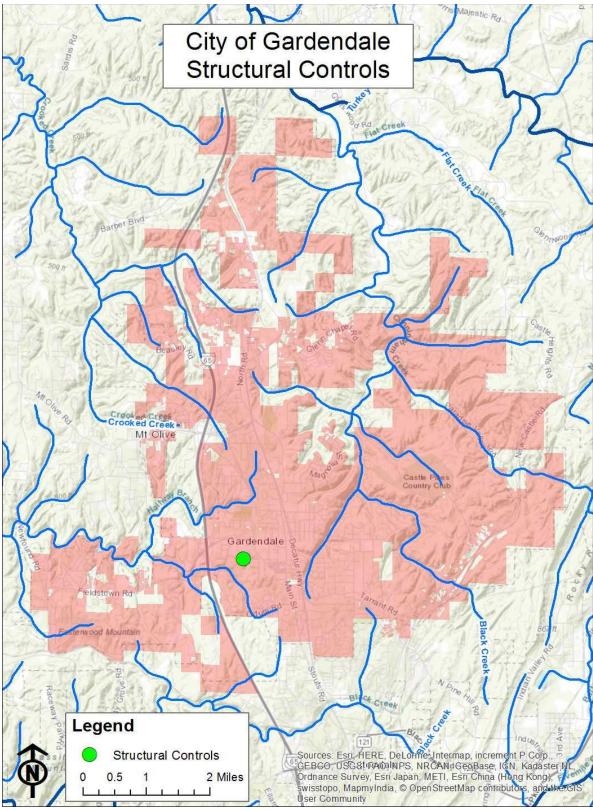


Figure 2: Structural Controls

PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORM WATER IMPACTS

PUBLIC EDUCATION AND PUBLIC INVOLVEMENT BMPS

PUBLIC EDUCATION

The City will provide public education information via its stormwater webpage and distribution of stormwater brochures.

PUBLIC INVOLVEMENT

The City activities for public involvement include a litter clean-up and a household hazardous waste collection event.

DEVELOPMENT AND IMPLEMENTATION OF THE SWMPP

The City seeks public input on the SWMPP by posting the draft SWMPP on its website for comments. Notification announcements will be made at council meetings. The Council-approved SWMPP for the upcoming year will then be posted on the website and be submitted yearly.

Responsible Department: Administration

TARGETED POLLUTANT SOURCES FOR PUBLIC EDUCATION

The City discusses targeted pollutant sources in the section of the SWMPP titled "Community Involvement with the Storm Water Program".

REDUCTION OF LITTER FLOATABLES AND DEBRIS

Litter signage is maintained throughout the City. Signage will be updated as necessary to properly address these issues. Administration approves of the messages and Public Works installs the signs and/or labels.

Responsible Departments: Administration/Public Works

EDUCATING INDIVIDUALS AND HOUSEHOLDS ON REDUCING STORM WATER POLLUTION

Information describing Gardendale's Storm Water Program is posted on the City's website. The information includes general information about the storm water permit with links and brochures about different ways to reduce storm water pollution in relation to the different community segments. These same brochures on storm water issues are placed at City Hall for public pickup. These materials will be updated as needed.

Responsible Department: Administration

COMMUNITY INVOLVEMENT WITH THE STORM WATER PROGRAM

GENERAL PUBLIC

The City has a storm water page on its website and placed brochures containing information in City facilities that inform the general public of:

- General impacts litter has on waterbodies and ways to reduce the litter
- General impacts of storm water on surface water from impervious surfaces
- Source control BMPs in areas of pet waste, home vehicle maintenance, landscaping and rain water reuse.
- Impacts of illicit discharges and how to report them.

These materials will be updated as needed.

Responsible Department: Administration

GENERAL PUBLIC AND BUSINESSES, INCLUDING HOME-BASED AND MOBILE

The City has a storm water page on its website and placed in City facilities brochures containing information on the following business-related topics:

- Information on BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
- Impacts of illicit discharges and how to report them.

These materials will be updated as needed.

