
City of Prattville

101 West Main Street
Prattville, Alabama 36067



PROPOSED SWMP PLAN CHANGES

REVISED January 2019

Prepared By:



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**Table 4-1
Public Education and Public Involvement Goals**

| Program Component | BMP | | Schedule | Responsible Department |
|---|--------------------------------|------------------|-------------------|--------------------------------------|
| | Description | Frequency | | |
| Public Education (Minimum of one / year) | Local Partnerships | Track | 30 September 2019 | Public Works |
| | Website | Update as needed | 30 September 2019 | Public Works Webmaster |
| | Social Media | Track | 30 September 2019 | Public Works |
| | Public Service Announcements | Track | 30 September 2019 | |
| | Brochures | 1 / year | 30 September 2019 | |
| | Workshops | Track | 30 September 2019 | |
| | Training | Track | 30 September 2019 | |
| Public Involvement (Minimum of one / year) | Citizen Reporting Tools | Track | 30 September 2019 | Public Works |
| | Recycling | Track | 30 September 2019 | Public Works |
| | Pet Waste Stations | Track | 30 September 2019 | Public Works Parks and Recreation |
| | Clean-up Events | Track | 30 September 2019 | ACIC |
| | Storm Drain Marking | Develop / Track | 30 September 2019 | Public Works |
| | Public Events | Track | 30 September 2019 | Public Works |
| Program Evaluation | Evaluate Program Effectiveness | 1 / year | 30 September 2019 | Public Works |
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5.7.2. Eliminating Illicit Discharges

After the source of an illicit discharge has been identified, the Public Works Department shall take appropriate actions to abate the illicit discharge. If the City cannot eliminate the illicit discharge, the City shall report the suspect violator to ADEM or other appropriate regulatory agencies.

5.8. Spill Response

The City's Fire Department is responsible for responding to any type of spill that may occur within the City's MS4 Area. If a spill enters the MS4, the Fire Department shall notify the Public Works Department. The Public Works Department may evaluate the impacts of the spill on the MS4 and ensure appropriate corrective measures are taken to abate the spill. Follow up inspections of the affected area may be performed as needed.

5.9. Sanitary Sewer System

A majority of the City's MS4 area is serviced by the City's sanitary sewer system. The City owns and operates the sanitary sewer collection system and two (2) Wastewater Treatment Plants. If any problems with the sanitary sewer system are encountered, they are reported to the Public Works Wastewater Department.

5.10. Enforcement

The IDDE Ordinance provides the City Official with an escalating scale of enforcement action for violation of any provision in the ordinance. Depending upon the severity of the violation, the City Official may skip a Warning Notice and Compliance Order to issue a Stop Work Order. In general, the sequence of escalating enforcement actions provided by the IDDE Ordinance is described below:

5.10.1. Warning Notice

When the City Official determines that any person has violated or continues to violate any provision of the IDDE Ordinance, the City Official may serve upon that person a Warning Notice specifying the particular violation to have occurred and requesting that the discharger immediately seek to cease any offending discharge.

If the violation is not corrected immediately, the City Official shall determine if the enforcement action should be escalated to a Compliance Order.



5.10.2. Compliance Order

When the City Official finds that any person has violated, or continues to violate, this ordinance, the City Official may issue a compliance order to the violator, directing that, within a specified time period, adequate structures and devices be installed, or procedures implemented, and properly operated or other action be taken to remedy such violation.

If the violation is not corrected immediately, the City Official shall determine if the enforcement action should be escalated to a Notice of Violation.

5.10.3. Notice of Violation

Whenever the City Official finds that any person is in violation of any provision of this ordinance, permit, or any order issued hereunder, the City Official or his agent may serve upon such person written notice of the violation by a Uniform Non-Traffic Citation and Complaint. This Notice of Violation shall contain:

- The name and address of the alleged violator;
- The address of the Premises (when available) or a description of the building, structure or land upon which the violation is occurring or has occurred;
- A statement specifying the nature of the violation; and
- Scheduled court date and/or pay date.

The City Official or agent may require without limitation:

- The performance of monitoring, analyses, and reporting;
- The elimination of illicit connections and/or illicit discharges;
- That violating discharges, practices, or operations shall cease and desist;
- The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
- Payment of an amount equal to administrative and remediation; and/or
- The implementation of source control or treatment BMPs.

Upon issuance of a written Notice of Violation, the City Official shall notify ADEM regarding status of the illicit discharge.



5.10.4. Fines

Fines provided by the IDDE Ordinance include the following:

1. First Violation - The fine of sixty dollars (\$60.00) shall be assessed for a first violation of this ordinance.
2. Second Violation - The fine of one hundred and fifty dollars (\$150.00) shall be assessed for a second violation of this ordinance within a 30-day period.
3. Third or Subsequent Violation - For a third or subsequent violation committed by the owner during a 30-day period or longer, the violation will be adjudicated and the penalty determined by the municipal judge.
4. If after a ninety (90) day period, all violations of this ordinance have been rectified and no additional violations have occurred during that ninety (90) day period, then any further violations of this ordinance will be assessed as a first violation.

