

# STORM WATER MANAGEMENT PROGRAM PLAN January 2019

**Prepared For** 

City of Midfield

725 Bessemer Super Hwy. Midfield, Alabama 35228

Prepared by

Jefferson County Department of Health.

1400 Sixth Avenue South Birmingham, Alabama 35233 (205) 930-1230

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#### **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.

01/15/2019

Gary Richardson

Mayor, City of Midfield

or, orly or whatera

Address: 725 Bessemer Super Highway

Midfield, Alabama 35228

Phone: (205) 923-7578

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### INTRODUCTION

#### REGULATORY OVERVIEW

The City of Midfield (City) was issued by the Alabama Department of Environmental Management (ADEM) a Municipal Separate Storm Sewer System (MS4) Individual Phase I Permit (ALS000030) on July 21<sup>st</sup>, 2017 (**Appendix A**). This permit went into effect on August 1, 2017. Previously, the City was included as a Co-Permittee under permit number ALS000001.

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 ALS000030, 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

Midfield's MS4 boundary is bound to the north by the city of Fairfield, to the south by the cities of Birmingham and Brighton, and to the east and west by the city of Birmingham and Jefferson County. Approximately 2.649 square miles of residential, commercial, industrial, undeveloped lands, and streams make up the MS4 boundary. See **Figure 1: MS4 Boundary**.

There is one major waterbody, Valley Creek, within the MS4 boundary. The designated use of this section of the Valley Creek is Agricultural and Industrial Water Supply (A&I).

# 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 Midfield's' MS4. These ordinances are found in **Appendix A**.

- Ordinance #2018-4, Post Construction Ordinance: Establishes procedures to address
  the discharge of pollutants in post-construction storm water runoff to the MS4 from
  new development and re-development.
- Ordinance #2018-5, 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.
- Ordinance #2018-6, Illicit Discharge Ordinance: Prohibits non-storm water discharges to the MS4.
- Ordinance #38: Makes it unlawful to deposit to deposit any debris in the gutter or storm drain that can cause damage or an obstruction.
- Ordinance #290, Flood Damage Prevention 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 #103, Anti-Litter Ordinance: Makes it unlawful to litter upon a vacant lot, public property, sidewalk or street in the city. Also encourages the use of receptacles in a manner to prevent litter from being scattered by the elements.
- Ordinance #2006-6, Nuisance Ordinances: Establishes a law against leaving abandoned and non-usable motor vehicles in the street or within public view.
- Ordinance #2007-4, Littering Nuisance Ordinance: Institutes a law against leaving litter, junk or household debris on public or private property.

In 2011 the City of Midfield 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	
JCDH/SWMA	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	
Public Works	Post signs prohibiting littering and illegal dumping	
Administration	Educating individuals and households on reducing storm water pollution	
Administration	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/SWMA	Develop MS4 map of outfalls	
Administration	Develop applicable ordinances and other regulatory mechanisms	
JCDH/SWMA	Screen 20% of the stream miles during dry weather conditions	
JCDH/SWMA/City Personnel	Illicit discharge source identification	
Inspections/JCDH	Elimination of illicit discharges	
Public Works/Inspections	Procedures to notify ADEM of a suspected illicit discharge entering the MS4 from an adjacent MS4	
Administration	Illicit discharge public reporting system	
JCDH/SWMA	Educating employees on detecting an IDDE , tracing the source of and eliminating illicit discharge	
Administration	Ordinance/Regulatory mechanism availability	
	Construction Site Storm Water Runoff Control	
Engineering	Site plan reviews	
Inspections	Site inspection plan	
Inspections	Inspection staff training	
Inspections	Construction site inspection checklist	
Administration	Enforcement Response Plan (ERP)	
Administration and Inspections	Construction site operator education	
Post-Consti	ruction Storm Water Management in New Development and Re-Development	
Administration	Develop applicable ordinances and other regulatory mechanisms	
Inspections	Inventory of post construction structural controls	