HOMEOWNERS, LANDSCAPERS, PROPERTY MANAGERS, AND CITY PERSONNEL

The City has a storm water page on its website and placed brochures containing educational information in City facilities that inform homeowners, landscapers, and property managers on the following topics:

- Landscape or yard care techniques that protect water quality.
- BMPs and storage of pesticides, herbicides, and fertilizers.
- BMPs for carpet cleaning and auto repair and maintenance
- Detention/retention pond maintenance.
- General impacts of storm water from impervious surfaces into surface water.

These materials will be updated as needed.

Responsible Department: Administration

ENGINEERS, CITY PERSONNEL, REVIEW STAFF, LAND USE PLANNERS, CONTRACTORS, AND DEVELOPERS

The City has a storm water page on its website and also placed in City facilities brochures to inform engineers, contractors and developers on the following topics:

- Impacts of increased storm water flows into receiving waterbodies.
- Technical standards for construction site sediment and erosion control
- Stormwater treatment and flow control BMPS
- Run-off reduction techniques and low impact development (LID)/green infrastructure practices and maintenance. Specifically addressing site design, pervious pavement, alternative parking lot design, retention of forests and mature trees.

These materials will be updated as needed.

Responsible Department: Administration

EVALUATING THE EFFECTIVENESS OF THE PUBLIC EDUCATION PROGRAM

The City will on a continuing basis evaluate the effectiveness of the public education program by monitoring and reporting the number of visitors to the storm water page and the number of brochures that are picked up from City facilities on an annual basis.

PUBLIC ACTIVITIES TARGETING LITTER, FLOATABLES AND DEBRIS REMOVAL FROM AREA WATERWAYS

Currently the City is planning to host or participate in a cleanup annually. The tonnage collected by the City will be included in the Annual Report.

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

MS4 MAP

Maps of the major outfalls and waters of the State within the MS4 boundary that receive discharge from the major outfalls can be found in **Appendix C**. Also, a list of the major outfalls' latitude and longitude coordinates can be found in **Appendix C**.

JCDH will update the MS4 map and provide a list of location coordinates annually on behalf of the City.

Responsible Department: JCDH

ORDINANCE/REGULATORY MECHANISM

Ordinance 2019-002 addresses illicit discharges as required by the City's Permit.

Responsible Department: Administration

DRY WEATHER SCREENING PROGRAM

Dry weather screening of at least 15% of the major outfalls will be performed annually with 100% of the major outfalls screened at least once per the five-year permit period. This work will be completed by JCDH. Currently there are no priority outfalls identified within the MS4 boundary, but if illicit discharges are identified during the dry weather inspections, those outfalls will be screened on an annual basis. JCDH shall use the EPA's guidance manual, *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, October 2004, for the main source of investigative techniques and guidance for the dry weather screening process. Outfalls will be field inspected after a minimum of 72 hours of dry weather. Data sheets found in **Appendix C** will be filled out for each outfall inspected. The protocols for dry weather screening are in the Standard Operating Procedure Manual found in **Appendix A**.

SOURCE IDENTIFICATION

If during the dry weather screenings, Public Works' identification, or citizen complaint, an outfall is found to be discharging a liquid, the city inspector or JCDH personnel will traverse upstream of the discharge in an attempt to identify the source of the discharge. If the discharge source is unidentifiable, then a sample of the discharge shall be collected by JCDH and analyzed by a qualified lab. Based on the lab results, the outfall will be prioritized and scheduled for further investigation if needed.

Responsible Departments: City Personnel/JCDH

ILLICIT DISCHARGE ELIMINATION

Once the source and responsible party of an illicit discharge has been identified, either the City will take action through **Ordinance 2019-002** or JCDH will through its regulations.

Responsible Departments: Code Enforcement Officer or JCDH

ADEM NOTIFICATION BY THE CITY

If a suspected illicit discharge enters the City's MS4 boundary from an adjacent MS4, the City will notify the adjacent MS4 and the ADEM Water Division within 48 hours of observing the suspected illicit discharge. The Standard Operating Procedure for this action is found in **Appendix C**.

Responsible Department: Engineering

ILLICIT DISCHARGE REPORTING BY THE PUBLIC

The City receives calls for illicit discharges at the City Hall phone number 205-631-8789 frequently. There is also a phone number, 205-631-1708, listed on the City's stormwater webpage.