5.11. Staff Training

The City may outsource the ORI of outfalls to a consultant. If the ORI effort is outsourced, the consultant selected shall have adequate training and experience to perform the ORI. If the City elects to utilize internal staff, staff selected to perform the ORI shall receive the following initial training:

- Outfall reconnaissance inventory;
- Water quality monitoring procedures;
- Outfall reconnaissance inventory field procedures; and,
- Illicit discharge tracking procedures.

Refresher training shall be provided on an as needed basis. Any new staff incorporated into the outfall reconnaissance inventory shall receive the initial training described above and refresher training, as applicable.

5.12. Program Goals and Evaluation

The City has developed realistic, achievable and measurable goals and performance milestones to measure the progress in implementing the illicit discharge detection and elimination program. Program goals are summarized in Table 5-4.



**Table 5-4
Illicit Discharge Detection and Elimination Goals**

| Program Component | BMP | | Schedule | Responsible Department |
|--------------------|--|--------------------------|-------------------|----------------------------|
| | Description | Frequency | | |
| Legal Authority | Illicit Discharge Detection and Elimination (IDDE) Ordinance | Update as needed | 30 September 2019 | Public Works City Clerk |
| Outfall Inventory | Mapping and Screening Schedule | Update as needed | 30 September 2019 | Public Works |
| | Outfall Screening Inspection Form | Update as needed | 30 September 2019 | |
| | Outfall Map | Annually | 30 September 2019 | Public Works GIS |
| | Outfall Mapping and Screening | Each Outfall 1 / 5 years | 30 September 2021 | |
| Illicit Discharges | Citizen Reporting Tools | Update as needed | 30 September 2019 | Public Works |
| | Inspection Form | Update as needed | 30 September 2019 | |
| | Source Tracing Procedures | Update as needed | 30 September 2019 | |
| | ADEM Notification Procedures | Update as needed | 30 September 2019 | |
| | Mitigation Procedures | Update as needed | 30 September 2019 | |
| | Training | Track | 30 September 2019 | |
| Program Evaluation | Evaluate Program Effectiveness | Annually | 30 September 2019 | Public Works |
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6. Construction Site Runoff

6.1. Introduction

The variety of pollutants present at a construction site and the severity of their potential effects to receiving waters are dependent upon several factors.

- Nature of construction activity – During clearing and grading activities, the primary pollutant of concern is sediment. As the construction activity progresses in the building phase, other potential pollutants of concern include concrete wash, paints, stucco, pesticides, herbicides, fertilizers, cleaning solvents, asphalt products, scrap wood, metal, glass, trash debris, etc.
- Physical characteristics of the construction site – Potential pollutants at a construction site are carried off in storm water runoff. Construction sites can potentially increase the intensity and volume of storm water runoff resulting in an increase of pollutant loadings.
- Proximity of surface waters – The closer the construction activity is to a surface water increase the potential impacts to surface waters.

The City shall develop and implement a Construction Site Runoff Program to monitor and control pollutants in storm water discharges to the City's MS4 area from the following land disturbing activities.

- Land disturbance equal to or greater than one (1) acre; and,
- Land disturbance involving less than one (1) acre that is part of a larger common plan of development.

This Construction Site Runoff Program has been developed using the following guidance materials.

- Alabama Handbook for Erosion Control, Sediment Control, and Storm Water Management on Construction Sites and Urban Areas, Alabama Soil and Water Conservation Committee, September 2014; and,



- Developing Your Storm Water Pollution Prevention Plan, A Guide for Construction Sites, Environmental Protection Agency, EPA 833-R-06-004, May 2007.

These documents are incorporated into the Construction Site Runoff Program by reference.

6.2. Program Administration

The Public Works Department is responsible for the development and implementation of the Construction Site Runoff Program. Specific responsibilities associated with each department are summarized below:

- Public Works Department is responsible for construction projects associated with developments that require the construction of infrastructure (roads, water, storm sewer, sanitary sewer, mass grading, etc.).
- Building Department is responsible for construction projects associated with the construction of industrial, commercial and residential buildings.

6.3. Legal Authority

On 15 May 2018, the City adopted an Erosion and Sedimentation Control Ordinance. A copy of the ordinance is provided in Appendix B.

6.4. Requirements and Control Measures

As provided by 40 CFR Part 122.35(b), the City may rely on ADEM for the setting of standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls. The City's Construction Site Runoff Program requires owners and/or operators of construction sites to select, design, install, implement, inspect and maintain effective Best Management Practices (BMPs) to minimize the discharge of pollutants into the City's MS4 area to the maximum extent practicable (MEP).