DEPARTMENT	RESPONSIBILITIES	
	Spill Prevention and Response	
Fire	Spill prevention/spill response plan	
JCDH	Educating employees on spill prevention/spill response	
Pollutio	n Prevention/Good Housekeeping for Municipal Operations	
All Departments	Inventory of municipal facilities	
All Departments	Good housekeeping practices SOP	
All Departments	Inspection plan	
JCDH	Educating employees on good housekeeping	
Ар	plication of Pesticides, Herbicides, and Fertilizers(PHFs)	
Parks and Recreation	Application and storage of PHFs	
JCDH	Educating employees on PHFs usage and storage	
	Dils, Toxics, and Household Hazardous Waste Control	
Administration	Public education on proper disposal	
JCDH	Educating employees on oils, toxics, and household hazardous waste	
	Industrial Storm Water Runoff	
JCDH/Administration	ration Inventory of high risk facilities	
JCDH	Inspection of high risk facilities	
	Wet Weather Monitoring and Reporting	
JCDH	Monitoring locations	
JCDH	Impaired waterways review	
JCDH	Sampling	
	Other Requirements	
JCDH/Administration	SWMPP plan review and modification	
JCDH/Administration	Annual Report submittal	

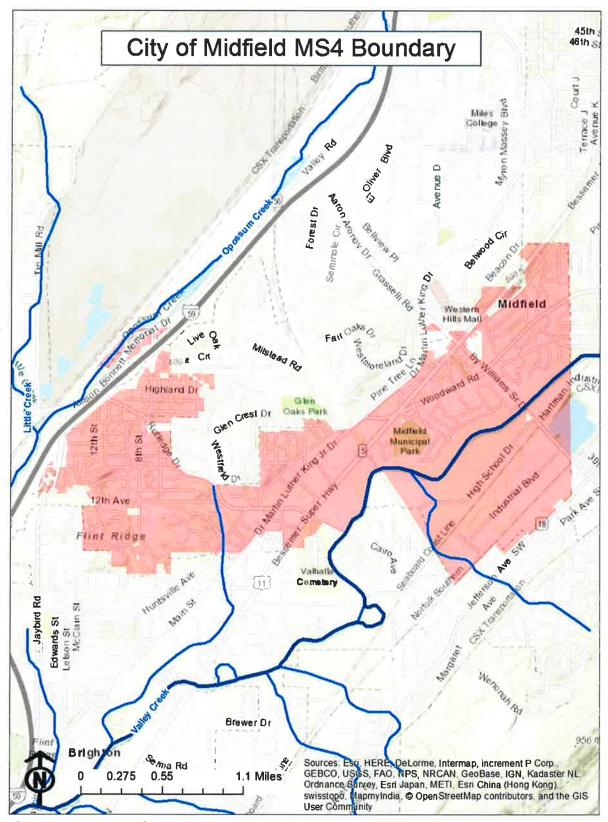


Figure 1: MS4 Boundary

STORM WATER COLLECTION SYSTEMS OPERATIONS

STRUCTURAL CONTROLS MAPPING

The City currently has no owned/maintained structural controls within the MS4 boundary

limits.

The City will monitor the addition of any City owned/ maintained structural controls.

**Responsible Department: Inspections** 

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. While the City does not own/maintain structure controls currently, any future inspections will be performed by a city inspector and/or a contractor. Any deficiencies or maintenance recommendations listed on the inspection form in regards to

the structural control will be addressed by Public Works.

**Responsible Department: Inspections** 

STANDARD OPERATING PROCEDURE (SOP) FOR STRUCTURAL CONTROL INSPECTION

AND MAINTENANCE PROCEDURES

The standard inspection form found in Appendix B is used to document structural control inspections. Once any maintenance is completed, a city inspector and/or a contractor will reinspect the Structural Control to ensure the structure can effectively function as designed.

**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.

**Responsible Department: Public Works** 

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# FLOATABLES, LITTER, SEDIMENT AND DEBRIS IN STRUCTURAL CONTROLS

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 inspection documentation and will remove the noted items. Public Works will maintain documentation of the estimated amounts of floatables, litter, sediment and debris removed during maintenance activities using the Storm Water Online Activity Record (SOAR) program.

