



City of Smithville, MO
MS4
Stormwater Management Plan (SWMP)
(MO-R0401C037 / 2021 - 2026)

OUTLINE OF STORMWATER MANAGEMENT PLAN FOR SMITHVILLE, MO 2021-2026

4.1 MCM 1. Public Education and Outreach on Stormwater Impacts

4.1.A Target audiences: Residents, Local Government, and Developers.

4.1.B Target pollutants: Residents – grass clippings / yard waste, illegal disposal of household hazardous waste. Local government – vehicle washing. Developers – sediment runoff from construction / land disturbance, concrete waste / wash out.

4.1.C Outreach and Education BMPs

1. Stormwater quality information on the City website
2. Social media campaign based on residential stormwater quality information
3. Permanently embossed “No Dumping” message on inlets
4. Publish stormwater tip articles in City Quarterly Newsletter
5. Other BMPs as time and resources allow

4.1.D The City will create opportunities, or support activities that are coordinated by citizen groups, for residents and others to become involved with the Stormwater Management Program. The activities, will make an effort to impact stormwater runoff by improving water quality. The City has selected ongoing yard waste collection, household hazardous waste collection, a street sweeping program. The City will be developing a Stormwater Master Plan, and will encourage citizens to participate in the MS4 area wide stormwater survey.

4.1.E The City will create or support the involvement BMP(s) in Section 4.1.D.

4.1.F The City will review their Public Education and Outreach on Stormwater Impacts annually and update implementation procedures and/or BMPs as necessary.

4.2 MCM 2. Public Participation

4.2.A The City held a public meeting on March 29, 2021 to receive comment on the MS4 Permit Renewal application. The SWMP will be posted in November 2021 on the City’s Website for public comment, and reviewed at a Board of Aldermen Work Session.

4.2.B The City posted a Copy of the renewal application and program summary on the City website on November 17, 2021. Public comment was requested.

4.2.C A Public information meeting will be held on December 21, 2021 as part of a Board of Aldermen work session. The public notice for this meeting was posted on November 17, 2021.

4.2.D The City tracks public input related stormwater quality matters in an electronic log kept by the Public Works Management Analyst.

4.2.E The City does not have a Stormwater Quality Advisory Committee.

4.2.F Staff will provide an update to the Board of Alderman at least annually on the MS4

Stormwater Program status.

4.2.G/I Using adaptive management, the City will review their Public Participation Program annually to ensure it is in compliance with this permit and promoted to the community. The City will include any additional events and/or BMPs in the Stormwater Management Program annual report.

4.3 MCM 3. Illicit Discharge Detection and Elimination (IDDE)

4.3.A The City will develop in the first permit year, a storm sewer map showing: accurate location of all MS4 outfalls; names and locations of all receiving waters; and the boundary of the regulated MS4 area (City limits). Paper maps are attached to the permit. The existing outfall map will be revised in the first permit year to include the names and locations of all receiving waters of the state that receive discharges from the MS4 outfalls. This map will be readily available and used by field staff as needed.

4.3.B The City will develop this map based on existing records and field surveys. Whenever outfall locations are verified or surveyed, the date will be recorded. Newly added outfalls will include the date that they were added to the system.

4.3.C The City will establish an ordinance prohibiting non-stormwater discharges in the storm sewer system. The City will establish appropriate procedures and actions to enforce the ordinance.

4.3.D The City will conduct outfall field assessments during dry weather conditions to check for the presence of illicit discharges using an established checklist/form. A minimum of 60% of all outfalls will be screened during the permit cycle. Priority areas will be established in the first year and screened each year.

4.3.E The City will develop diagnostic monitoring procedures to detect and investigate unknown non-stormwater flows as part of the dry weather screening program. These procedures will test parameters as necessary to determine the nature of any illicit discharges discovered during dry weather field screening.

4.3.F The City will develop procedures for tracing the source of an illicit discharge. If initial screening indicates that a dry weather discharge contains pollutants, or if an illicit discharge is suspected from another reporting method, the source shall be traced. A variety of investigative tools may be used as appropriate for each situation.