6.4.1. Erosion and Sediment Controls

The owner and/or operator shall select, design, install, implement, inspect, and maintain BMPs appropriate to specific site conditions to, at a minimum:

1. Control storm water discharges to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;



2. Minimize the disturbance of steep slopes;
3. Minimize sediment discharges from the site;
4. Minimize the generation of dust and off-site tracking of sediment from vehicles;
5. Stabilize all construction entrances and exits; and,
6. Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible.

6.4.2. Soil Stabilization

Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 13 calendar days.

6.4.3. Dewatering

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations are prohibited unless managed by appropriate BMPs.

6.4.4. Pollution Prevention Measures

The owner and/or operator shall select, design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:

1. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, concrete washout, and other wash waters. Wash waters must be treated in a sediment control structure, basin or alternative control that provides equivalent or better treatment prior to discharge;
2. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and storm water runoff;



3. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures; and,
4. Use of polymers, flocculants or other treatment chemicals at the site may only be applied where treated storm water is directed to a sediment control structure or basin prior to discharge.

6.4.5. Prohibited Discharges

The following discharges are prohibited:

1. Wastewater from washout of concrete, unless managed by an appropriate BMP;
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,
4. Soaps or solvents used in vehicle and equipment washing.

6.4.6. Surface Outlets

When discharging from a sediment control structure, basins or impoundments the owner and/or operator shall utilize outlet structures that withdraw water from the surface, unless infeasible.

6.5. Training and Education

Select City staff shall maintain current certification as a Qualified Credentialed Inspector (QCI). To further support this program element, additional staff may obtain and maintain either a QCP or QCI certification. Staff shall receive annual refresher training. Copies of the current QCI training certificates shall be included in the Annual Report.

To assist educating private construction operators, the City has placed materials and links on its web site to provide information about the appropriate application and maintenance of erosion and sediment controls. Also, the City generally has printed booklets with City requirements for construction sites available when owners, contractors, or developers are applying for building and/or grading permits.



6.6. Permitting

The City currently has a permitting process for commercial and residential developments. The existing process for reviewing and approving commercial developments is provided in Figure 6-1. Before the commencement of any land disturbing activity that is not exempted from obtaining a permit, the owner and/or operator of the construction site is required to submit a grading permit application for approval of the Construction Best Management Practices (CBMP) Plan. The grading permit application requires the following information:

- Applicant Information;
- Site Information;
- Project Description;
- Type of Construction;
- If the proposed construction activity is required to obtain a General NPDES Permit for construction activity from ADEM, a copy of the Notice of Intent (NOI) submitted to ADEM and a copy of ADEM's authorization under the General NPDES Permit;
- CBMP Plan;
- Surety Bond or Letter of Credit; and,
- Application Fee.

Copies of the permit applications and submittal checklists are provided in Appendix E.