**Responsible Department: Public Works** 

# PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORM WATER IMPACTS

#### DEVELOPMENT AND IMPLEMENTATION OF THE SWMPP

The City will seek public input on the SWMPP by posting the draft SWMPP on Midfield's 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 with the annual report on January 31st.

#### **Responsible Department: Administration**

#### PUBLIC ACCESS TO CITY STORM WATER DOCUMENTS

The City posts copies of the current Annual Report, draft SWMPP, current SWMPP and the NPDES permit on the City's website. The documents will be updated on the website as they are approved by the city council and/or submitted to ADEM.

#### **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

The City currently maintains litter signage within the Midfield City Hall and B.Y. Williams Sr. Dr. at Valley Creek. The City will investigate options for installing additional signage, in practical locations, referencing the City's litter control ordinance. Administration will approve the messages and Public Works will install the signs and/or labels.

#### **Responsible Department: Administration and Public Works**

# EDUCATING INDIVIDUALS AND HOUSEHOLDS ON REDUCING STORM WATER POLLUTION

The City has posted on its website information describing Midfield's Storm Water Program. 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. The information and links will be modified and/or updated on the

website as needed. These same brochures on storm water issues are placed at City Hall for public pickup.

**Responsible Department: Administration** 

#### COMMUNITY INVOLVEMENT WITH THE STORM WATER PROGRAM

#### **GENERAL PUBLIC**

The City has a storm water page on its website and places brochures in City facilities containing information that informs 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.

The storm water page will be updated as needed.

**Responsible Department: Administration** 

#### **BUSINESSES**

The City has a storm water page on its website and places brochures in City facilities 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.

The storm water page will be updated as needed.

Responsible Department: Administration

#### HOMEOWNERS, LANDSCAPERS, AND PROPERTY MANAGERS

The City has a storm water page on its website and places brochures in City facilities informing homeowners, landscapers, and property managers on the following topics:

- BMPs and storage of pesticides, herbicides, and fertilizers.
- Detention/retention pond maintenance.
- General impacts of storm water from impervious surfaces into surface water.

The storm water page will be updated as needed.

**Responsible Department: Administration** 

#### ENGINEERS, CONTRACTORS, AND DEVELOPERS

The City has a storm water page on its website and places brochures in City facilities informing engineers, contractors and developers on the following topics:

- 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.

The storm water page will be updated as needed.

**Responsible Department: Administration** 

#### EVALUATING THE EFFECTIVENESS OF THE PUBLIC EDUCATION PROGRAM

The City will 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 the City facilities on an annual basis.

Responsible Department: Administration

#### **PUBLIC AWARENESS ACTIVITIES**

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.

**Responsible Department: Administration** 

# ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

#### MS4 MAP

Maps of the major outfalls, structural controls owned/maintained by the City, 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** and a list of the structural controls' latitude and longitude can be found in **Appendix B**.

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

**Responsible Party: JCDH** 

#### ORDINANCE/REGULATORY MECHANISM

Ordinance 2018-6, passed in 2018, addresses illicit discharges as required by the City's Permit.

**Responsible Department: Administration** 

#### DRY WEATHER SCREENING PROGRAM

Dry weather screening of 20% of the stream miles will be performed annually with 100 percent 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. Protocols for dry weather are also found in the Standard Operating Procedure Manual also found in **Appendix A**. In addition to the required dry weather screening program, Public Works staff will be educated annually to recognize and report potential illicit discharges while conducting their day to day operations. Also, all citizen complaints regarding potential illicit discharges will be investigated.

#### 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 Parties: City Personnel and/or JCDH

#### ILLICIT DISCHARGE ELIMINATION

Once the source and responsible party of an illicit discharge has been identified, either the City will take action through its pertinent ordinances or JCDH will through its regulations.

**Responsible Parties: Midfield Inspections 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: Midfield Public Works or Midfield Inspections** 

#### ILLICIT DISCHARGE REPORTING BY THE PUBLIC

The City receives calls for illicit discharges at the City Hall phone number 205-923-7578 frequently. There is also a phone number, 205-424-0110, listed on the City's website to report illicit discharges.

**Responsible Department: Administration** 

#### **PERSONNEL TRAINING**

Non-First Responder City Personnel will be trained by JCDH on IDDE identification and response annually.