Responsible Department: Administration

PERSONNEL TRAINING

City administrators, engineers, inspectors and laborers will be trained on IDDE identification and response annually.

Responsible Department: Administration

ORDINANCE/REGULATORY MECHANISM AVAILABILITY

The illicit discharge ordinance is found on the City's website at the link below:

https://library.municode.com/al/gardendale/codes/code of ordinances?nodeId=13035

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

ORDINANCE/REGULATORY MECHANISM

Ordinance 2019-001 addresses Construction Site Regulations as required by the City's Permit. The ordinance is found at the link below:

https://library.municode.com/al/gardendale/codes/code of ordinances?nodeId=13035

Responsible Department: Administration

SITE PLAN REVIEWS

According to **Ordinance 2019-001**, a BMP plan must be submitted to the City along with the permit application before any land disturbance. The City must either approve or disapprove the BMP plan within 14 days. Reasons for disapproval must be submitted to the applicant in writing. All revisions have an additional 14-day response time. Land disturbing activity may not be commenced prior to the issuance of the permit by the City.

Responsible Department: Engineering

CONSTRUCTION SITE INSPECTION SCHEDULE

The City will perform an inspection every other month, at a minimum, on qualifying sites that have been issued land disturbance permits. Erosion controls and best management practices will be inspected during these inspections. Deficiencies identified during an inspection will be subjected to enforcement procedures outlined in the Erosion Control Ordinance.

Responsible Department: Engineering/Inspections

TRAINING OF MS4 SITE INSPECTION STAFF

Personnel responsible for construction site inspections receive BMP training annually.

Responsible Department: Inspections

CONSTRUCTION SITE INSPECTION CHECKLIST

See Appendix D for the City's construction site inspection checklist.

Responsible Department: Inspections

ENFORCEMENT RESPONSE PLAN (ERP)

An Enforcement Response Plan is included in **Ordinance 2019-001.** Documentation of formal enforcement actions and ADEM referrals is available via the SOAR program.

Responsible Department: Administration

CONSTRUCTION SITE OPERATOR TRAINING

The City provides construction site operator's informational materials regarding appropriate application and maintenance of erosion and sediment controls when they receive their permits from the Inspections Department. The City has a storm water page on its website and brochures at City facilities that inform the engineers, contractors and developers on:

- Impacts of increased storm water flows into receiving waterbodies.
- Run-off reduction techniques and low impact development (LID)/green infrastructure practices. Specifically addressing site design, pervious pavement, alternative parking lot design, retention of forests and mature trees.

These materials will be updated as needed.

Responsible Departments: Administration/Inspections

POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND RE-DEVELOPMENT

ORDINANCE/REGULATORY MECHANISM

Ordinance 2009-003 addresses storm water design requirements for post-construction storm water management.

The Ordinance addresses the following:

- Procedures to develop, implement and enforce systems of appropriate structural and/or non-structural BMPs.
- Procedures to develop, implement and enforce performance standards.
- Procedures for encouragement of the utilization of LID/green infrastructure practices.
- Procedures to ensure compliance including sanctions and enforcement mechanisms.
- Procedures for post-construction inspections to include tracking and enforcement.
- Procedures to ensure adequate long-term operation and maintenance of BMPs.

The post-construction ordinance is found on the City's website at the link below:

https://library.municode.com/al/gardendale/codes/code_of_ordinances?nodeId=13035

Responsible Department: Administration

LID/GI ENCOURAGEMENT PROCEDURES

Information detailing the importance of LID/GI is provided along with the City's land disturbance permit application. This also includes a statement acknowledging receipt of the information by the applicant.

Responsible Department: Administration/Engineering/Inspections

INVENTORY OF POST-CONSTRUCTION STRUCTURAL CONTROLS

The City is developing a list of privately-owned structural controls for those built after the codification of the new requirements. Currently the City has one site (See **Appendix E**). The City will update annually the list of privately-owned structural controls under the new requirements.

Responsible Department: Inspections

SPILL PREVENTION AND RESPONSE

CITY RESPONSE PROTOCOL

Gardendale Fire and Rescue is responsible for investigating, responding, and conducting response actions for any spill within the City's boundaries. Jefferson County's Emergency Management Agency (EMA) will additionally respond at the request of the City. Gardendale Fire and Rescue and EMA track the spills, the response, and the cleanup activities for all spills.