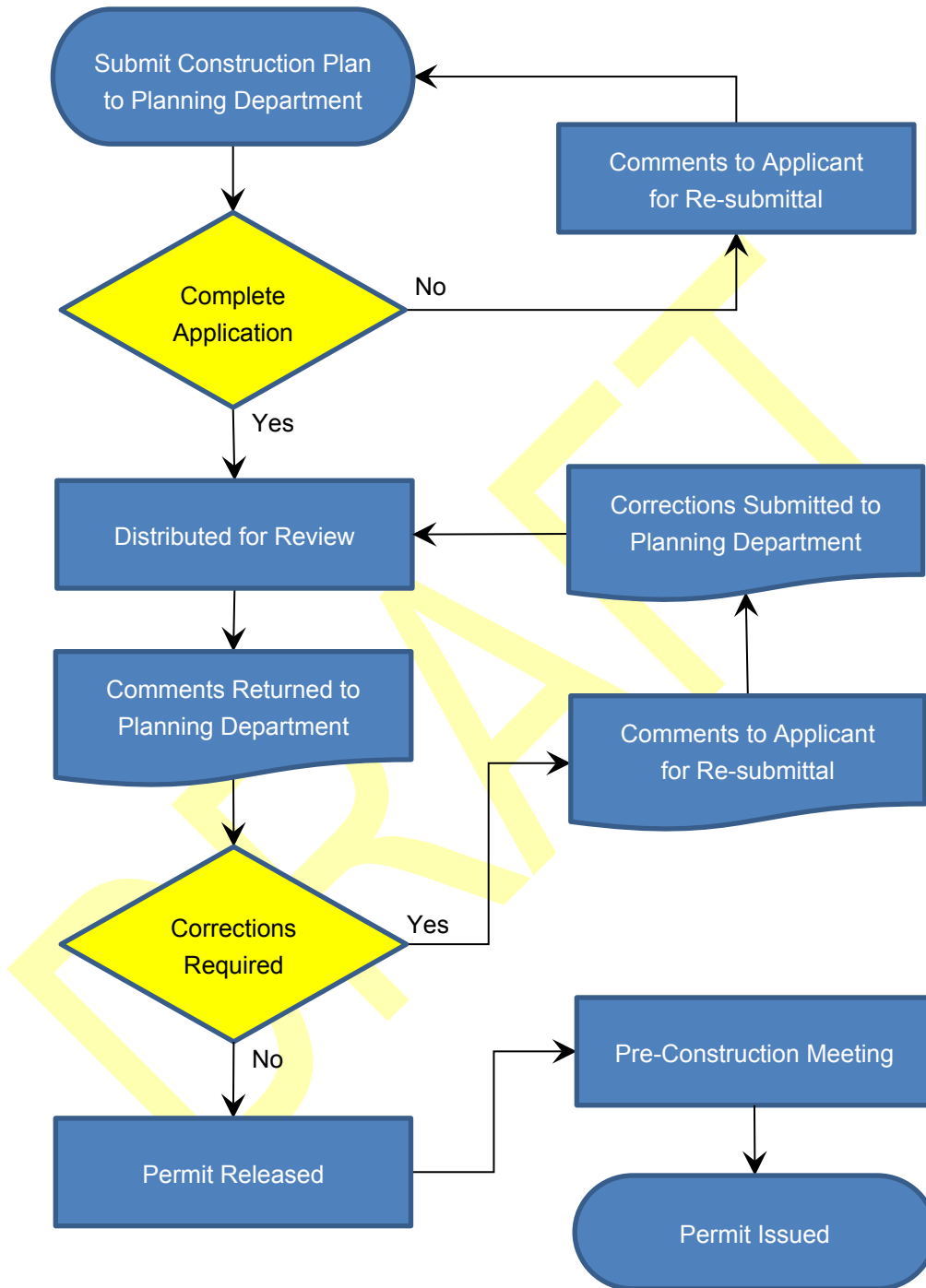
6.7. Plan Review

Before the commencement of any land disturbing activity that is not exempted from obtaining a permit, the owner and/or operator of the construction site is required to submit a permit application for approval of the CBMP Plan. BMPs selected for the site shall be designed, sized, and/or maintained in accordance with the following references:

- Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas, Alabama Soil and Water Conservation Committee, March 2009;



Figure 6-1 Permitting and Plan Review Flow Chart





- Developing Your Stormwater Pollution Prevention Plan, A Guide for Construction Sites, Environmental Protection Agency, EPA 833-R-06-004, May 2007; and,
- National Pollutant Discharge Elimination System General Permit ALR100000 for discharges from construction activities.

Review of the CBMP Plan shall be performed by personnel that are knowledgeable in the many facets of design, stormwater management, erosion and sediment control, and construction. The City shall develop a Standard Operating Procedure (SOP) and checklist for CBMP Plan review. Once the SOP and CBMP Plan Review Checklist are developed, they shall be included in Appendix E.

6.8. Inspections

After the CBMP Plan has been approved, a copy of the approved CBMP Plan shall be provided to the Developer and the project shall be assigned to one of the City's inspectors. The inspector shall review the CBMP Plan, design plans and all applicable project documents. All inspections and activities associated with the project will be tracked by the permit number.

6.8.1. Initial Inspection (Optional)

The City may require an initial inspection on development projects. If an initial inspection is required, The Developer shall contact the inspector to schedule an initial inspection after perimeter BMPs have been installed. The Developer and/or their representatives shall accompany the inspector during the initial inspection. The initial inspection shall address the following:

- Inspect all discharge points from the site;
- Inspect perimeter controls; and,
- Compare installed BMPs with the CBMP Plan.

If all BMPs have been installed in accordance with the CBMP Plan and to the satisfaction of the inspector, the inspector shall approve the initial inspection and allow the Developer to proceed with construction of the project. The inspector shall document the results of the initial inspection.

If deficiencies are noted during the initial inspection, the inspector shall discuss the nature of the deficiencies with the Developer during the initial inspection. After all deficiencies have been corrected, the Developer shall contact the inspector to reschedule the initial inspection. If all deficiencies have been corrected, the



inspector shall approve the initial inspection and allow the Developer to proceed with construction of the project. The inspector shall document the results of the initial inspection.

6.8.2. Routine Inspection

The inspector performs routine inspections throughout the construction process. Routine inspections are typically performed before foundation, framing and final inspections.

Since all of the City's inspectors will be QCI certified, the inspector shall evaluate BMPs before inspecting any other activities at the site. The inspection shall address the following:

- Inspect all discharge points from the site;
- Inspect perimeter controls;
- Compare installed BMPs with the CBMP Plan;
- Inspect disturbed areas not currently being worked;
- Inspect areas with final stabilization;
- Inspect perimeter areas; and
- Request copies of the Developer's inspection reports.

If deficiencies are noted during the inspection, the inspector shall discuss the nature of the deficiencies with the Developer. The Developer shall be given 48 hours to correct all deficiencies noted by the inspector. Other inspections associated with foundations, framing and final will not be performed until all BMP deficiencies have been corrected. The inspector shall document the results of the inspection and schedule the site for re-inspection.