**Responsible Party: JCDH** 

#### ORDINANCE/REGULATORY MECHANISM AVAILABILITY

All ordinances and regulatory mechanisms can be found on the City's website, <a href="http://www.cityofmidfield.com/">http://www.cityofmidfield.com/</a>, or through the link to Municode on the City's website.

**Responsible Department: Administration** 

### CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

#### **EROSION AND SEDIMENTATION CONTROL COMPLAINTS**

The City frequently receives calls about construction and sedimentation runoff at the city hall phone number (205-923-7578). These calls are directed to the Department of Building Safety and Inspections (205-228-9076). The website lists the Department of Building Safety and Inspections as the contact number for construction complaints.

**Responsible Department: Inspections** 

#### SITE PLAN REVIEWS

According to Ordinance # 2018-5, a BMP plan must be submitted to the City along with the permit application before the commencement of 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** 

#### SITE INSPECTION PLAN

The City will perform an inspection, at a minimum, every two months on 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: Inspections** 

#### TRAINING OF MS4 SITE INSPECTION STAFF

City staff responsible for construction site inspections receive QCI 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 # 2018-5.

**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 will develop a storm water page on its website and have 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.

The storm water page will be updated as needed.

**Responsible Department: Administration and Inspections** 

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

#### ORDINANCE/REGULATORY MECHANISM

City Ordinance # 2018-5 meets the requirements for post-construction storm water management.

The Post-Construction 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.

#### **Responsible Department: Administration**

#### INVENTORY OF POST CONSTRUCTION STRUCTURAL CONTROLS

The City currently has no publically-owned structural controls. The City will develop a list of privately-owned structural controls for those built after the codification of the new requirements. The City will update annually the list of publicly-owned post construction structural controls and the privately-owned structurally controls under the new requirements.

**Responsible Department: Inspections** 

# SPILL PREVENTION AND RESPONSE

#### CITY RESPONSE PROTOCOL

The Midfield Fire Department 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. Midfield's Fire Department and EMA track the spills, the response, and the cleanup activities for all spills.

#### SPILL PREVENTION/SPILL RESPONSE PLAN

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

**Responsible Department: Fire** 

#### PERSONNEL SPILL PREVENTION/RESPONSE TRAINING

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

# POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

#### MUNICIPAL FACILITIES INVENTORY

See **Figure 2: Municipal Properties** for a map of municipal properties as well as the locations for vehicle and equipment maintenance facilities. The map shows which department maintains which properties. Generally, Parks and Recreation (part of Public Works) use pesticides, herbicides and fertilizers (PHF) while Public Works only mows. Parks and Recreations usage of PHFs is minimal. The map will be reviewed annually and updated if needed. JCDH will compile the data provided by each Department.

**Responsible Department: All Departments** 

#### GOOD HOUSEKEEPING PRACTICES SOP

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

**Responsible Department: All Departments** 

#### **INSPECTION PLAN**

Annual inspections will be conducted for municipal facilities, to include municipal maintenance shops and equipment yards, for good housekeeping practices, including BMPs. See **Appendix F** for the inspection checklist.

**Responsible Department: All Departments** 

#### GOOD HOUSEKEEPING TRAINING PROGRAM

City staff will be educated annually on good housekeeping practices. The 2011 SWMA SOP Manual (Appendix A) contains procedures related to Good Housekeeping.

Responsible Party: JCDH

#### SHORT TERM AND LONG TERM TRASH REMOVAL STRATEGY

The City has a SOP for special events that promotes the reduction of trash and debris into the City's MS4 as well as Waters of the State (**Appendix F**).

# APPLICATION OF PESTICIDES, HERBICIDES, AND FERTILIZERS (PHFS)

#### APPLICATION AND STORAGE

The Park and Recreation Department usage of PHFs is minimal. PHFs are purchased at a local hardware stores (usually in bottle size) and are completely used in a single application. Each chemical used is applied per the labeling instructions. City staff responsible for application of PHFs receive annual training in safe use, storage, and disposal of PHFs. All contractors contracted to apply pesticides or herbicides to City property shall provide proper certification and licensing before performing work. Also, contractors contracted to apply fertilizer must provide qualification in utilizing proper nutrient management practices.

