CITY OF BESSEMER

THE MARVEL CITY

1700 Third Avenue North ● Bessemer ● AL 35020

Storm Water Management Program Plan (SWMPP)

Revision:
June 2018

Prepared by:
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Stormwater Specialist
City of Bessemer
And
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Bessemer City Engineer
And
EEFS Company, PC

Signatory and Certification:

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.

6/5/18

Kenneth E. Gulley
Mayor, City of Bessemer

Date

1700 Third Avenue North
Bessemer, AL 35020

(205) 424-4060

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1. INTRODUCTION

1.1 Regulatory Overview

The City of Bessemer (the City) was issued by the Alabama Department of Environmental Management (ADEM) a Municipal Separate Storm Sewer System (MS4) Phase 1 Permit No. ALS000022 on November 30, 2017, **Appendix A**. The permit took effect on December 1, 2017 and replaced the previous jointed-municipals Permit No. 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)". (PART II, A. 1.)

Per the requirements of NPDES Permit No. ALS000022, BMPs, measurable goals, and responsibility designations are provided for each of the following program elements:

1. Storm Water Collection System Operations
2. Public Education and Public Involvement on Storm Water Impacts
3. Illicit Discharge Detection and Elimination
4. Construction Site Strom Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Re-Development
6. Spill Prevention and Response
7. Pollution Prevention/Good Housekeeping for Municipal Operations
8. Application of Pesticide, Herbicide, and Fertilizers
9. Oils, Toxics, and Household Hazardous Waste Control
10. Industrial Storm Water Runoff

1.2 MS4 Jurisdictional Boundary

See **Appendix B** for the City MS4 jurisdictional boundary map.

2. STORM WATER COLLECTION SYSTEM OPERATIONS

2.1 Structural Controls Mapping

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

The City will continue to monitor and integrate any addition of City owned/maintained structural controls.

Responsible Department: Building Inspections

2.2 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 C** on a semi-annual basis, at a minimum. While the City does not own/maintain structure controls currently, any future inspections will be done by a city inspector. Any deficiencies or maintenance recommendations listed on the inspection form in regards to the structural control will be addressed by Building Inspections.

The City is not responsible for any routine inspection or maintenance for private structures.

Responsible Department: Building Inspections

2.3 Standard Operating Procedure (SOP) For Structural Control Inspection and Maintenance Procedures

The standard inspection form found in **Appendix C** is used to document structural control inspections. Once any maintenance is completed, a city inspector will re-inspect the Structural Control to make sure the structure can effectively function as designed.

Responsible Department: Building Inspections

2.4 Stabilization and Re-vegetation of Eroded Areas

During the inspection of the structural controls, areas of erosion will be documented. The Building Inspection Department will receive a copy of the inspection documentation noting the eroded areas and will stabilize and re-vegetate these areas.

Responsible Department: Building Inspections

2.5 Floatables, Litter, Sediment and Debris in Structural Controls

All notable floatables, litter, sediment, and/or debris found during the structural inspection will be documented. The Building Inspection Department will receive a copy of the inspection documentation and will remove the noted items. Public Works Department will maintain documentation of the estimated amounts of floatables, litter, sediment and debris removed during maintenance activities.

Responsible Department: Building Inspections

3. PUBLIC EDUCATION AND PUBLIC INVOLEMENT ON STORM WATER IMPACTS

3.1 Development, Revision and Implementation of the SWMPP

After the SWMPP being revised per the NPDES MS4 permit, the City is in the process to implement and comply with the permit requirements.

Responsible Department: Administration

3.2 Targeted Pollutant Sources for Public Education

The City discusses targeted pollutant sources through the workshops sponsored by the City.

Responsible Department: Administration

3.3 Reduction of Litter, Floatables and Debris

The City currently maintains a street sweeping program year-round by the Public Works Department.

Responsible Department: Administration

3.4 Educating Individuals and Households on Reducing Storm Water Pollution

Currently the City has posted on its website a page describing the Bessemer's Stormwater program. The page includes general information about what is stormwater, pollution prevention, and different ways to reduce stormwater pollution in relation to the different community segments.

Responsible Department: Administration

3.5 Community Involvement with the Storm Water Program

3.5.1 General Public

The City will continuously improve the storm water page on its website with information that informs the general public of:

- General impacts litter has on waterbodies and ways to reduce the litter
- General impacts od storm water into 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

Responsible Department: Administration

3.5.2 Business

The City will continuously improve the storm water page on its website with 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

Responsible Department: Administration

3.5.3 Homeowners, Landscapers, and Property Managers

The City will continuously improve the storm water page on its website to inform 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

Responsible Department: Administration

3.5.4 Engineers, Contractors, and Developers

The City will continuously improve the storm water page on its website to inform engineers, contractors, and developers on the following topics:

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

Responsible Department: Administration

3.6 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 website page annually and the number of attendances to the City quarterly lunch and learn programs.

Responsible Department: Administration

3.7 Public Awareness Activities

- The City has a quarterly lunch and learn program to educate public with various topics
- The City will sponsor elementary school student attendance at related storm water events
- The City will work with students at Bessemer City High School to educate them in storm water related topics

Responsible Department: Administration

4. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

4.1 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 D**. Also, a list of the major outfalls latitude and longitude coordinates can be found in **Appendix D** and a list of the structural controls latitude and longitude can be found in **Appendix D**.

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Responsible Department: Building Inspection

4.2 Ordinance/Regulatory Mechanism

City of Bessemer Stormwater Management Ordinance
City of Bessemer Zoning Ordinance
City of Bessemer Subdivision Ordinance

The City will review and update these ordinances to confirm to the requirements of NPDES permit ALS000022.

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Responsible Department: Building Inspection

4.3 Dry Weather Screening Program

At a minimum, dry weather screening of 15%-20% of the major outfalls will be performed annually with 100 percent of the major outfalls screened at least once per the five-year permit period. Currently there are no priority outfalls identified within the MS4 boundary, but if during the dry weather inspections, they are identified, they will be screened on an annual basis. City 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 D** will be filled out for each outfall inspected.

In addition to the required dry weather screening program, Public Works staffs and inspectors will be trained 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.

Responsible Department: Building Inspection and Public Works

4.4 Source Identification

If during the dry weather screenings, Public Works Department identification, or citizen complaint, an outfall is found to be discharging a liquid, the city inspector 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 the city inspector and analyzed by a qualified lab. Based on the lab results, the outfall will be prioritized and scheduled for further investigation if needed.

Responsible Department: Building Inspection and Public Works

4.5 Illicit Discharge Elimination

Bessemer Fire Department conducts pre-incident plans practices throughout the permit year. These pre-incident plans are conducted at facilities that are NPDES facilities. The Fire Department walks through each site to identify where hazardous materials are stored and they develop a plan to prevent the release of hazardous materials during an emergency and identify where is illicit discharge at the facility. As a part of these comprehensive inspections, the spill prevention, countermeasures and control plans of those facilities are reviewed as well as any NPDES storm water permit issued by ADEM.

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

The City will review and update this ordinance to conform to NPDES permit ALS000022.

More BMPs will be found in **APPENDIX E**, City of Bessemer Integrated Storm Water Pollution Prevention Program.

Reported spill and illicit discharge investigation form is in **APPENDIX F**.

Responsible Department: Building Inspection and Fire Department

4.6 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 G**.

Responsible Department: Building Inspection and Public Works

4.7 Illicit Discharge Reporting by the Public

The City does not currently have a dedicated way for the individuals to contact the City. The City will specify the Fire Department and City Stormwater Specialist on the storm water webpage to easily allow the public to report illicit discharges to the City.

Responsible Department: Administration

4.8 Personnel Training

Non-First Responder of City Personnel will be trained by the City of Bessemer Stormwater Specialist on IDDE identification and response annually.

Responsible Department: Administration

4.9 Ordinance/Regulatory Mechanism Availability

All ordinances and regulatory mechanisms can be found on the City's website or through the link to Municode on Bessemer's website.

Responsible Department: Administration

5. CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

5.1 Site Plan Review

City Zoning Ordinance Section 2.13 states that submission of a preliminary development plan and a final development plan is required prior to the issuance of a building permit for all developments in all but single-family residence districts.

Upon receipt of an applicant's final development plan, the City Engineer shall appropriate for his review, report, and recommendation to the City Planning and Zoning Commission.

No land disturbing activity may be commenced prior to issuance of a permit.

Responsible Department: Building Inspection

5.2 Site Inspection Plan

The City will perform site inspections on sites that have been issued land disturbance permits in accordance with the frequency requirements of the NPDES permit. Erosion controls and best management practices will be inspected during the site inspections. If there are deficiencies noted, the permit holder will be notified that they did not pass inspection, and will need to correct deficiencies and request a re-inspection.

Responsible Department: City Engineer and Building Inspection

5.3 Training of MS4 Site Inspection Staff

City staff responsible for construction site inspections receive QCI training annually.

Responsible Department: Building Inspection

5.4 Construction Site Inspection Checklist

See **APPENDIX H** for the City's Construction Storm Water Inspection and Enforcement Standard Operating Procedures (SOP) Manual.

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

Responsible Department: City Engineer and Building Inspection

5.5 Enforcement Response Plan (ERP)

An Enforcement Response Plan will be reviewed and updated and included in the City Ordinance.

Responsible Department: Administration

5.6 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 Building Inspection 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.