All qualifying construction sites shall be inspected at a minimum frequency of every two (2) months. The inspection frequency may be increased depending upon the following:

- Status of construction;
- Site conditions;
- Site size;
- Site location;
- Site proximity to sensitive waters and/or areas;
- Type of construction;
- Historical performance and/or issues with the Developer; and
- Significant storm events.



6.8.3. Re-Inspection

If a site fails the routine inspection, the site shall be scheduled for a re-inspection. The re-inspection shall focus on areas that were determined deficient during the routine inspection. If all deficiencies have been corrected to the satisfaction of the inspector, the inspector shall continue with routine inspections. The inspector shall document the results of the inspection.

6.8.4. Final Inspection

Upon completion of all construction activity, the Developer shall request a final inspection. The inspection shall address the following:

- Inspect all discharge points from the site;
- Inspect areas with final stabilization;
- Inspect perimeter areas;
- Request copies of the Developer's inspection reports; and
- Request copy of the Termination of Registration letter from ADEM.

If deficiencies are noted during the inspection, the inspector shall discuss the nature of the deficiencies with the Developer and the Developer shall be asked to reschedule the final inspection. The inspector shall document the results of the inspection and schedule the site for re-inspection.

If the site passes the final inspection, a certificate of occupancy shall be provided. The inspector shall document the results of the inspection.

6.9. Enforcement

The Erosion and Sediment Control Ordinance provides the City Official with an escalating scale of enforcement action for violation of any provision in the ordinance. Depending upon the severity of the violation, the City Official may skip a Warning Notice and Compliance Order to issue a Stop Work Order. In general, the sequence of escalating enforcement actions provided by the Erosion and Sediment Control Ordinance is described below:

6.9.1. Warning Notice

When the City Official determines that any person has violated or continues to violate any provision of the Erosion and Sediment Control Ordinance, the City Official may serve upon that person a Warning Notice specifying the particular



violation to have occurred and requesting that the discharger immediately seek to cease any offending discharge.

If the violation is not corrected immediately, the City Official shall determine if the enforcement action should be escalated to a Compliance Order.

6.9.2. Compliance Order

When the City Official finds that any person has violated, or continues to violate, this ordinance, the City Official may issue a compliance order to the violator, directing that, within a specified time period, adequate structures and devices be installed, or procedures implemented, and properly operated or other action be taken to remedy such violation.

If the violation is not corrected immediately, the City Official shall determine if the enforcement action should be escalated to a Notice of Violation.

6.9.3. Stop Work Order

In the event that any person holding a grading permit or building permit pursuant to this ordinance violates the terms of the grading permit or implements site development in such a manner as to materially adversely affect the health, welfare, or safety of persons residing or working in the neighborhood or development site so as to be materially detrimental to the public welfare or injurious to property or improvements in the neighborhood, the City Official may immediately suspend or revoke the grading permit.

6.9.4. Notice of Violation

Whenever the City Official finds that any person is in violation of any provision of this ordinance, permit, or any order issued hereunder, the City Official or his agent may serve upon such person written notice of the violation by a Uniform Non-Traffic Citation and Complaint. This Notice of Violation shall contain:

- The name and address of the alleged violator;
- The address of the Premises (when available) or a description of the building, structure or land upon which the violation is occurring or has occurred;
- A statement specifying the nature of the violation; and
- Scheduled court date and/or pay date.

The City Official or agent may require without limitation:



- The performance of monitoring, analyses, and reporting;
- The elimination of illicit connections and/or illicit discharges;
- That violating discharges, practices, or operations shall cease and desist;
- The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
- Payment of an amount equal to administrative and remediation; and/or
- The implementation of source control or treatment BMPs.

Upon issuance of a written Notice of Violation, the City Official shall notify ADEM regarding status of the illicit discharge.

6.9.5. Fines

Fines provided by the Erosion and Sediment Control Ordinance include the following:

5. First Violation - The fine of sixty dollars (\$60.00) shall be assessed for a first violation of this ordinance.
6. Second Violation - The fine of one hundred and fifty dollars (\$150.00) shall be assessed for a second violation of this ordinance within a 30-day period.
7. Third or Subsequent Violation - For a third or subsequent violation committed by the owner during a 30-day period or longer, the violation will be adjudicated and the penalty determined by the municipal judge.
8. If after a ninety (90) day period, all violations of this ordinance have been rectified and no additional violations have occurred during that ninety (90) day period, then any further violations of this ordinance will be assessed as a first violation.

6.10. Public Reporting

The City has developed and implemented a Report a Problem feature on their website. This feature allows citizens to report problems at specific locations. The City then distributes the request to the appropriate department. A copy of the Citizen Request webpage is provided in Appendix C.