The SOP manual (Appendix A) contains procedures related to usage and storage of PHFs.

Responsible Department: Park and Recreation Department (part of Public Works)

#### PHF TRAINING PROGRAM

City staff will be educated annually on proper PHF practices.

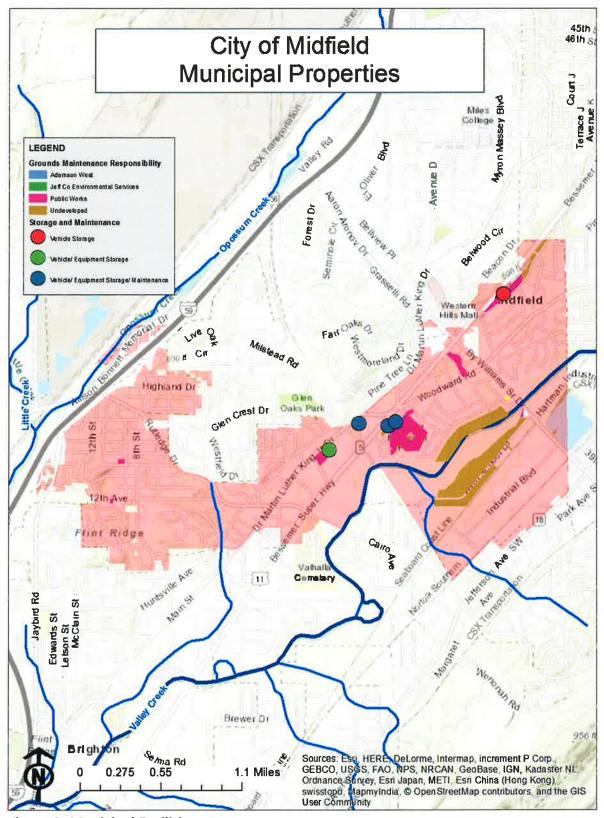


Figure 2: Municipal Facilities

OILS, TOXICS, AND HOUSEHOLD HAZARDOUS WASTE

PUBLIC EDUCATION ON PROPER DISPOSAL

The city has contact information on the City's website on where to report spills, illicit discharges

and improper disposals.

The City also provides a list of facilities in the area that accept used oil on the City's storm water website. Brochures on oils, toxics, and household hazardous waste are on the City storm

water website 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 by JCDH.

**Responsible Party: JCDH** 

INDUSTRIAL STORM WATER RUNOFF

INVENTORY OF HIGH RISK FACILITIES

The City maintains a list of industrial and high risk facilities within the city limits, see Appendix

**G**. This list is updated annually.

The list of industrial facilities will be reviewed annually for completeness and accuracy and will be updated when necessary. A map of the industrial and high risk facilities can be found in

Figure 3: Industrial and High Risk Facilities.

**Responsible Party: JCDH and Administration** 

INSPECTION OF HIGH RISK FACILITIES

JCDH will inspect these sites annually on behalf of the city. See Appendix G for the Industrial

Inspection form.

**Responsible Party: JCDH** 

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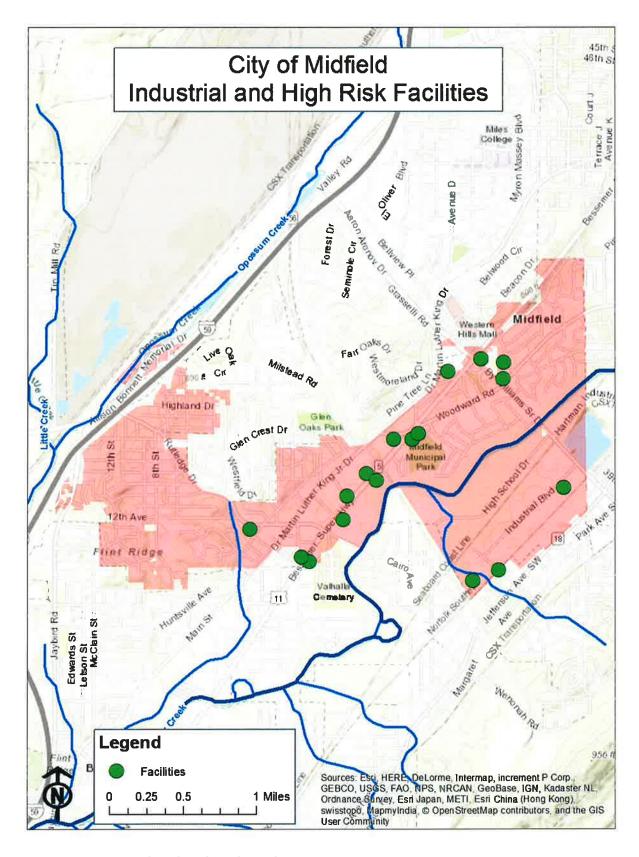