Responsible Department: City Engineer and Building Inspection

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

6.1 Ordinance/Regulatory Mechanism

The City's Subdivision & Development Regulations addresses storm water design requirements for post-construction storm water management.
The City will review its ordinances, codes, regulations, and procedures regarding post construction storm water management and make revisions as necessary per the permit. Reviews will specifically consider 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 with the ordinance or regulatory mechanism including the sanctions and enforcement mechanisms the permittee will use to ensure compliance. If an ordinance mechanism needs to be developed, then the permittee must provide a timeline for the development of the ordnance and/or regulatory mechanism.
- Procedures for post-construction inspections to include tracking and enforcement.
- Procedures to ensure adequate long-term operation and maintenance of BMPs.

The City Engineer and Building Inspection Department will have input into the ordinance's creation. Reviews will be competed in Fiscal Year 2018.

Responsible Department: City Engineer and Building Inspection

6.2 Inventory of Post Construction Structural Controls

The City currently has no publicly-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: Building Inspection

6.3 Post-Construction Hydraulic Design Requirements

The permit requires that a 1.1 inch rainfall over a 24-hour period proceeded a 72-hour antecedent dry period shall be the basis for the design and implementation of post-construction BMPs.

All property owners shall comply with City MS4 permit requirements if construction permits issued after 12/1/2017.

Responsible Department: City Engineer and Building Inspection

6.4 Post-Construction BMP Plan Review

All property owners/developers shall include the post-construction BMP plan as part of the development plan review process if construction permits to be issued after 12/1/2017.

Responsible Department: City Engineer and Building Inspection

6.5 Post-Construction BMP Plan "As Built" Submission

All property owners/developers are required the submission of an "as built" certification of the post-construction BMPs within 120 days of the completion of the construction or receiving of the certificate occupancy if construction permits to be issued after 12/1/2017.

All "as built" certifications shall be signed and sealed by Alabama licensed professionals.

Responsible Department: City Engineer and Building Inspection

6.6 Post-Construction BMP Annual Inspection

If construction permits to be issued after 12/1/2017, all property owners are required to perform, at a minimum, an annual post-construction inspection, **APPENDIX J**, to ensure that design standards are being met and require corrective actions to poorly functioning or inadequately maintained post-construction BMPs. The property owner shall document its post-construction inspection. Such document shall include, at a minimum:

- Facility type
- Inspection date
- Name and signature of the inspector
- Site location
- Owner information (name, address, phone number, fax, and email)
- 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 outfall structures
- Photographic documentation of all critical storm water BMP components
- Specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP
- Maintenance agreements for long-term BMP operations and maintenance
- A copy of the “as built” certification of the post-construction BMPs which was accepted by City under Section 6.5

All property owners/operators are required to keep records of post-construction inspections, maintenance activities and make them available to the City upon request.

Responsible Department: City Engineer and Building Inspection

7. SPILL PREVENTION AND RESPONSE

7.1 Spill Prevention / Spill Response Plan

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

Responsible Department: Fire Department

7.2 Personnel Spill Prevention/Response Training

Bessemer 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.

Responsible Department: Fire Department

8. POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

8.1 Municipal Facilities Inventory

See **Appendix K** 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 Public Works Department mows and applies pesticides, herbicides, and fertilizers. The map will be reviewed annually and updated if needed. Public Works Department will compile the data provided by each Department.

Responsible Department: All Departments

8.2 Good Housekeeping Practices SOP

See **Appendix L** for the good housekeeping Practices SOP .

Responsible Department: Public Works Department

8.3 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 L** for the inspection checklist.

Responsible Department: Building Inspection and Public Works Department

8.4 Good housekeeping Training Program

City staff will be trained annually on good housekeeping practices as outlined in the SOP manual, see **APPENDIX L**.

Responsible Department: Building Inspection and Public Works Department

9. APPLICATION OF PESTICIDES, HERBICIDES, AND FERTILIZERS (PHFs)

9.1 Good housekeeping Training Program

The **Public Works Department** keeps annual records of pesticide, herbicides, and fertilizers (PHFs) used at municipal facilities. Each chemical used is applied per the labeling instructions. **Material safety data sheets (MSDS)** on each product are found in the chemical storage areas. City staff responsible for application of PHFs receives 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.
City facilities that store PHF will be inspected annually to determine proper storage, product labeling, and MSDS accessibility.

Responsible Department: Building Inspection

9.2 PHF Training Program

City staff will be trained annually on PHFs as outlined in the SOP manual.

Responsible Department: Building Inspection

10. OILS, TOXICS, AND HOUSEHOLD HAZARDOUS WASTE

10.1 Public Education on Proper Disposal

The City currently has on their website an SOP on how citizens should report spills, illicit discharges and improper disposals.
The City also provides a list of facilities in the area that accept used oil on the 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: Building Inspection

10.2 Annual Employee Training

Annual training on spill prevention is provided to City personnel by Bessemer Fire Department.

Responsible Department: Bessemer Fire Department

11. INDUSTRIAL STORM WATER RUNOFF

11.1 Inventory of High Risk Facilities

The City maintains a list of industrial and high risk facilities within the city limits, see **Appendix E**. This list is updated annually.

The list of industrial facilities 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 **Appendix E.**

Responsible Department: Building Inspection and Fire Department

11.2 Inspection of High Risk Facilities

Fire Department conducts comprehensive inspections annually.

Responsible Department: Building Inspection and Fire Department

12. WET-WEATHER MONITORING AND REPORTING

12.1 Monitoring Locations

The monitoring locations are as follows:

Watershed	**Valley Creek**	**Valley Creek**	**Shades Creek**	**Shades Creek**
Site ID	VCDW01	VCDW02	SCDW01	SCDW02
Address Nearest To	2433 19th Street, Bessemer	6591 Johns Rd, Bessemer	2098 John Hawkins Pkwy, Bessemer	7112 – 7310 Dickey Springs Rd, Bessemer
Type	In-Stream	In-Stream	In-Stream	In-Stream
Location	Lat: 33.420177 Long: -86.98039	Lat: 33.388216 Long:-87.059692	Lat: 33.354759 Long:-86.876954	Lat: 33.325883 Long:-86.948626

VCDW01 at bridge going to Hueytown

VCDW02 at WWTP

SCDW01 on 150 at bridge after Lake Cyrus Entrance

SCDW02 at bridge before Pleasant Hill Rd

Responsible Department: Building Inspection

12.2 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 Department: Building Inspection

12.3 Monitoring Parameters and Frequency

Grab samples will be analyzed for the following parameters by quarterly:

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 (NH_3-N) (mg/l)
k. Biochemical Oxygen Demand (BOD) (mg/l)
l. Chemical Oxygen Demand (COD) (mg/l)
m. Hardness as $CaCO_3$ (mg/l)
n. Nitrate plus Nitrite Nitrogen (NO_3+NO_2-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: Building Inspection

12.4 Sample Types, Collection and Analysis

The City will collect grab samples and run the sample analysis based on the permit requirements.

Responsible Department: Building Inspection

13. OTHER REQUIREMENTS

13.1 SWMPP Plan Review and Modification

This plan will be reviewed annually and updated as necessary.

Responsible Department: Building Inspection

13.2 Annual Report

The annual report will be complied by the City and compliance with the permit requirements (Part IV).

All annual reports shall be submitted to the Department electronically in a prescribed manner acceptable to the Department on or after December 21, 2020.

Responsible Department: Building Inspection

APPENDICES

APPENDIX A: City of Bessemer MS4 NPDES Permit ALS000022

APPENDIX B: City of Bessemer MS4 Jurisdictional Boundary Map

APPENDIX C: City of Bessemer Structural Control Inspection Form

APPENDIX D: Map of Major Outfalls, Structural Controls and Waters of State

APPENDIX E: City of Bessemer Integrated Storm Water Pollution Prevention Program

APPENDIX F: City of Bessemer Report Spill and Illicit Discharge Investigation Form

APPENDIX G: ADEM Notification by City Standard Operating Procedure (SOP)

APPENDIX H: City of Bessemer Construction Storm Water Inspection and Enforcement SOP Manual

APPENDIX I: City of Bessemer Construction Site Inspection Report

APPENDIX J: City of Bessemer Post-Construction BMP Inspection Report

APPENDIX K: Map of Municipal Property Locations

APPENDIX L: City of Bessemer Public Works Municipal Good Housekeeping Program

(Please visit Freddie Freeman, Stormwater Specialist,
at Bessemer City Hall
for the complete contents of appendixes)

1700 Third Avenue North
Bessemer, AL 35020
(205) 424-4060 Ext. 4188

(ONLY *MS4 – NPDES PERMIT ALS000022*,
***FORMS* AND *CHECKLISTS* INCLUDED)**

APPENDIX A:
City of Bessemer
MS4 NPDES Permit ALS000022

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE:	CITY OF BESSEMER
AREA OF COVERAGE:	CORPORATE BOUNDARIES OF THE CITY OF BESSEMER
PERMIT NUMBER:	ALS000022
RECEIVING WATERS:	WATERBODIES WITHIN THE CORPORATE BOUNDARIES OF CITY OF BESSEMER

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:	NOVEMBER 30, 2017
EFFECTIVE DATE:	DECEMBER 1, 2017
EXPIRATION DATE:	NOVEMBER 30, 2022

Marilyn Elliott

Alabama Department of Environmental Management

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PART I Applicability

A. Permit Area

This permit applies to the corporate boundaries of the City of Bessemer that are regulated by the Permittee and discharge to the Permittee's Municipal Separate Storm Sewer System (MS4).

B. Authorized Discharges

1. This permit authorizes all existing or new storm water point source discharges to waters of the State of Alabama from those portions of the (MS4s) owned or operated by the Permittee. Discharge of pollutants shall be reduced to the Maximum Extent Practicable (MEP), shall not cause, nor contribute to, violations of Alabama Water Quality Standards, and shall be in compliance with Total Maximum Daily Loads (TMDLs) where applicable.