6.11. Non Permitted Construction Activities

If City personnel encounter qualifying construction activities that have not obtained an ADEM permit for construction, the City shall notify ADEM. At a minimum, the City shall provide the following information:

- Specific location of the construction project;
- Name and contact information of the owner or operator, if available; and,
- Summary of concerns or permit status.

The City may utilize the Complaints link on ADEM's website to provide this notification.

6.12. Program Goals and Evaluation

The City has developed realistic, achievable and measurable goals and performance milestones to measure the progress in implementing a construction site runoff program. Program goals are summarized in Table 6-1.

The most basic measure to evaluate the program effectiveness is to evaluate whether the program goals are being met. At the end of the permit year, the City will evaluate the program goals and overall effectiveness in educating the public on storm water related issues. The results of the program evaluation will be summarized in the Annual Report.



**Table 6-1
Construction Site Runoff Goals**

| Program Component | BMP | | Schedule | Responsible Department |
|---------------------|--|------------------|-------------------|---|
| | Description | Frequency | | |
| Legal Authority | Erosion and Sediment Control (ESC) Ordinance | Update as needed | 30 September 2019 | Public Works City Clerk |
| Permitting | Permit Application Requirements | Update as needed | 30 September 2019 | Planning and Development |
| | Permits Issued | Track | 30 September 2019 | |
| Plan Review | Construction Best Management Practices Plan (CBMPP) Requirements | Update as needed | 30 September 2019 | Planning and Development |
| | CBMPP Review Checklist and Procedures | Update as needed | 30 September 2019 | |
| | CBMPPs Reviewed | Track | 30 September 2019 | |
| Inspections | Inspection Requirements | Update as needed | 30 September 2019 | Planning and Development |
| | Inspections | Track | 30 September 2019 | |
| Enforcement Actions | Enforcement Strategy | Update as needed | 30 September 2019 | Code Enforcement |
| | Enforcement Tracking System | Update as needed | 30 September 2019 | |
| | Enforcement Actions | Track | 30 September 2019 | |
| | Citizen Reporting Tools | Update as needed | 30 September 2019 | Public Works Code Enforcement |
| | ADEM Notification Procedures | Update as needed | 30 September 2019 | Public Works |
| Training | QCI Training | 1 / year | 30 September 2019 | Public Works Planning and Development Engineering |
| Program Evaluation | Evaluate Program Effectiveness | 1 / year | 30 September 2019 | Public Works |
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7. Post Construction Storm Water Management

7.1. Introduction

Post construction runoff generally has two types of impacts. First, developed areas may increase the type and quantity of pollutants in storm water runoff. When storm water flows over areas altered by development it has a potential to pick up a variety of pollutants including but not limited to trash, debris, sediment, oil, grease, pesticides, heavy metals and/or nutrients, and carry these pollutants to the streams and lakes. Second, development increases the impervious surfaces of an area resulting in a quantity increase of storm water runoff. Increased impervious surfaces like buildings and parking lots interrupt the natural cycle of gradual percolation of storm water through the vegetation and soil. Instead, storm water is collected on the impervious surface and conveyed to drainage systems where increase volumes of storm water runoff enter the stream quickly. As a result, stream banks are more susceptible to scouring and the downstream areas have a higher potential of flooding.

The NPDES permit requires the City to develop, implement and enforce a program to address storm water discharges from new development and redevelopment projects. Goals of this program should be to:

- Retain the pre-disturbance hydrological conditions of both surface and groundwater;
- Remove suspended solids and associated pollutants entrained in stormwater runoff that result from activities occurring during and after development;
- Decrease the erosive potential of increased runoff volumes and velocities associated with development;
- Preserve natural systems including in-stream habitat, riparian areas and wetlands; and,
- Reduce the thermal impacts that result from impervious surfaces and treatment devices with large amounts of surface exposed to sunlight such as wet ponds.



7.2. Program Administration

The Public works Department is responsible for developing establishing design standards, plan review, as-built certification, inspection and maintenance requirements for post-construction structural BMPs. The Engineering Department shall be responsible for plan review and any additional technical assistance for post-construction structural BMPs.

7.3. Legal Authority

On 1 May 2018, the City of Prattville adopted a Post Construction Stormwater Management Ordinance. A copy of the ordinance is provided in Appendix B.

7.4. Program Components

There are a variety of structural BMPs capable of not only mimicking pre development hydrology, but also, provide very effective treatment of storm water runoff. Structural BMPs may include but are not limited to the following:

- Storm water retention / detention basins;
- Infiltration basins / trenches;
- Proprietary structural devices;
- Pervious pavement;
- Grass swales;
- Filter strips;
- Constructed wetlands;
- Rain barrels; and,
- Rain gardens.

As the City's post construction storm water management program develops, the City shall evaluate and identify the most appropriate BMPs to ensure, to the MEP, that post construction runoff mimics pre-construction hydrology. A 1.14 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.