Figure 3: Industrial and High Risk Facilities

# WET-WEATHER MONITORING AND REPORTING

#### MONITORING LOCATIONS

JCDH will take wet-weather grab samples at sites on Valley Creek and two tributaries to Valley Creek once every year on behalf of the City. See **Figure 4: Midfield Sampling Sites** for a map of the sampling sites

The site locations are as follows:

Water Body	Latitude, Longitude	Description
Valley Creek	33.425456, -86.95317	Grab Sample and Water Quality Sonde Site
Tributary to Valley Creek (runs through Brookwood Park)	33.45815, -86.907794	Grab Sample
Tributary to Valley Creek (runs near Rutledge Drive)	33.43316, -86.946071	Grab Sample

An hourly water quality sonde will be placed on Valley Creek. The sonde will be managed by the United States Geological Survey (USGS). The site's title is USGS 02461405 VALLEY CREEK BELOW BRIGHTON ALA.

**Responsible Party: 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.

**Responsible Party: JCDH** 

#### 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)

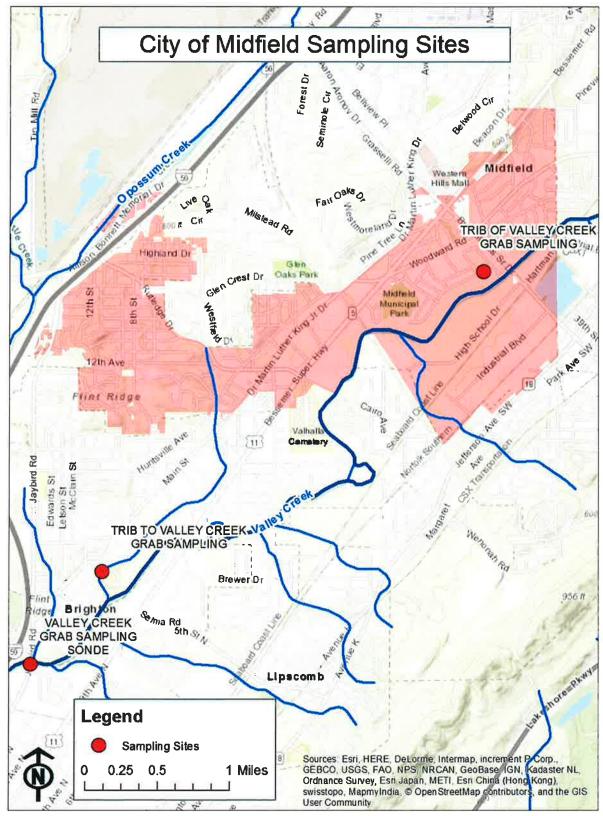
The water quality sonde will monitor the following parameters at least hourly:

- a. Temperature
- b. pH/ORP
- c. Turbidity (NTU)
- d. Conductivity
- e. Dissolved Oxygen
- f. Water level

**Responsible Party: JCDH** 

#### SAMPLE TYPE, COLLECTION AND ANALYSIS

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



**Figure 4: Trussville Sampling Sites** 

# OTHER REQUIREMENTS

# SWMPP PLAN REVIEW AND MODIFICATION

This plan will be reviewed annually and updated as necessary.

**Responsible Department: All Departments** 

#### ANNUAL REPORT

The Annual report will be compiled by JCDH for the city of Midfield.