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 provided that they have been determined not to be substantial contributor pollutants by the Permittee or the Department:
    a. Water line flushing
    b. Landscape irrigation (not consisting of treated, or untreated wastewater unless authorized by the Department)
    c. Diverted stream flows
    d. Uncontaminated ground water infiltration
    e. Uncontaminated pumped groundwater
    f. Discharges from potable water sources
    g. Foundation and footing drains
    h. Air conditioning drains
    i. Irrigation water (not consisting of treated, or untreated, wastewater unless authorized by the Department
    j. Rising ground water
    k. Springs
    l. Water from crawl space pumps
    m. Lawn watering runoff
    n. Individual residential car washing, to include charitable carwashes
    o. Residual street wash water
    p. Discharge or flows from firefighting activities (including fire hydrant flushing)
    q. Flows from riparian habitats and wetlands
    r. Dechlorinated swimming pool discharges

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 in compliance with a separate NPDES permit or where those dischargers have been determined not to represent significant sources of pollution, as identified by, and in compliance with, Part I.B.2;

2. Discharges of materials resulting from a spill, except emergency discharges required to prevent imminent threat to human health or to prevent severe property damage, provided reasonable and prudent measures have been taken to minimize the impact of the discharges; and

3. The discharge of sanitary wastewater through cross connections or other illicit discharges through the MS4 is prohibited.

PART II Storm Water Pollution Prevention and Management Programs

A. Storm Water Management Program (SWMP)

1. 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 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 program elements referenced in Part II.B. to include the following:

    a. A map of the Permittee's MS4 corporate boundaries;
    b. The BMPs that will be implemented for each control measure. Low impact development (LID)/green infrastructure (GI) shall be considered where feasible. Information on LID/GI is available on the following websites: http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf and http://epa.gov/polwaste/green/index.cfm.;
    c. The measureable goals for each of the program elements outlined in Part II.B.;
    d. The proposed schedule – including interim milestones, as appropriate, inspections, and the frequency of actions needed to fully implement each program element; and,
    e. The person and/or persons responsible for implementing or coordinating the BMPs for each separate program element.

4. Once the SWMPP is acknowledged by ADEM, activities and associated schedules outlined by the SWMPP or updates to the SWMPP are conditions of this permit.

5. Unless otherwise specified in this permit, the Permittee shall be in compliance with the conditions of this permit by the effective date.

B. Storm Water Program Elements and Requirements

1. Storm Water Collection System Operations

a. Structural Controls

i. For Permittee owned/maintained structural controls, the structural controls shall be operated in a manner to reduce the discharge of pollutants, to the MEP;

ii. For Permittee owned/maintained structural controls, the Permittee shall include in the SWMPP and implement the following:

1. Maintain a map of the structural controls;

2. Inspect existing and newly constructed structural controls on a semi-annual basis, at a minimum;
3. Develop a standard operating procedure (SOP) or inspection checklist for structural control inspection and maintenance procedures;
4. Stabilization and re-vegetation of eroded areas as needed; and
5. Floatables, litter, sediment and debris, in structural controls, shall be removed as needed.

iii. The Permittee shall maintain an inventory of structural controls, and maintain a tracking system for inspections and maintenance of the control structures; and

iv. The Permittee shall report each year in the annual report the following structural control information:

1. The number of inspections performed on structural controls, to include follow-up inspections. The inspection documentation (i.e. checklist) shall be made available upon request;
2. A summarization of the maintenance activities performed on structural controls;
3. The estimated amount of floatable, litter, sediment and debris that was removed, if applicable;
4. Copies of any contractual agreements for maintenance activities if not performed by the Permittee, if requested by the Department. The contractual agreement should specify maintenance activities performed and schedule; and
5. Updated structural controls map of Permittee-owned structural controls added during the preceding year with geographic coordinates.

2. **Public Education and Public Involvement on Storm Water Impacts**

a. The Permittee must further develop and implement a public education and outreach program to inform the community about the impacts from 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.

b. The Permittee shall include within the SWMPP the methods for how it will:

1. Seek and consider public input in the development, revision and implementation of the SWMPP;
2. Identify targeted pollutant sources the Permittee's public education program is intended to address;
3. Plans to specifically address the reduction of litter, floatables and debris from entering the MS4, that may include, but is not limited to:
    a. Labeling storm drain inlets and catch basins with "no dumping" message; and
    b. Posting signs referencing local codes that prohibit littering and illegal dumping at designated public access points to open channels, creeks, and other relevant waterbodies
4. Inform and involve individuals and households about the steps they can take to reduce storm water pollution; and
5. Inform individuals and groups on how to become involved in the storm water program (with activities such as local stream and lake restoration activities). 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:

i. 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.
   d. Impacts of illicit discharges and how to report them.

ii. General Public and Businesses to include Home-Based and Mobile Businesses
   a. BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials;
   b. Impacts of illicit discharges and how to report them.

iii. Homeowners, Landscapers, Property Managers and City Personnel
   a. Landscape techniques that protect water quality;
   b. BMPs for use and storage of pesticides, herbicides and fertilizers;
   c. BMPs for carpet cleaning and auto repair and maintenance; and
   d. Storm water pond maintenance.

iv. Engineers, City Personnel, Land Use Planners, Contractors and Developers
   a. Impacts of increased storm water flows into receiving water bodies;
   b. Technical standards for construction site sediment and erosion control;
   c. Storm water treatment and flow control BMPs; 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.

6. Evaluate the effectiveness of the public education and public involvement program; and
7. Organize and participate in activities that target the removal of litter, floatables, and debris from area waterways. The minimum number and the waterways these activities will target will be addressed in the SWMPP.

c. The Permittee shall report each year in the annual report the following information:

1) A description of the activities used to involve groups and/or individuals in the development and implementation of the SWMPP;
2) A description of the individuals and groups targeted and how many groups and/or individuals participated. If exact participation is not readily quantifiable, an estimation will be sufficient;
3) A description of the communication mechanisms or advertisements used to inform the public and the number of applications that were distributed (i.e. number of printed brochures, copies of newspapers, workshops, public service announcements, etc);
4) Results of the evaluation as required in Part II.B.2.b.6.; and
5) A list of the activities required in Part II.B.2.b.7 and the estimated amount of litter, floatables and debris removed during each activity.

d. The current SWMPP and latest annual report should be posted on the Permittee's website.

3. **Illicit Discharge Detection and Elimination (IDDE)**

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:

1) The development and annual update of an MS4 map. An initial map shall be provided in the SWMPP with updates provided each year in the annual report. The map shall include, at a minimum:

a. The latitude/longitude of all known major outfalls;
b. The names of all waters of the State within the MS4 area that receive discharges from these major outfalls; and,

2) To the extent allowable under State law, an ordinance or other regulatory mechanism that prohibits non-storm water discharges to the MS4. The ordinance or other regulatory mechanism shall:

a. Include escalating enforcement procedures and actions;
b. 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 the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4; and
c. Provide for the review of the IDDE ordinance and update as necessary.

3) 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 twenty (20) percent of the major outfalls at least once per year with all (100 percent) major outfalls screened at least once per five years. Also, 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 flow, from an unidentified source, is observed during the dry weather screening of an outfall, then the Permittee shall follow the sampling protocol as outlined in the SWMPP and developed in accordance with EPA's guidance manual, *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, October, 2004.

4) 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.

5) Procedures for eliminating an illicit discharge as outlined in the SWMPP;

6) Procedures to notify ADEM of a suspect illicit discharge entering the Permittee's MS4 from an adjacent MS4 as outlined in the SWMPP;

7) A mechanism for the public to report illicit discharges discovered within the Permittee's MS4 and procedures for appropriate investigation of such reports;

8) A training program for appropriate personnel on identification, reporting, and corrective action of illicit discharges; and

9) The Permittee shall post on its website the ordinance or other regulatory mechanism as required by Part II.B.3.a.2 of this Permit.

b. The Permittee shall report each year in the annual report the following information:

1) List of outfalls observed during the dry weather screening of the current year and a list of the outfalls to be dry weather screened during the upcoming year;
2) Updated MS4 map(s), if necessary;
3) Copies of the IDDE ordinance or other regulatory mechanism or provide a hyperlink for the ordinance or regulatory mechanism location on the Permittee's website; and,
4) The number of illicit discharges investigated, any associated sampling results, and the summary of corrective actions taken to include dates and timeframe of response.

4. **Construction Site Storm Water Runoff Control**

a. The Permittee shall further 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:

1) Procedures to require all applicable construction sites to obtain coverage under ADEM NPDES General Permit ALR10000 or other applicable NPDES permits;
2) To the extent allowed under State law, an ordinance or other regulatory mechanism to require effective erosion and sediment controls on qualifying construction sites, as well as sanctions to ensure compliance;
3) 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;
4) Procedures for site plan review to ensure the selection of effective erosion and sediment controls 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") and are appropriate for site conditions. Site plan review may be prioritized based on criteria outlined in the Permittee's SWMPP and may include, but is not limited to, size and location within priority watersheds. The plan review process will also consider potential water quality impacts;
5) A mechanism for the public to report complaints regarding pollution discharges from construction sites;
6) Inspection of sites to verify use and proper maintenance of appropriate BMPs. Inspections of construction sites shall be performed in accordance with the frequency specified in the table below:

Site	Inspection Frequency
Priority Constructions Sites (Defined in Part V.Y.)	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 construction sites not meeting the criteria specified above.	At a minimum, inspections must occur every two months

*In evaluating the threat to water quality, the following factors must be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; 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.	