7.4.1. Permitting

The City currently has a permitting process for commercial and residential developments. The existing process for reviewing and approving commercial developments is provided in Figure 6-1. All qualifying new development and redevelopment of areas greater than one acre, less than one acre and part of a



common development greater than one acre, or a development where stormwater management is required to provide adequate protection of the City's MS4 require a Post Construction Stormwater Permit (PCSP). The PCSP application requires the following information:

- Applicant Information;
- Site Information;
- Project Description;
- Type of Construction;
- Contact Information for the following:
 - Project Owner
 - Engineer/Designer
 - Contractor
- Waiver Request Form or Design Form;
- Site Development Plan / Preliminary Plat; and,
- Required Supporting Documentation.

Copies of the permit applications and submittal checklists are provided in Appendix F.

7.4.2. Post Construction Technical Memorandum

The City's Post Construction Storm Water Ordinance requires the establishment of design standards through a Design Memorandum. The City developed a technical memorandum describing how it will implement a post construction stormwater management program for qualifying new development or redevelopment. Since the most common BMPs used to address post construction stormwater management are detention and retention ponds, the technical memorandum was developed to address detention and retention ponds first. Additional BMPs may be included in the future. Components of the technical memorandum include the following:

- Overview;
- Applicable Developments;
- Implementation;
- Waiver Request;
- Water Quality Requirements;
- Low Impact Development;
- Design Standards;
- Detention and Retention Ponds;
- As-Built Certification;
- Annual Inspections;
- Home Owner's Association (HOA) Requirements and,
- Operation and Maintenance.



The technical memorandum was finalized and became effective on 5 October 2018. A copy of the technical memorandum is provided in Appendix F.

7.4.3. Waiver Request

The City recognizes that there are existing project sites that have been constructed or previously approved, prior to the effective date of the technical memorandum, that may qualify for a waiver from the updated post construction stormwater management requirements. Also, there may be projects which reduce the existing impervious area within the development. As a result, the City has developed two (2) Post Construction Stormwater Management Waiver Request Forms to address existing project sites and sites with impervious area reductions. In order for a project site to be considered for a waiver, the waiver request form must be completed and submitted to the City for review and approval. If a waiver has been submitted for a development that has not been completed and the density of the development is increased and/or modified, the developer is required to resubmit a waiver request for this development. Copies of the Existing Development, Post Construction Stormwater Management Waiver Request Form and Impervious Area, Post Construction Stormwater Management Form are provided in Appendix F.

7.4.4. Water Quality Requirements

Post-construction stormwater runoff quality is an important component of the City's SWMP. For all qualifying new development or redevelopment, Post-construction stormwater management shall include water quality BMPs to detain and treat the first 1.14 inches of rainfall that occurs on the project site.

7.4.5. Low Impact Development

The City shall encourage landowners and developers to incorporate the use of low impact development (LID) into development plans. The City has reviewed and adopted the latest version of the *Low Impact Development (LID) Handbook for the State of Alabama*.

7.4.6. Post Construction BMP Plan Review

The City already has a permitting and plan review process that is shown in Figure 6-1. During the development of the Post-Construction Storm Water Management Program, the City has incorporated the post construction BMP plan review into the existing process.



7.4.7. As-built Certification

As a part of the NPDES permit, the City must insure the BMPs that have been designed and approved are constructed and operated in accordance with their original design and intent. In an effort to confirm that the constructed BMPs meet the designer's intent, an As-Built Evaluation and Certification form has been developed. It is the Owner's responsibility to have as-built information, such as pond volume, embankment size and elevations, invert size and elevations, and spillway elevations, field surveyed by a Professional Land Surveyor. It is the Engineer-of-Record's responsibility to utilize the field surveyed information to fill out the As-Built Evaluation and Certification Form. A copy of the As-Built Evaluation and Certification Form is provided in Appendix F.

7.4.8. Annual Inspection

In order for post-construction BMPs to continue to function in accordance with their original design and installation, annual inspections are required by the City's NPDES permit. The Owner of the project is required to have these annual inspections performed and must then submit the required Annual Inspection Form to the City. The Annual Inspection Form shall provide documentation concerning the condition of each facility in terms of vegetative cover, erosion that may be occurring, the condition of inlets into the pond and the pond outlet, embankment conditions and any maintenance required and/or performed. The City shall evaluate the documentation submitted to confirm that the stormwater management facilities are continuing to function as designed. A copy of the Annual Inspection Form is provided in Appendix F.

7.4.9. Operation and Maintenance Agreement

It is the responsibility of the Owner to operate and maintain the stormwater management facility and/or BMPs in accordance with the original design intent and approval. If the original Owner or Developer has sold the project or passed ownership on to a Homeowner's Association, then it is the new Owner or HOA's responsibility to maintain the facility and provide any required inspection and maintenance. Prior to Final Plat Approval, the owner must submit an Operations and Maintenance Agreement (OMA) to the City for approval.