Responsible Department: Fire and Rescue

SPILL PREVENTION/SPILL RESPONSE PLAN

The City's SOP for spill response is found in **Appendix F**.

Responsible Department: Fire and Rescue

PERSONNEL SPILL PREVENTION/RESPONSE TRAINING

Gardendale Fire and Rescue is responsible for the training and certification of their personnel. An annual training will be provided to municipal personnel on spill prevention/response.

Responsible Departments: Fire and Rescue/Administration

POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

MUNICIPAL FACILITIES INVENTORY

See **Table 1: Municipal Facilities** for a list of facilities. The list will be reviewed annually and updated as needed.

Responsible Departments: All Departments

STRATEGY EVALUATION

City personnel pick up trash prior to it entering the MS4 and remove trash from the MS4. Volunteer organizations assist with removal of trash from waterbodies and the MS4. Trash collected is assessed and documented. The City also participates in a household hazardous waste collection event. An SOP for special events is located in **Appendix G**. These activities have been successful in removing and preventing trash from entering the MS4.

Responsible Departments: All Departments

GOOD HOUSEKEEPING PRACTICES SOP

The SOP detailing good housekeeping practices is found in the 2011 SWMA SOP Manual (Appendix A).

Responsible Departments: All Departments

INSPECTION PLAN

Annual inspections will be conducted for municipal facilities that have the potential to discharge pollutants via stormwater runoff. See **Appendix G** for the inspection checklist.

Responsible Departments: All Departments

GOOD HOUSEKEEPING TRAINING PROGRAM

City staff will be educated annually on good housekeeping practices. The SOP manual (**Appendix A**) contains procedures related to Good Housekeeping.

APPLICATION OF PESTICIDES, HERBICIDES, AND FERTILIZERS (PHFS)

APPLICATION AND STORAGE

The Parks and Recreation Department keeps annual records of applied pesticides, herbicides, and fertilizers (PHFs). Each chemical used is applied per the labeling instructions. Safety Data Sheets (SDS) on each product are found in the chemical storage areas. City staff responsible for application of PHFs receive annual training in safe use, storage, and disposal of PHFs. Personnel contracted to apply pesticides or herbicides to City property shall provide proper certification and licensing before performing work. Also, contractors who apply fertilizer must provide qualification in utilizing proper nutrient management practices.

City facilities that store PHFs will be inspected annually to determine proper storage, product labeling, and SDS accessibility (**Table 1: Municipal Facilities**). The SOP manual (**Appendix A**) contains procedures related to usage and storage of PHFs.

Responsible Department: Parks and Recreation

PHF TRAINING PROGRAM

Necessary staff will be educated annually on proper PHF practices.

Table 1: Municipal Facilities

Name	Address	Inspection
Park Maintenance Shop	2161 DECATUR HWY	Yes. Vehicle/ Equipment/ PHF Storage and Maintenance
Gardendale Fire Station # 1	1811 DECATUR HWY	Yes. Vehicle/ Equipment Storage
Fire Station # 2	1640 FIELDSTOWN RD	Yes. Vehicle/ Equipment Storage
Fire Station # 2	1648 FIELDSTOWN RD	No. No potential to discharge pollutants.
Fire Station # 2	1664 FIELDSTOWN RD	No. No potential to discharge pollutants.
Library	2433 CAUFIELD DR	No. No potential to discharge pollutants.
City Hall	925 MAIN ST	No. No potential to discharge pollutants.
Gardendale Community Center	857 MAIN ST	No. No potential to discharge pollutants.

OILS, TOXICS, AND HOUSEHOLD HAZARDOUS WASTE

PUBLIC EDUCATION ON PROPER DISPOSAL

The City has contact information on its webpage regarding where to report spills, illicit discharges and improper disposals. The webpage also includes a link to the website Earth911_<u>http://earth911.com/</u> which provides local sites for recycling of oils, toxics and household hazardous waste. Brochures on oils, toxics, and household hazardous waste are on the City storm water webpage as well as placed in City facilities for public pick-up.

Responsible Department: Administration

ANNUAL EMPLOYEE TRAINING

Annual training on spill prevention is provided to City personnel.