7) Training for the Permittee's construction site inspection staff in the identification of appropriate construction best management practices (Example: QCI training in accordance with ADEM Admin Code. r. 335-6-12 or the Alabama Construction Site General Permit);
8) Development of a construction site inspection checklist;
9) Implementation of an enforcement response plan (ERP), which sets out the Permittee's potential responses to violations through progressively stricter actions as needed to achieve compliance. The ERP must include a system for tracking formal actions and ADEM referrals. Types of enforcement actions may include, but not limited to the following:

    a. Verbal Warnings—Verbal warnings are primarily consultative in nature and must specify the nature of the violation and required corrective action;
    b. Written Notices—Written Notices must stipulate the nature of the violation and the required corrective action, with deadlines for taking such action; and
    c. Escalated Enforcement Measures—Citations, stop work orders, withholding plan approvals/authorizations, monetary penalties, or additional measures to address persistent non-compliance, repeat or escalating violations or incidents of major environmental harm.

10) A program to make available a list of education and training materials and resources to construction site operators in the appropriate application and maintenance of erosion and sediment controls; and
11) The Permittee shall post on its website the ordinance or other regulatory mechanism required by Part II.B.4.a.2.

b. The Permittee shall include within the SWMPP the following information:

    1) Procedures for site plan reviews required by Part II.B.4.a.4;
    2) A site inspection plan meeting the requirements of Part II.B.4.a.6;
    3) Plans for the training of MS4 site inspection staff as required by Part II.B.4.a.7;
    4) A copy of the construction site inspection checklist as required by Part II.B.4.a.8;
    5) The ERP as required by Part II.B.4.a.9;
    6) Procedures and schedule for making available a list of education and training materials and resources to construction site operators in the appropriate application and maintenance of erosion and sediment controls required by Part II.B.4.a.10.

c. The Permittee shall report each year in the annual report the following information:

    1) A copy or a hyperlink to the ordinance or regulatory mechanism location on the Permittee's website;
    2) List of all active qualifying construction sites within the MS4 to include the inspections as required by Part II.B.4.a.6; and
    3) A summary of the following:

a. Number of construction site inspections;
b. Number of formal enforcement actions and description of violations;
c. Number of construction site runoff complaints received.
d. Number of new staff trained and follow-up training provided to existing staff.

d. The Permittee shall maintain the following information and make it available upon request:

1) Documentation of all inspections conducted of construction sites. The inspection documentation shall include, at a minimum, the following:

a. Facility type;
b. Inspection date;
c. Name and signature of inspector;
d. Location of construction project;
e. Owner/operator information (name, address, phone number, fax, and email);
f. 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
g. Photographic documentation of any issues and/or concerns.

2) Documentation of enforcement actions taken at construction sites to include, at a minimum, the following:

a. Name of owner/operator;
b. Location of construction project;
c. Description of violation;
d. Required schedule for returning to compliance;
e. Description of enforcement response used, including escalated responses if repeat violations occur;
f. Accompanying documentation of enforcement responses (e.g. notices of non-compliance, notices of violations, etc.); and
g. Any referrals to different Departments or Agencies.

3) Records of public complaints including:

a. Date, time and description of the complaint;
b. Location of subject construction sites; and
c. Identification of any actions taken (e.g. inspections, enforcement, corrections). Identifying information must be sufficient to cross-reference inspection and enforcement records.

4) Educational and Training Documentation for Construction Site Operators

a. List of education and training materials and resources

5. **Post-Construction Stormwater Management in Qualifying New Development and Re-Development**

The Permittee must develop/revise and implement a program, within 365 days from the effective date of this permit, to address the discharge of pollutants in post-construction storm water runoff to the MS4 from qualifying new development and re-development. Post-Construction Stormwater 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 stormwater management over the life of the property's use. These post construction controls should be considered during the initial site development planning phase.

a. The Permittee shall develop/revise and implement project review and enforcement procedures for qualifying new development and redevelopment projects, to the maximum extent practicable. Specifically, the Permittee shall:

1) Require landowners and developers to, the MEP, implement systems of appropriate structural and/or non-structural BMPs designed to reduce the discharge of pollutants, which may include, but is not limited to, the following:

a. Minimize the amount of impervious surfaces;
b. Preserve and protect ecologically sensitive areas that provide water quality benefits;
c. Provide vegetated buffers along waterways, and reduce discharges to surface waters from impervious surfaces such as parking lots;
d. Implement policies to protect trees, native soils and other vegetation; and
e. Minimize topsoil stripping and compacted soils where feasible.

2) Require landowners and developers to develop and maintain best management practices to ensure, to the maximum extent practicable, that post-construction runoff mimics pre-construction hydrology of the site. A 1.1 inch rainfall over a 24-hour period preceded by a 72-hour antecedent dry period shall be the basis for the design and implementation of post construction BMPs;
3) Encourage 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 website:http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf and http://epa.gov/nps/lid;
4) To the extent allowed under State law, adopt or amend an ordinance or other regulatory mechanism to ensure the applicability and enforceability of post-construction BMPs at all new qualifying development and redevelopment projects;
5) Require the submittal of a post-construction BMP plan, for review, as outlined in the SWMPP. The post-construction BMP plan review process may be integrated with the construction plan review process under Section II.B.4.a.4;
6) Require the submittal of an 'as built' certification of the post-construction BMPs within 120 days of completion;
7) Perform and/or require the performance of, at a minimum, an annual post-construction inspection to ensure that design standards are being met and require corrective actions to poorly functioning or inadequately maintained post-construction BMPs. The Permittee shall document its post-construction inspection. Such documentation shall include, at a minimum:

a. Facility type
b. Inspection date

c. Name and signature of inspector
d. Site location
e. Owner information (name, address, phone number, fax, and email)
f. 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;
g. Photographic documentation of all critical storm water BMP components;
h. Specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP; and
i. Maintenance agreements for long-term BMP operations and maintenance.

8) 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;
9) Require and/or perform adequate long-term operation and maintenance of post-construction BMPs, including one or more of the following, as applicable:

a. The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; and/or
b. Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; and/or
c. 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
d. Any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control management practices.

b. The Permittee shall include within the SWMPP the following information:

1) Procedures to develop, implement and enforce systems of appropriate structural and/or non-structural BMPs;
2) Procedures to develop, implement and enforce performance standards;
3) Procedures for encouragement of the utilization of LID/green infrastructure practices;
4) Procedures to ensure compliance with the ordinance or regulatory mechanism, including the sanctions and enforcement mechanisms the Permittee will use to ensure compliance. If an ordinance or regulatory mechanism needs to be developed, then the Permittee must provide a timeline for the development of the ordinance and/or regulatory mechanism;
5) Procedures for post-construction inspections, to include tracking and enforcement;
6) Procedures to ensure adequate long-term operation and maintenance of BMPs; and,
7) Development of an inventory of post-construction structural controls.

c. The Permittee shall report each year in the annual report the following information:

1) Provide a hyperlink for the ordinance or regulatory mechanism location on the Permittee's website;
2) A list of the post-construction structural controls installed and inspected during the permit year;
3) Updated inventory of post-construction structural controls including those owned by the Permittee;
4) Number of inspections performed on post-construction structural controls; and,
5) Summary of enforcement actions.

6. **Spill Prevention and Response**

a. The Permittee shall further develop/revise and implement a program to prevent, contain, and respond to spills that may discharge into the MS4. The Permittee must, at a minimum:

1) Investigate, respond, and conduct response actions or coordinate w/other agencies that may provide response actions as outlined in the SWMPP;
2) Develop a mechanism to track spills, response, and cleanup activities for all spills;
3) Use GIS or acceptable mapping scheme to identify spill locations, locations for inspections, and chronic problem areas;
4) Implement a spill prevention/spill response plan;
5) Provide training of appropriate personnel in spill and response procedures and techniques to mitigate pollutant discharges from spills to the MS4; and
6) Establish procedures to ensure that all spills are able to be promptly reported to appropriate authority.

b. The Permittee shall include within the SWMPP the following information:

1) The spill prevention/spill response plan; and
2) Procedures to provide training of personnel in spill prevention and response.

c. The Permittee shall report each year in the annual report the following information:

1) Summary of spills occurring during the reporting year, to include the following, at a minimum:
    a. Location;
    b. Spill Substance (i.e. fuel, oil, etc);
    c. Photographs (Spill and After clean-up) to be made available upon request; and
    d. Incident dates and time to resolution, including any enforcement actions taken and their result.
2) Documentation of employee training as required by Part II.B.6.b.2
    a. Title of Training Presentations; and
    b. Dated Attendance Sheets.

7. **Pollution Prevention/Good Housekeeping for Municipal Operations**

a. The Permittee shall further develop/revise, implement, and maintain a program that will prevent or reduce the discharge of pollutants in storm water run-off from municipal operations to the MEP. The program elements shall include, at a minimum, the following:

1) An inventory of all municipal facilities, including municipal facilities that have the potential to discharge pollutants via storm water runoff;
2) Develop and implement a short and long term strategy and program for the removal of trash from the waterways and tributaries in the permitted area in such a manner to quantify the removal of trash per year, which shall be included in the annual report. These strategies shall be included in the Permittee's SWMPP and shall be updated as necessary. This program shall address the following, at a minimum:

    a. Direct removal of trash from waterbodies;
    b. Direct removal of trash from the MS4;
    c. Direct removal of trash prior to entry to the MS4;
    d. Prevention through disposal alternatives; and
    e. Prevention through waste reduction practices, additional enforcement, and/or initiatives.