Should maintenance be needed at a facility as a result of the Annual Inspection, the Owner is required to provide the City with documentation describing the maintenance required and a schedule for completing all maintenance activities. Once all maintenance activities are completed, the Owner is required to provide documentation to the City of the maintenance performed and that the BMP



operates as it was designed. Under the City's OMA, if the owner or developer does not complete the construction of BMPs fully or does not maintain BMPs according to the required standards, the City can perform any necessary measures to bring the BMPs into compliance. The owner is responsible for reimbursing the City for any reasonable costs associated with the completion or maintenance of the BMPs. A copy of the OMA is provided in Appendix F.

7.4.10. Maintenance Escrow Agreement and Account

For residential subdivisions with Home Owner's Associations (HOAs), the City's Post Construction Stormwater Management Ordinance requires the establishment of an escrow account to ensure that adequate funds are available to provide for the operation, long-term maintenance, inspection, repair, and replacement or reconstruction of Post Construction BMPs. An escrow account shall be established to, at minimum, cover 50% of the constructed cost of each post construction stormwater management BMP. The developer or HOA shall initially pay 10% of this amount. The developer or HOA shall annual contribute 10% of the remaining amount required until the escrow account balance is equal to 50% of the constructed cost of each BMP.

The City requires HOAs to sign a Maintenance Escrow Account Agreement form and report the annual financial status of the escrow account with the Escrow Account / Maintenance Request Form the City provides in the Technical Memorandum. The City shall review and approve any escrow account disbursement requests listed on the form prior to the HOA withdrawing money for BMP maintenance. Copies of the Escrow Account Agreement and Escrow Account / Maintenance Request Form are provided in Appendix F.

7.5. Program Goals and Evaluation

The City has developed realistic, achievable and measurable goals and performance milestones to measure the progress in implementing a post construction storm water management program. Program goals are summarized in Table 7-1.

The most basic measure to evaluate the program effectiveness is to evaluate whether the program goals are being met. At the end of the permit year, the City will evaluate the program goals and overall effectiveness of post construction storm water controls to improve storm water quality. The results of the program evaluation will be summarized in the Annual Report.



**Table 7-1
Post Construction Storm Water Management Goals**

| Program Component | BMP | | Schedule | Responsible Department |
|------------------------|--|------------------|-------------------|--|
| | Description | Frequency | | |
| Legal Authority | Post Construction Stormwater Management New Ordinance or Modify Existing Ordinances | Update as needed | 30 September 2019 | Public Works Planning and Development City Clerk |
| Permitting | Low Impact Development | Encourage | 30 September 2019 | Planning and Development |
| | Permit Application Requirements | Update as needed | 30 September 2019 | |
| | Permits Issued | Track | 30 September 2019 | |
| Plan Review | Post Construction Stormwater Management Requirements | Update as needed | 30 September 2019 | Planning and Development |
| | Plan Review Checklist and Procedures | Update as needed | 30 September 2019 | |
| | Plans Reviewed | Track | 30 September 2019 | |
| Post Construction BMPs | As-Built Certification Requirements | Update as needed | 30 September 2019 | Planning and Development |
| | As-Built Certifications | Track | 30 September 2019 | |
| | Post Construction BMP Inventory | Track | 30 September 2019 | |
| Maintenance | Maintenance Requirements | Update as needed | 30 September 2019 | Planning and Development |
| | Maintenance Activities | Track | 30 September 2019 | |
| Program Evaluation | Evaluate Program Effectiveness | Annually | 30 September 2019 | Public Works Planning and Development |
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**Table 8-4
Pollution Prevention / Good Housekeeping – Program Goals**

| Program Component | BMP | | Schedule | Responsible Department |
|--|--------------------------------------|------------------|-------------------|-----------------------------|
| | Description | Frequency | | |
| Municipal Facilities | Inventory | Update as needed | 30 September 2019 | Public Works |
| | Inspection Requirements | Update as needed | 30 September 2019 | |
| | Standard Operating Procedures (SOPs) | Update as needed | 30 September 2019 | |
| | Training Requirements | Update as needed | 30 September 2019 | |
| Roads | Inventory | Update as needed | 30 September 2019 | Engineering |
| | Maintenance | Track | 30 September 2019 | |
| | Litter Control | Track | 30 September 2019 | Public Works |
| | Street Sweeping | Track | 30 September 2019 | |
| | Deicing Events | Track | 30 September 2019 | Engineering |
| Pesticides, Herbicides and Fertilizers (PHF) | PHF Storage Facility Inventory | Update as needed | 30 September 2019 | Public Works |
| | Training | Update as needed | 30 September 2019 | |
| | Standard Operating Procedures (SOPs) | Update as needed | 30 September 2019 | |
| | Chemical Inventory | Track | 30 September 2019 | |
| | Chemical Application | Track | 30 September 2019 | |
| Program Evaluation | Evaluate Program Effectiveness | Annual | 30 September 2019 | Public Works Engineering |
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