INDUSTRIAL STORM WATER RUNOFF

INVENTORY OF HIGH RISK FACILITIES

The City maintains a list of industrial and high risk facilities within the city limits (**Appendix H**). The list of industrial facilities will be reviewed annually for accuracy and will be updated when necessary.

Responsible Departments: Administration/JCDH

INSPECTION OF HIGH RISK FACILITIES

JCDH will inspect these sites annually on behalf of the City. See **Appendix H** for the Industrial Inspection form.

MONITORING AND REPORTING

MONITORING LOCATIONS

JCDH will take a grab sample annually on behalf of the City at the site listed below. See **Figure 3**: **Sampling Site** for a map of the site.

The site locations are as follows:

Water Body	Latitude, Longitude	Description	
Newfound Creek	33.655549, -86.872087	Grab Sample	

Responsible Department: JCDH

IMPAIRED WATERWAYS

The City will review the waterbodies listed in the latest final §303(d) list, annually. If a waterbody becomes listed that falls within the MS4 boundary, the SWMPP will be updated as needed.

MONITORING PARAMETERS AND FREQUENCY

Grab samples will be analyzed for the following parameters:

- a. E. coli
- b. Total Nitrogen (TN) (mg/l)
- c. Total Phosphorus (mg/l)
- d. Total Suspended Solids (TSS) (mg/l)
- e. Temperature
- f. pH/ORP
- g. Turbidity (NTU)
- h. Conductivity
- i. Dissolved Oxygen (mg/l)
- j. Ammonia Nitrogen (NH3-N) (mg/l)
- k. Biochemical Oxygen Demand (BOD) (mg/l)
- I. Chemical Oxygen Demand (COD) (mg/l)
- m. Hardness as CaCO3 (mg/l)
- n. Nitrate plus Nitrite Nitrogen (NO3+NO2-N) (mg/l)
- o. Oil and Grease (mg/l)
- p. Total Dissolved Solids (TDS) (mg/l)
- q. Total Kjeldahl Nitrogen (TKN) (mg/l)

Responsible Department: JCDH

SAMPLE TYPE, COLLECTION AND ANALYSIS

JCDH will collect grab samples and submit them to a certified laboratory for analysis.

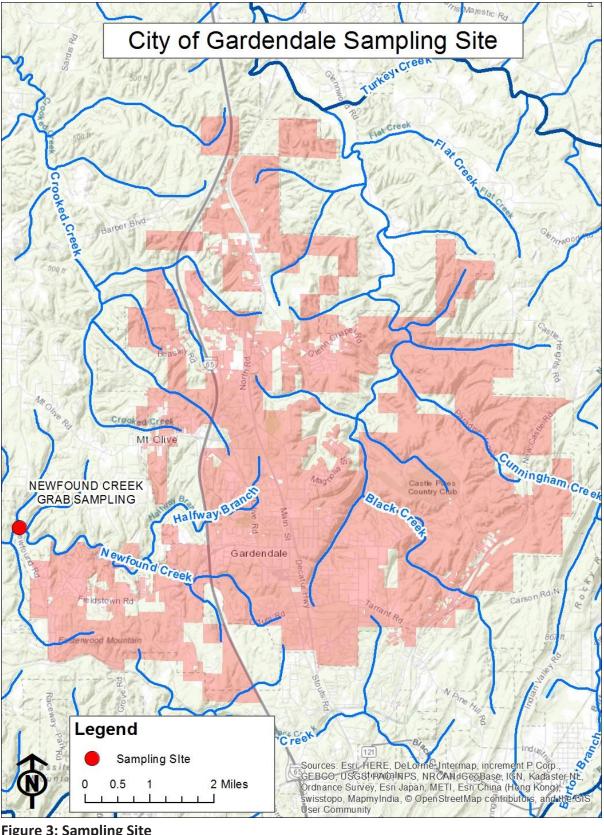


Figure 3: Sampling Site

OTHER REQUIREMENTS

SWMPP PLAN REVIEW AND MODIFICATION

This plan will be reviewed annually and updated as necessary.

Responsible Departments: All Departments

ANNUAL REPORT

The Annual Report will be compiled by JCDH for the City of Gardendale.