3) Require the following measures to be implemented in the public right of way for any event or wherever it is anticipated that substantial quantities of trash or litter may generated:

    a. Arrangement for temporary protection of preventative measures to the catch basins, where feasible, and
    b. Provide proper disposal of trash receptacles, cleanup of catch basins, as needed, and grounds of the event area within one business day subsequent to the event.

4) Ensure that trash receptacles, or similar trash capturing devices are provided and maintained in areas identified as high trash generated areas;
5) A Standard Operating Procedures (SOP) detailing good housekeeping practices to be employed at appropriate municipal facilities and during municipal operations that may include, but not limited to, the following:

    a. Equipment washing;
    b. Street sweeping;
    c. Maintenance of municipal roads owned, operated, or under the responsibility of the Permittee;
    d. Storage and disposal of chemicals and waste materials;
    e. Vegetation control, cutting, removal, and disposal of the cuttings;
    f. Vehicle fleets/equipment maintenance and repair;
    g. External Building maintenance; and
    h. Materials storage facilities and storage yards.

6) A program for inspecting municipal facilities, to include municipal maintenance shops and equipment yards, for good housekeeping practices, including BMPs. The program shall include checklists and procedures for correcting noted deficiencies;
7) A training program for municipal facility staff in good housekeeping practices as outlined in the SOP developed pursuant to Part II.B.7.a.(5); and
8) The Permittee shall assess the water quality impacts for those flood management projects owned, operated, or the responsibility of the Permittee. The feasibility of retro-fitting existing structural control devised to provide additional pollutant removal from the storm water shall be evaluated.

b. The Permittee shall include within the SWMPP the following information:

1) The inventory of municipal facilities required by Part II.B.7.a.(1);
2) Schedule for developing the SOP of good housekeeping practices required by Part II.B.7.a.(5);
3) An inspection plan and schedule, including checklists and any other materials needed to comply with Part II.B.7.a.(6); and
4) A description of the training program and training schedule required by Part II.B.7.a.(7).

c. The Permittee shall report each year in the annual report the following information:

1) Any updates to the municipal facility inventory;
2) An estimated amount of floatable material collected from the MS4 as required by Part II.B.7.a.(2-4);
3) Any updates to the inspection plan;
4) Any updates to the SOP of good housekeeping practices; and
5) Summary of inspection reports of municipal facilities

d. The Permittee shall maintain the following information and make it available upon request:

1) Records of inspections and corrective actions, if any; and
2) Training records including the dates of each training activities and names of personnel in attendance.

8. **Application of Pesticide, Herbicide, and Fertilizers (PHFs)**

a. For the *Application of Pesticide, Herbicide, and Fertilizers* (PHFs), the Permittee shall implement controls to reduce, to the *MEP,* the discharge of pollutants related to the storage and application of PHFs applied by employees or contractors, to public rights of way, parks, and other public property. The Permittee shall implement programs to encourage the reduction of the discharge of pollutants related to application and distribution of PHFs. For those controls implemented, the Permittee will obtain coverage and maintain compliance with ADEM NPDES Pesticide General Permit ALG870000, if applicable, or other applicable NPDES permits. In addition, the Permittee shall address priorities to include the following:

1) Identify all areas known to receive high applications of PHFs, develop a program to detect improper usage, and prioritize problem areas;
2) Require evidence of proper certification and licensing for all applicators contracted to apply pesticides or herbicides on municipal property; require that applicators contracted to apply fertilizer are qualified in utilizing proper nutrient management practices;
3) Maintain an inventory of on-hand PHFs with information about the formulations of various products, including how to recognize the chemical constituents from the label, their respective uses, directions and precautions for applicators that explain if products should be diluted, mixed or only used alone, and, proper storage of products;
4) Equipment use and maintenance;
5) Training in safe use, storage and disposal of PHFs;
6) Inspection and monitoring of facilities where PHFs are stored; and
7) Record keeping.

9. **Oils, Toxics, and Household Hazardous Waste Control**

a. The Permittee shall prohibit to the MEP the discharge or disposal of used motor vehicle fluids and household hazardous wastes into the MS4. Specific activities to be completed under this item are:

1) Make available material educating the public about used oil facility locations, hotline numbers, and alternatives to toxic materials;
2) Advertise the location of used oil collection facilities; and
3) Provide employee training on spill prevention at all municipal facilities where oils or toxic materials are used.

b. The Permittee shall include within the SWMPP the following information:

1) Procedures to develop, implement, and enforce a program for oils, toxics, and household hazardous waste control to include educational information and employee training.

c. The Permittee shall report each year in the annual report the following information:

1) Quantities of Household Hazardous Waste and used oil collected; and
2) Oils, Toxics, and Household Hazardous Waste Control training workshops
    a. Dated attendance sheet; and
    b. Titles of presentations.

10. **Industrial Storm Water Runoff**

a. The Permittee shall implement a program to inspect, monitor and control pollutants in storm water runoff to the MS4 from municipal waste landfills, hazardous waste treatment, storage, disposal and recovery facilities, and industrial facilities and high risk commercial facilities. Facilities to be addressed under this program include: facilities that have reported under the requirements of the Emergency Planning and Community Right to Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge that the Permittee determines is contributing substantial pollutants loading to the MS4 ("high risk facilities"). The program must provide for, at a minimum:

1) Annual inspections of municipal waste landfills, hazardous waste treatment, storage, disposal (TSD) and recovery facilities;
2) Annual inspections, at a minimum, of industrial facilities and high-risk commercial facilities that do not have an NPDES permit issued by the Department as outlined in the SWMPP, and
3) Data collected by a NPDES permitted facility to satisfy the monitoring requirements of an NPDES, State, land application or local pretreatment discharge permit may be used to satisfy Part II.B.10.a of the Permit. The Permittee may require the facility to conduct self-monitoring to satisfy this requirement, if necessary.

b. The Permittee shall include in the SWMPP a list of all municipal waste landfills, hazardous waste treatment, storage, disposal and recovery facilities, high risk commercial facilities, and industrial facilities, both NPDES permitted and non-NPDES permitted, within the MS4.

c. The Permittee shall include in the annual report a summary of inspections performed for the year and enforcement, if applicable.

C. *Legal Authority*

To the extent allowed under State law, the Permittee must review and revise its relevant ordinances or other regulatory mechanisms, or adopt any new ordinances that provide it with adequate legal authority to control pollutant discharges into and from its MS4, and to implement and enforce its SWMPP. To be considered adequate, this legal authority must, at a minimum, authorize the Permittee to:

1. Prohibit non-storm water discharges unless such storm water discharges are in compliance with a separate NPDES permit, or determined by the Department not to be a significant contributor of pollutants to waters of the State;
2. Prohibit and eliminate illicit connections to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4;
3. Control the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4;
4. Require operators of construction sites and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 to the maximum extent practicable through the installation, implementation, and maintenance of appropriate controls, including installation, implementation and long-term maintenance of post construction controls;
5. Request information to determine compliance with ordinances or other regulatory mechanism;
6. Inspect and monitor at reasonable times any facilities, equipment, practices, or operations for active or potential polluted storm water discharges to the MS4;
7. Promptly require that dischargers cease and desist discharging and/or clean-up and abate a discharge;
8. Levy citations or administrative fines against responsible parties to include but not limited to non-compliant construction sites;
9. Require recovery and remediation costs from responsible parties; and
10. Provide the authority to enter into interagency agreements with other entities for the purpose of controlling the contribution of pollutants to the maximum extent practicable from one MS4 to another MS4.

D. *SWMPP Plan Review and Modification*

1. The Permittee shall submit to the Department within nine months of the effective date of this permit a SWMPP. The Permittee shall implement plans to seek and consider public input in the development, revision and implementation of this SWMPP, as required by Part II.B.2.b.1. Thereafter, the Permittee shall perform an annual review of the current SWMPP and must modify the SWMPP, as necessary, to maintain compliance with the permit. Any modifications to the SWMPP shall be submitted to the Department at the time a modification is made. Modifications 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.
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. Implementation of the program in any new area shall consider the plans of the SWMPP of the previous MS4 ownership, if any.

E. 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 total maximum daily load (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.

        a. 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.

F. Responsibilities of Permittee

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 the permit and reliance on another entity will not be a defense or justification for non-compliance if the entity fails to implement the permit requirements.

PART III Monitoring and Reporting

The Permittee shall implement a monitoring program to provide data necessary to assess the effectiveness and adequacy of BMPs implemented under the SWMPP. The quality of the streams receiving MS4 discharges shall continue to be monitored to assess the water quality of the streams and to identify potential water quality impairments. This shall be accomplished by the following:

A. Monitoring Locations

1. Proposed monitoring locations and descriptions of their respective characteristics shall be described in the SWPPP with actual locations described in the annual report;

Waterbody	Frequency
Valley Creek	Quarterly
Shades Creek	Quarterly

2. In addition to the requirements in Part III.A.1., if a waterbody (not listed in Part III.A.1) 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 revise its monitoring program to include monitoring that addresses the impairment or TMDL. Any revisions to the monitoring program shall be documented in the SWMPP and Annual Report. In addition, the permit may be modified by the Department to establish the additional or revised monitoring locations.

B. Monitoring Parameters and Frequency

1. Grab samples shall be collected on Valley Creek, and Shades Creek at each instream monitoring station and 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 (NH_3-N) (mg/l);
k. Biochemical Oxygen Demand (BOD) (mg/l);
l. Chemical Oxygen Demand (COD) (mg/l);
m. Hardness as $CaCO_3$ (mg/l);
n. Nitrate plus Nitrite Nitrogen (NO_3+NO_2-N) (mg/l);
o. Oil and Grease (mg/l);
p. Total Dissolved Solids (TDS) (mg/l);
q. Total Kjeldahl Nitrogen (TKN) (mg/l); and

2. The Permittee must include in the instream monitoring program any additional 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.