4.3.G The City will develop procedures for removing the source of the discharge. After locating the source, the pollutant and source will be removed following these procedures. The City will work with the sources of the illicit discharge to remedy the situation with the implementation of source control or treatment BMPs to prevent reoccurrence of the violation as well as remediation or restoration of affected property.

4.3.H In order to prevent further illicit discharge, the City will identify priority areas such as: areas with evidence of ongoing illicit discharges. Annually, the City will evaluate this priority area list and/or map and update as necessary to reflect changing priorities.

4.3.I The City will maintain written procedures for implementing the IDDE Program, including those components described within this section, to ensure program continuity and consistency.

4.3.J The City will conduct investigations in response to field screening discoveries, spills, or in response to complaints from the public, municipal staff, or adjacent MS4s. This investigation will work to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection.

4.3.K The City will develop procedures for appropriate enforcement when the ordinance is developed.

4.3.L The City will track its dry weather field screenings, spills, incidents, and investigations in an excel spreadsheet. This data will be used to continuously evaluate the effectiveness of the IDDE program. The City will document all investigations and report annually on these investigations.

4.3.M The City will inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. The City will utilize the website, quarterly newsletters, and "drain to stream" decals to spread this message.

4.3.N/O The City will review their IDDE Program annually, update implementation procedures as necessary and evaluate their current program to ensure that it is in compliance with their permit.

4.3.Q The City will develop and implement a training program for all municipal field staff, who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system.

4.3.R Using adaptive management the MS4 Operator shall review their IDDE Program, at minimum, annually and update implementation procedures as necessary.

4.4 MCM 4. Construction Site Stormwater Runoff Control

4.4.A The City has an ordinance to require construction site runoff control BMPs at construction/land disturbance sites greater than or equal to one (1) acre or less than one acre if the construction activity is part of a larger common plan or development or sale that would disturb one acre or more.

4.4.B The City will review pre-construction plans. These reviews will incorporate the consideration of potential water quality impacts. The plan reviewer will use a checklist to ensure consistency and completeness of each review.

4.4.C The MS4 Operator shall establish authority for site inspections and enforcement of control measures. They have implemented procedures for inspecting construction/land disturbance projects.

4.4.D The construction site runoff control program will include an established, escalating

enforcement policy that clearly describes the action to be taken for violations. The program will have written procedures to ensure compliance with the construction site runoff control program and will have at least two (2) enforcement actions.

4.4.E The City shall require the construction site operator to conduct inspections at minimum: Every fourteen (14) days, when construction is active and within 72 hours of any storm event, and within 48 hours after any storm event equal to or greater than a 2-year, 24-hour storm has ceased. The City will verify that these inspections are being conducted by the construction site operator during City inspections.

4.4.F The City shall maintain an inventory of active public and private land disturbance sites.

4.4.G The City will track their oversight inspections. This will be done by retaining copies of records such as inspection checklists and email correspondence.

4.4.H The City will review the Stormwater Management Program including ordinances, permitting procedures, review procedures, inspection procedures and enforcement procedures to ensure compliance with these requirements.

4.4.I Not applicable for the City.

4.4.J The Stormwater Management Program includes procedures for the City to receive and consider information submitted by the public about land disturbance sites.

4.4.K The City shall provide, or support access to, construction site runoff control training for City inspectors and plan reviewers at minimum once during this permit cycle.

4.4.L The City will develop written procedures outlining the local inspection and enforcement procedures to their inspectors to ensure consistency among the inspections.

4.4.M Using adaptive management, the City will review their Construction Site Stormwater Runoff Control Program annually. The ordinances, review procedures, inspection procedures, enforcement procedures, receipt of public information procedures, and effectiveness of training procedures will be reviewed to ensure compliance with these requirements and determine if changes are needed.

4.5 MCM 5. Post-Construction Stormwater Management in New Development and Redevelopment

4.5.A The City maintains and utilizes an ordinance to address post-construction runoff from new development and redevelopment projects to the extent allowable under state or local law for sites equal to or greater than one acre including projects less than one acre that are part of a larger common plan of development or sale. The City Code works to protect sensitive areas, minimizes the creation of stormwater pollution, utilizes BMPs that effectively remove stormwater pollution, and attempt to maintain predevelopment runoff conditions.