C. Sample Type, Collection and Analysis

1. Grab samples taken within the first two hours of discharge shall be used for the analysis;
2. Grab samples shall be collected resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event;
3. Analysis and collection of grab 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;
4. If the Permittee is unable to collect grab 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.).

PART IV Annual Reporting Requirements

1. The Permittee shall submit to the Department an annual report (1 hardcopy and 1 electronic copy) no later than January 31 of each year. The annual report shall cover the previous fiscal year beginning October 1 through September 30.

2. On or after December 21, 2020, all annual reports shall be submitted to the Department electronically in a prescribed manner acceptable to the Department.

3. The Permittee shall sign and certify the annual report in accordance with Part V.K.

4. The annual report shall include the following information, at a minimum, and in addition to those requirements referenced in Part II.B and Part III:

   a. 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.

   b. An overall evaluation of the storm water management program developments and progress for the following:
      1) Major findings such as water quality improvements or degradation;
      2) Major accomplishments;
      3) Overall program strengths/weaknesses;
      4) Future direction of the program;

5) The Permittee(s) will make an overall determination of the effectiveness of the SWMPP taking into account water quality/watershed improvements; and
6) Required actions that were not performed, and reasons why the actions were not accomplished.

c. The annual report will include a narrative report of all program elements referenced in Part II.B of this permit. The activities concerning a program element shall be discussed as follows:

1) Program element activities completed and in progress;
2) General discussion of element. Explanation for all element activities that have not been fully implemented or competed. Results of activities shall be summarized and discussed (e.g.: maintenance caused by inspection, pollutants detected by monitoring, investigations as a result of dry and wet weather screening, number and nature of enforcement item, education activities/participation);
3) Status of program element with compliance, implementation, and augmentation schedules in Part II of the permit;
4) Assessment of controls; and
5) Discussion of proposed element revisions.

d. The annual report shall contain a monitoring section which discusses the progress and results of the monitoring programs required under Part III of the permit and shall include, at a minimum, the following information.

1) Status of implementation of the monitoring program;
2) Map(s) showing the monitoring station locations, latitude/longitude, and narrative site descriptions, including watershed size;
3) Raw data, results, methods of evaluating the data, graphical summaries of the data, and an explanation/discussion of the data for each component of the monitoring program;
4) An analysis of the results of each monitoring program component;
5) A comparison of the reporting year's data to the previous five years of data to establish a trend analysis to determine the relative health of the receiving water;
6) All monitoring reports and supporting data shall be submitted in hardcopy and/or electronically in a format deemed acceptable to the Department concurrently with the submission of the Annual Report; Failure to provide this data in a format appropriate to the Department for review shall be a violation of this permit; and
7) The interpretation of the analytical data, required by Part III.B.1-2 of the Permit, for determinacy of meeting water quality standards.

e. Provide the status of the implementation and proposed changes to the SWMPP to include assessment of controls and specific improvements or degradation to water quality;

f. Provide a summary of inspections and enforcement actions for regulatory program. Enforcement actions should include a corrective actions summary;

g. Implementation status of the public education programs; and

h. Status of expenditures and budget for the past fiscal year and the next fiscal year for the Permittee's program. The analysis shall indicate budgets and funding sources.

PART V Standard and General Permit Conditions

A. Certification and Signature of Reports

All reports required by the permit and other information requested by the Director shall be signed and certified in accordance with Part V.K. of this permit.

B. Submittals

All documents required to be submitted to the Department by this permit, shall be addressed to:

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

Certified and Registered Mail shall be addressed to:

Alabama Department of Environmental Management
Stormwater Management Branch, Water Division
1400 Coliseum Blvd
Montgomery, Alabama 36110-2059

C. Retention of Records

The Permittee shall retain the storm water quality management program developed in accordance with Part II of this permit until at least five years after coverage under this permit terminates. The Permittee shall retain all records of all monitoring information, copies of all reports required by this permit, and records required by this permit, and records of all other data required by or used to demonstrate compliance with this permit, until at least three years after coverage under this permit terminates. This period may be explicitly modified by alternative provisions of this permit or extended by request of the Director at any time.

D. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

E. Civil and Criminal Liability

1. Tampering

   Any person, who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under this permit shall, upon conviction, be subject to penalties as provided by AWPCA.

2. False Statements

   Any person knowingly makes any false statement, representation, or certification in any record or other documentation submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance, shall, upon conviction, be punished as provided by AWPCA

3. Relief from Liability

Nothing in this permit shall be construed to relieve the Permittee(s) of civil and criminal liability under AWPCA or FWPCA for non-compliance with any term or condition of this permit.

F. Duty to Reapply

1. If the Permittee intends to continue an activity regulated by this permit beyond the expiration of this permit, the Permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days prior to expiration of this permit.

2. Failure of the Permittee to apply for re-issuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code, Rule 335-6-6.-06, and should the permit not be re-issued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

G. Need to Halt or Reduce an Activity Not a Defense

It shall not be a defense for a Permittee 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.

H. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human or the environment.

I. 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, suspending, or revoking this permit in whole or in part, or to determine compliance with this permit. The Permittee shall also furnish to the Director upon request copies of records required to be kept by this permit.

J. Other Information

If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

K. Signatory Requirements

All reports and forms to be submitted by this permit, AWPCA and the Department's rules and regulations, shall be signed by a "responsible official" of the Permittee, as defined in ADEM Administrative Code, Rule 335-6-6-.09, or a "duly authorized representative" of such official, as defined by ADEM Administrative Code, Rule 335-6-6-.09, and shall bear the following certification:

"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."

L. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under Section 311 of FWPCA.

M. Property and Other Rights

This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of Federal, State, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the State of Alabama.

N. Severability

The provision 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 the permit shall not be affected thereby.

O. Compliance with Statutes and Rules

This permit is issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter that are applicable to this permit are hereby made a part of this permit.
This permit does not authorize the non-compliance 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.

P. Proper Operations and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a Permittee only when necessary to achieve compliance with conditions of the permit.

Q. Monitoring Records

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

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.

R. Monitoring Methods

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

S. Right of Entry and Inspection

The Permittee shall allow the Director or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon any of the permittee's premises where a regulated facility or activity or point source is located or in which any records must be maintained under conditions of this permit;

2. Have access to and copy, at reasonable times, any records required to be maintained by the terms and conditions of this permit;

3. Inspect, at reasonable times, any point source, any monitoring equipment or practices being maintained to comply with this permit, or any treatment or control or systems being maintained to comply with this permit; and

4. Sample or monitor, at reasonable times, for the purposes of determining permit compliance or as otherwise authorized by AWPCA, any substances or parameters at any location.

T. 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.

U. Permit Modification and Revocation

1. This permit may be modified or revoked or reissued, in whole or in part, during its term for cause including but not limited to, the following:

    a. If cause for termination under Part V.A.3., of this permit exists, the Director may choose to revoke or re-issue this permit instead of terminating the permit;

    b. If a request to transfer this permit has been received, the Director may decide to revoke and re-issue or to modify the permit; or

    c. If modification or revocation and re-issuance is requested by the Permittee and cause exists, the Director may grant the request.

2. This permit may be modified during its term for cause, including but not limited to:

    a. If cause for termination under Part V.A.3., of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

    b. The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;

    c. Errors in calculation of discharge limitation or typographical or clerical errors were made;

    d. To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or judicial decision after the permit was issued;

    e. To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permit may be modified to change compliance schedules;

    f. To incorporate an applicable Section 307(a) of FWPCA toxic effluent standard or prohibition;

    g. When required by the re-opener conditions in this permit;

h. Upon failure of the State to notify, as required by Section 402(b)(3) of FWPCA, another State whose water may be affected by a discharge permitted by this permit;

i. When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions;

j. When requested by the Permittee and the Director determines that the modification has cause and will not result in a violation of federal or State law, rules, or regulations;

k. To add a new Permittee who is the owner or operator of a portion of the Municipal Separate Storm Sewer System; or

l. To change portions of the Storm Water Quality Management Program that is considered permit conditions.

3. This permit may be terminated during its term for cause, including but not limited to, the following:

a. Violation of any term or condition of this permit;

b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance or the permittee's misrepresentation of any relevant facts at any time;

c. Materially false or inaccurate statements or information in the permit application or the permit;

d. The permittee's discharge threatens human life or welfare or the maintenance or water quality standards; or

e. Any other cause allowed by ADEM Administrative Code, Rule 335-6-6.

4. This permit may be suspended during its term for cause, including but not limited to, the reasons for termination listed above.

5. The filing of a request by the Permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term condition.

V. Termination of Coverage for a Single Permittee

Permit Coverage may be terminated, in accordance with the provision of 30 CFR 122.64 and 124.5, for a single Permittee without terminating coverage for other permittees.

W. Modification of Storm Water Management Program

Only those portions of the Storm Water Management Program specifically required as permit conditions shall be subject to modification requirements of 40 CFR 124.5. Replacement of an ineffective or infeasible BMP implementing a required component of the Storm Water Management Program with an alternate BMP expected to achieve the goals of the ineffective or infeasible BMP shall be considered a minor modification to the SWMPP and not modification to the Permit.

X. Changes in Monitoring Outfalls

This permit is issued on a system-wide basis in accordance with CWA §402(p)(3)(i) and authorizes discharges from all portions of the MS4. Since all outfalls are authorized, changes

in monitoring outfalls, other than those with specific numeric effluent limitations, shall be considered minor modifications to the permit and will be made in accordance with the procedures at 40 CFR 122.63.

Y. Definitions

1. "Alabama Handbook" means the September 2014 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. "Arithmetic Mean" means the summation of the individual values of any set values divided by the number of individual values.

3. "AWPCA" means Code of Alabama 1975, Title 22, the Alabama Water Pollution Control Act, as amended.

4. "Best Management Practices" (BMPs) means activities, prohibitions of practices, maintenance procedures, and other management practices implemented to prevent or reduce the discharge of pollutants to waters of the State. BMPs also include treatment systems, operating procedures, and practices to control facility runoff, spillage or leaks, sludge or water disposal, or drainage from raw material storage.

5. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

6. "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.

7. "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.

8. "Department" means the Alabama Department of Environmental Management or an authorized representative.

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

10. "Flood Management Project" means a project that will alter, modify or change the base flood elevation of a 1% annual chance flood event.

11. "Flow-weighted composite sample" means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge at the time of sampling.

12. "Green Infrastructure" refers to systems and practices that use or mimic natural processes to infiltrate, evapotranspirate (the return of water to the atmosphere either through evaporation or by plants), or reuse stormwater or runoff on the site where it is generated.

13. "Hydrology" refers to the physical characteristics of storm water discharge, including the magnitude, duration, frequency, and timing of discharge.

14. "Illicit connection" means any man-made conveyance connecting a non-storm water discharge directly to a municipal separate storm sewer system.

15. "Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit.

16. "Industrial Land Use" means land utilized in connection with manufacturing, processing, or raw materials storage at facilities identified under Alabama State Law.

17. "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.

18. "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.

19. "Large" municipal separate storm sewer system means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 250,000 or more as determined by the latest decennial census.

20. "Low Impact Development" (LID) is an approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product.

21. "Major outfall" is the point(s) where the MS4 discharges to a water of the State from (1) a pipe (or closed conveyance) system with a cross-sectional area equal to or greater than 7.07 square feet (e.g., if a single circular pipe system, an inside diameter of 36 inches or greater),(2) a single conveyance other than a pipe, such as an open channel ditch, which is associated with a drainage area of more than 50 acres,(3) a pipe (or closed conveyance) system draining "industrial land use" with a cross-sectional area equal to or greater than 0.79 square feet (e.g., if a single circular pipe system, an inside diameter of 12 inches or greater),(4) or a single conveyance other than a pipe, such as an open channel ditch, which is associated with an "industrial land use" drainage area of more than 2 acres;For the purpose of this permit, outfalls of the "double barrel" type, whose combined cross-sectional area is greater than 7.07 square feet, equivalent to a single circular pipe outfall with an inside diameter of 36 inches or greater, are also considered major outfalls.

22. "MEP" is an acronym for "Maximum Extent Practicable," the technology-based discharge standards and controls necessary for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA Section 402(p). These standards and controls may consist of a combination of best management practices, control techniques, system design and engineering methods, and such other provisions for the reduction of pollutants discharged from a MS4 as described in the storm water management system.

23. "Medium" municipal separate storm sewer system means all municipal separate storm sewers that are either: (i) 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.

24. "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.

25. "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 Administrative Code335-6-6-.02(nn).

26. "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.

27. "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.

28. "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, any waterbody assigned the 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 335-6-10-.10.

29. "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.

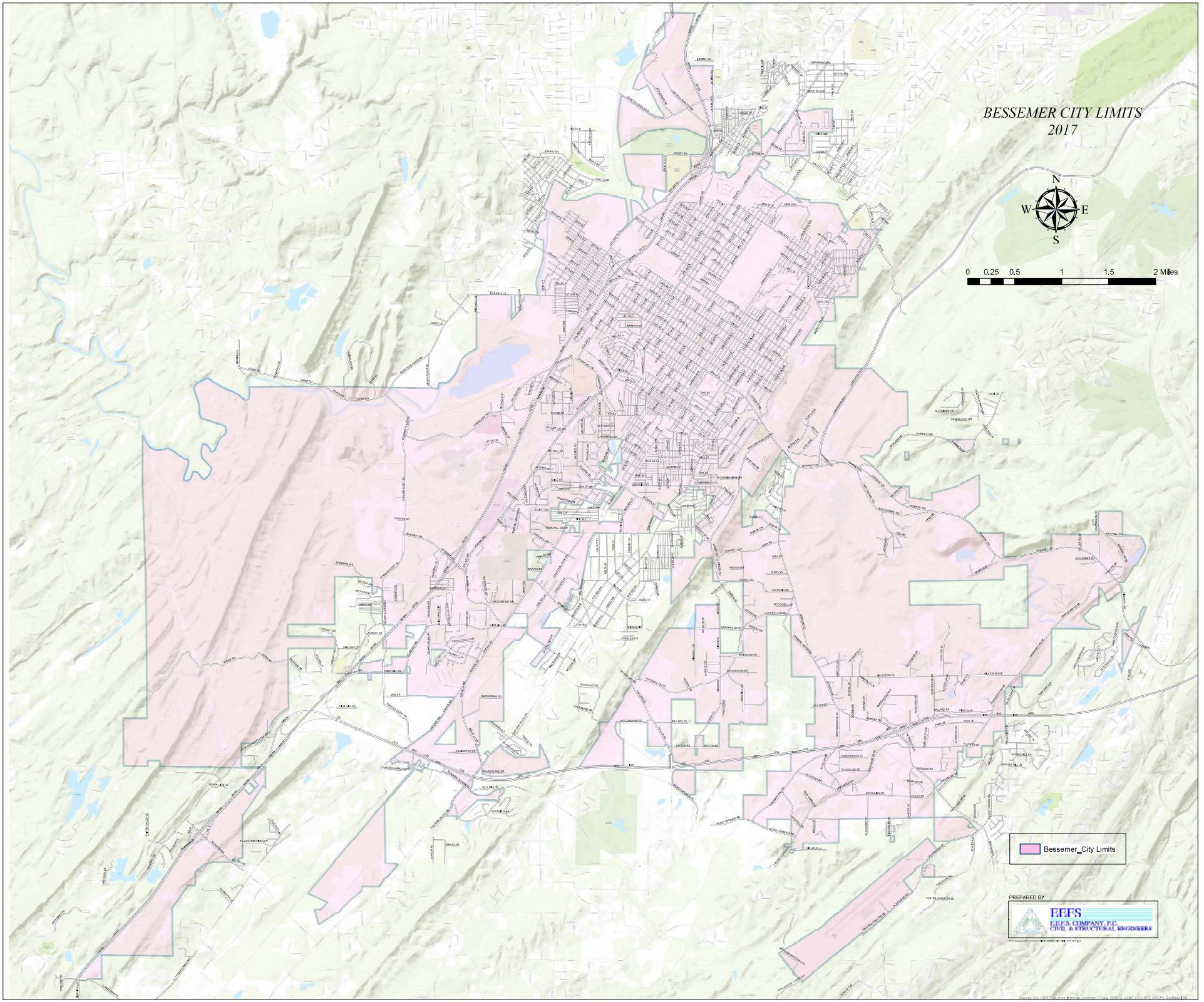
30. "Qualifying New Development and Redevelopment" means any site that results from the disturbance of one acre or more of land or the disturbance of less than one acre of land if part of a larger common plan of development or sale that is greater than one acre. Qualifying new development and redevelopment does not include land disturbances conducted by entities under the jurisdiction and supervision of the Alabama Public Service Commission.

31. "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.

32. "Structural Controls" means an engineered BMP constructed with rigid walls and/or weirs and piped drainage that utilize active or passive treatment and/or mechanical systems for the purpose of treating storm water runoff.

33. "Structural Flood Control" means structural measures that control the 1% annual chance floodwaters by construction of barriers, storage areas or by modifying / redirecting channels.

APPENDIX B:
City of Bessemer
MS4 Jurisdictional Boundary Map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E.E.F.S. COMPANY, P.C.
CIVIL & STRUCTURAL ENGINEERS

APPENDIX C:
City of Bessemer
Structural Control
Inspection Form

City of Bessemer – Structural Control Inspection Report

Structural Control ID:_____ Date/Time of Inspection:_____

Location:_____ Receiving Stream:_____

	Yes	No	N/A	Comments	Photographs
Structural Control Observations					
Erosion					
Sedimentation					
Maintenance					
Structural Integrity					
Effectiveness					
Deficiency					

Additional notes to file:_____

_____

_____

_____

City Inspector Name:_____ Reviewing Supervisor Name:_____

Signature:_____ Signature:_____

Date:_____ Date:_____

APPENDIX D:
Map of Major Outfalls, Structural Controls and Waters of State

APPENDIX E:
City of Bessemer
Integrated Storm Water
Pollution Prevention Program

APPENDIX F:
City of Bessemer
Report Spill and Illicit Discharge
Investigation Form