4.5.B The City will develop a strategy to minimize water quality impacts. This will include a combination of structural and/or non-structural controls (BMPs) appropriate for the community.

The ordinance for structural post-construction controls includes technical performance and design standards to control post-construction stormwater discharges. Non-structural controls include stream buffers, preservation of open spaces, tree preservation, impervious cover reduction, land use planning, and low impact development.

4.5.C Pre-construction plan review is conducted by the Public Works and Development Departments to assess site characteristics at the beginning of the construction site design phase to ensure adequate planning for stormwater program compliance. The structural or non-structural controls are chosen to protect sensitive areas, minimize the creation of stormwater pollution, and effectively reduce stormwater pollution.

4.5.D City shall develop an ordinance or similar enforcement mechanisms to ensure adequate long-term operation and maintenance (O&M) of the selected BMPs, including, as appropriate, agreements between the City and other parties such as post-development landowners or regional authorities.

4.5.E The City will inspect each water quality structural and non-structural post-construction stormwater BMP.

4.5.F The City will develop a plan designed to ensure compliance with the MS4's post-construction water quality regulatory mechanism. This plan shall include escalating enforcement mechanisms the City will use to ensure compliance. The City will have the authority to initiate a range of enforcement actions to address the variability and severity of noncompliance.

4.5.G Enforcement actions are timely in order to ensure the actions are effective. The City will begin enforcement actions within thirty (30) days of discovering a violation.

4.5.H The City will develop an inventory tracking the water quality post-construction BMPs in an excel spreadsheet.

4.5.I The City will track the post-construction BMP inspections in an excel spreadsheet.

4.5.J The City will evaluate the ordinances, permitting procedures, review procedures, inspection procedures and enforcement procedures to ensure compliance with these requirements and determine if changes are needed.

4.5.L The City will provide appropriate training for MS4 inspectors at minimum once every permit cycle.

4.5.M Using adaptive management, the City will annually review their Post-Construction Site Stormwater Management in New Development and Redevelopment Program and evaluate effectiveness of the overall program and determine if changes are needed.

4.6 MCM 6. Pollution Prevention / Good Housekeeping for Municipal Operations

4.6.A The City will maintain and utilize an employee training program for municipal operations staff. The training shall be given at minimum annually to all staff who work with material handling, at City owned or operated vehicle/equipment maintenance areas, storage yards, and

material storage facilities.

4.6.B Employee training will be used to prevent and reduce stormwater pollution. The training will cover the following topics/ activities: vehicle and equipment washing; fluid disposal and spills; fleet, equipment, and building maintenance; park and open space maintenance procedures (including fertilizer, herbicide, pesticide application); new construction, road maintenance, and land disturbances; stormwater system maintenance; MS4 operated salt and de-icing operations; fueling; solid waste disposal; street sweeper operations; and illicit discharges.

4.6.C The City maintains educational materials to use in the Good Housekeeping training program.

4.6.D The City will review and update their list of locations of all municipal operations and facilities.

4.6.E The City will maintain a list of industrial facilities the City owns or operates which are subject to NPDES permits for discharges of stormwater associated with industrial activity. The list shall include the permit number or a copy of the No Exposure Exemption Certification (if applicable) for each facility.

Facility: Wastewater Treatment Plant MDNR Permit No: MO-0055204.

4.6.F The City shall develop controls for reducing or eliminating the discharge of floatables and pollutants from municipal facilities listed in Section 4.6.D and 4.6.E

4.6.G The City will develop procedures for proper disposal of waste removed from the MS4 structures and areas of jurisdiction.

4.6.H The City maintains and utilized procedures for the washing of all municipal vehicles and equipment.

4.6.I The City will maintain written explanation of the controls, procedures, inspection schedules, and explanation of tracking of these controls. Annually, the City will evaluate the results, controls, and inspection procedures to ensure compliance.

4.6.J The City will maintain procedures to determine if there are impacts to water quality for new flood management projects.

4.6.K The City will evaluate the current Good Housekeeping program including training, inspection procedures, and other municipal operation procedures to ensure compliance with the permit.

4.6.L Not applicable to the City.

4.6.M Using adaptive management, the City will review their Municipal Operations Program annually and update implementation procedures as necessary.