City of Bessemer, Alabama
MS4 Stormwater Management Program

Reported Spill and Illicit Discharge Investigation Form

Date and Time of Report Received:	Form Completed By:
Reported by (Name/Address/Phone), indicate if it is by anonymous:	Location of Incident:
Reporter's Description of the Incident (attach additional sheets if more space is required for description):	
City Investigated the Site? ☐ Yes ☐ No	Date and Time Site Investigated:
Name(s) of Investigating Personnel:	
Material Involved in the Incident:	Estimated Quantity of Material:
Is Discharge Within Storm Sewer or Reached Storm Sewer? ☐ Yes ☐ No	
Is Discharge Has Potential To Reach Storm Sewer? ☐ Yes ☐ No If Yes, Are Appropriate Containments in Procedures Place? ☐ Yes ☐ No	
Is Discharge Reached Receiving Water or Has Potential to Reach? ☐ Yes ☐ No	
Samples Collected? ☐ Yes ☐ No ; If Yes, Collected at: ☐ Incident Site ☐ Receiving Water	
Is the Responsible Party Identified? ☐ Yes ☐ No; If Yes, Name and Contact Details of Responsible Party:	
Weather (*mark all that apply*): ☐ Runoff Occurring ☐ Dry ☐ Has Rained After Spill	
Other Agencies Informed? ☐ ADEM ☐ FD ☐ EMA ☐ County ☐ Others _____	
Are Photos Taken at the Site? ☐ Yes ☐ No; If Yes Attach Photo Log	

Reported Spill and Illicit Discharge Investigation Form

Additional Description of Incident Investigation, Recommendations, Notifications Made, etc (attach additional sheets if more space is required for description):

City of Bessemer, Alabama
MS4 Stormwater Management Program

Reported Spill and Illicit Discharge Investigation Form

Tracking City Time and Material Spent In Investigating and Abating Illicit Discharge/Spill

(This form has to be filled for every trip to illicit discharge/spill site)

Date:	Site Location:	
Names of Investigating City Personnel:		
Time Arrived On Site:	Time Left From Site:	Total Time Spent In Investigation:
Vehicle Information: (Company ,model & year)		Vehicle Mileage At Start: At End:
Field Water Quality Test Conducted? Yes No		
List Field Parameters Tested:		
List Amount of Reagents/Testing Material Consumed For Field Testing:		
Samples Collected For Lab Testing? Yes No		
List Sample Parameters To Test In The Lab:		
Are Any Spill or Illicit Discharge Containment Materials Deployed By City Staff (non-BFD): Yes No; If Yes, List The Material Deployed and Their Quantity:		
Briefly Describe Investigation or Source Abetment Activities Conducted As Part of This Trip:		
Time Spent In Documenting Investigation Findings and Reporting: (Identify personnel and their time for the activity)		

Revised on 1/5/2018

APPENDIX G:
ADEM Notification by City
Standard Operating Procedure (SOP)

SOP G.1 – ADEM NOTIFICATION BY CITY

Standard Operating Procedure for ADEM Notification by City

Purpose: To notify ADEM to prevent suspect illicit discharges from adjacent MS4 to the City's MS4

Always:

- Monitor waterbodies (Waters of States) around City's jurisdictional boundary for suspect illicit discharges from the upstream side of the adjacent MS4
- Remind citizens to notify City (*see below for contact information*) for any suspect illicit discharges
- Document suspect illicit discharges from adjacent MS4
- Notify ADEM (*see below for contact information*) as soon as a suspect illicit discharge from adjacent MS4 was verified and documented

Whenever possible:

- Verify a suspect illicit discharge from adjacent MS4
- Properly document a suspect illicit discharge from adjacent MS4
- Notify the City – Stormwater Specialist
- Notify ADEM

Contact - CITY:

Freddie Freeman
Stormwater Specialist
1700 Third Avenue North
Bessemer, AL 35020
Phone: (205) 424-4060
Fax: (205) 481-4359
Email: ffreeman@bessemeral.org

Contact - ADEM:

Birmingham Branch
Phone: (205) 942-6168
Fax: (205) 941-1603
Email: bhamail2@adem.alabama.gov
Emergency Response (24-hours)
Phone: 1-800-843-0699

CHECKLIST G.2 – ADEM NOTIFICATION BY CITY – A SUSPECT ILLICIT DISCHARGE FROM ADJACENT UPSTREAM MS4 INSPECTION CHECKLIST

Location: _____

Date of Inspection: _____

Name of Inspector: _____

Frequency: _____

Components / Items to check	Problems Observed	Additional Notes	Action
Waterbody / Waters of States	Petroleum Related		
Waterbody / Waters of States	Siltation Related		
Waterbody / Waters of States	Industrial Waste Related		
Waterbody / Waters of States	Others		

APPENDIX H:
City of Bessemer
Construction Storm Water
Inspection and Enforcement
SOP Manual

City of Bessemer, Alabama
Application for Land Disturbing Activity
BMP Plan Review Checklist

Project Name: _____ Permit Number: _____

Registrant: _____ Approval Date: _____

Cell Number: _____ Receiving Stream: _____

Email Address: _____ Total Site Area (Ac): _____

Site Address: _____ Disturbed Area (Ac): _____

(Reference City of Bessemer Minimum Plan Requirements for Commercial/Industrial Site Plans for more details)

_____ If total disturbing areas are greater than 1 acre, ADEM NPDES permit is required?

_____ Is the site in the ***Priority Construction Sites*** (per ADEM)?

_____ Any existing outstanding drainage issues at the property or downstream from the property?

_____ Boundary/topographic survey or existing conditions maps (signed and sealed) provided?

_____ Proposed grading and storm drainage plans (signed and sealed) provided?

_____ Erosion and sedimentation control BMP plans (signed and sealed) provided?

_____ Project specific BMP details provided?

_____ Each BMP inspection and maintenance procedure provided?

_____ Discharge locations (surface runoff leaving from the site to streams or storm features)?

_____ Sequence of construction notes?

_____ Design calculations of sediment basins and/or sediment traps?

_____ Design calculations of outlet control structures and overflow spillways?

_____ Summary of pre- vs. post-conditions for 2-, 5-, 10-, and 25-storm events at each sub-basin?

_____ Show surface runoff flowing directions?

_____ Any potential un-controlled surface runoff leaving from the property?

_____ Statements/notes to address

- Vehicle tracks on public streets?
- Facility ID & permit to be posted at the construction exit?
- On-site rain gage and record?
- The approved plans to be at the site all time?
- All inspection reports and photo documents to be at the site all time?
- The registrant to contact City of Bessemer to perform the Final Inspection after all BMPs being removed from the site and all permanent vegetation being stabilized?
-
-

_____ The post-construction storm water management by the MS4 permit requirements,

- require to design and implement systems to reduce the discharge of pollutants...
- require to meet pre- vs. post-condition hydrology of the site. Also a 1.1 inch rainfall over 24-hour period preceded by 72-hour antecedent dry period...
- encourage to incorporate the use of low impact development (LID)
- require to submit a post-construction BMP plan...
- require the submittal of "as-built" certification within 120 days of completion of project
- require to perform annual post-construction inspections and submit annual reports
- require and/or perform adequate long-term operation and maintenance of post-construction BMPs...

_____ Additional comments:

APPENDIX I:
City of Bessemer
Construction Site
Inspection Report

City of Bessemer - Construction Site Inspection Report

Registrant:_____ Permit Number: _____

Address of Construction Site:_____ Receiving Stream:_____

Date of Most Recent Rain Event:_____ Date/Time of Inspection:_____

Size of site (disturbed): _____ First Inspection (Yes/No):_____

Final Inspection (Yes/No):_____

	Yes	No	N/A	Comments	Photographs
Records and Postings					
Permit On-Site					
Facility ID Posted					
Rain Gage On-Site (ADEM Permitted Sites)					
CBMPP On-Site					
Inspection Reports (prepared by the site operator's QCP)					
Rainfall Data					
On-Site Observations					
On-Site Erosion					
On-Site Sedimentation					
Silt Fence					
Construction Entrance					
Straw Bales					
Seeding/Landscaping					
Sediment Traps					
Inlet Protection					
Outlet Protection					
Proper Good Housekeeping Keeping					
Solid Waste Handling					
Fuel Handling					
Spills					
Contaminated Soils					
Trash/Litter					
Construction Debris					
Proper Off-Site Observations					
Off-Site Erosion					
Off-Site Sediment					
In Stream Turbidity (NTU)					
Off-Site Vehicle Track.					
Trash/Litter					
Oily Sheen in Stream					
Construction Debris					

City of Bessemer - Construction Site Inspection Report

Comments	

Violation (Yes/No)	**Date(s):**	
□ First Offense	□ Verbal Notice of Violation	□ Written Notice of Violation
□ Second Offense	□ Administrative Action	□ Civil Penalty
□ Third Offense	□ Other (describe)	
□ Fourth Offense		

Additional notes to file:_____

_____

_____

_____

_____

Follow-up with Complainant: _____

_____

_____

City Inspector Name:_____ Reviewing Supervisor Name:_____

Signature:_____ Signature:_____

Date:_____ Date:_____

APPENDIX J:
City of Bessemer
Post-Construction BMP
Inspection Report

City of Bessemer – Post-Construction BMP Inspection Report

Registrant:_____ Permit Number: _____

Address of Construction Site:_____ Inspection Date:_____

	Yes	No	N/A	Comments	Photographs
Post-Construction BMP Observations					
Inspection Record					
Post-Construction Plans					
Post-Construction As-built					
On-Site Erosion					
On-Site Sedimentation					
BMP#1 Maintenance					
BMP#2 Maintenance					
BMP#3 Maintenance					
BMP#4 Maintenance					

Comments	

Violation (Yes/No)	**Date(s):**	
□ First Offense	□ Verbal Notice of Violation	□ Written Notice of Violation
□ Second Offense	□ Administrative Action	□ Civil Penalty
□ Third Offense	□ Other (describe)	

Additional notes to file:_____

_____

_____

Follow-up with Complainant: _____

_____

_____

City Inspector Name:_____ Reviewing Supervisor Name:_____

Signature:_____ Signature:_____

Date:_____ Date:_____

APPENDIX K:
Map of Municipal Property Locations

APPENDIX L:
City of Bessemer Public Works
Municipal Good Housekeeping Program