City of Sturgis, South Dakota
Storm Water Management
Program Plan

for compliance with

Federal Clean Water Act
Phase II Storm Water Regulations
MS4 Permit: SDR41A006

Introduction

In 1987, Congress amended the federal Clean Water Act to require implementation, in two phases, of a comprehensive national program for addressing storm water discharges. Under Phase I, the Environmental Protection Agency (EPA) established the permitting requirements for discharges of storm water from *large* and *medium* Municipal Separate Storm Sewer Systems (MS4s). This definition included point source discharges from MS4s serving a population greater than or equal to 100,000.

On December 8, 1999, EPA promulgated Phase II of the Storm Water Regulations, which expanded the program to include point source discharges from *small* MS4s such as the City of Sturgis.

The South Dakota Department of Environment and Natural Resources (DENR) has been the delegated permitting authority for the Storm Water Program within the State of South Dakota since December 1993, and has adopted the federal storm water regulations, by reference, into the Administrative Rules of South Dakota (ARSD) Chapters 74:52:01 through 74:52:11. The Phase II municipal separate storm sewer systems (MS4s) in South Dakota will be covered under the "General Permit for Storm Water Discharges from Small MS4s."

The Phase II Rule defines a small MS4 storm water management program as a program comprising six elements (six minimum control measures) that, when implemented in concert, are expected to result in significant reductions of pollutants discharged into receiving waterbodies. Federal and state regulations for Phase II require the MS4 operator to "*develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable to protect water quality*."

Sturgis's Storm Water Phase 2 Program

The following pages define the Storm Water Phase 2 Program for the City of Sturgis. It is organized and broken down into segments according to each of the 6 minimum control measures. The narrative included under each of the 6 individual minimum control measures contains the associated regulatory text excerpted from South Dakota's General Permit for Storm Water Discharges from Small MS4s, the activities that the City of Sturgis will conduct to address the control measure, a timeline for activity and program implementation, and defined measurable goals intended to gauge the success of the Program and the City's compliance with the Phase II regulations.

Management and Responsibilities

Full implementation of Sturgis's Storm Water Phase 2 Program will involve numerous city departments and divisions. Currently, City activities associated with permit compliance are coordinated through the Planning and Permitting Department as well as the Public Works Department under the supervision of the City Manager. The Planning and Permitting staff includes the City Building Inspector who also serves as the Flood Plain Manager, The City Code Enforcement Officer who is responsible for enforcement of nuisance and other related ordinances, The City Engineer and the Planning Coordinator along with the Planning and Zoning Commission and City Council is responsible for plat review and other zoning issues. The Public Works Department is made up of several divisions. The Street Division is responsible for sweeping, snow removal and maintenance of street and traffic lights. The Sanitation Division is responsible for residential and commercial garbage service, oversees the recycling program and daily operations at the Rubble Site. The Wastewater Division is responsible for wastewater treatment, storm water drainage, irrigation activities and sewer line maintenance. Due to the limited number of staff in each division, many employees are cross trained and fulfill duties in other divisions as needed.

Inspection and Enforcement

Inspections are performed by the City Building Inspector and the City Code Enforcement Officer. Inspections are performed on a periodic basis depending on the complexity of the project or on a complaint basis. The City has the authority to request an inspection of a contractor's Storm water Prevention Plan at any time and may issue a Stop Work Order if deemed necessary.

Funding

Sturgis has very limited additional budget capability for costs directly associated with implementing MS4 activities. There is no source of funding for MS4 activities at this time. Activities slated for implementation will be limited to those that can be accomplished within existing city department budgets and at current and available staffing levels. Options for financing program administration, operations, maintenance, inspection, enforcement and capital improvements will be realized as program components are specifically identified and implemented.

Outreach and Training

The City of Sturgis provides public outreach and education to citizens through the City Website, Monthly Newsletters, a quarterly Contractor Newsletter, City Facebook pages and during Spring and Fall City Wide Cleanup campaigns.

Contact Information

The implementation of the SWMP will be coordinated through the Planning Coordinator's Office. The contact information is:

Laura Abernathy, Planning Coordinator
1040 Harley-Davidson Way
Sturgis, SD 57785
(605) 347-4422
labernathy@sturgisgov.com

Internal Stakeholders

City of Sturgis
Public Works Wastewater
Department of Planning & Permitting, Building Inspections, Code Enforcement, Engineering
Sturgis City Council

Staff Responsibilities

Director of Public Works
Supervise wastewater staff in inspecting and locating potential violations of illegal dumping and illicit discharge and notify the Office of Code Enforcement.

Director of Planning & Permitting
Investigate Code Enforcement complaints of illegal dumping and illicit discharge.
Assist with public information and education of the dangers of illegal discharge.

Building Inspector
Help ensure all Storm Water Pollution Prevention plans and measures required for construction are followed and installed.

Planning Coordinator
Coordinate MS4 Program, compile yearly reports and ensure listed projects are completed.

City Engineer
Assist Building inspector with compliance with Storm Water Pollution.
Prevention Plans and State issued permits for contractors.
Act as a reviewing body for development plans for storm water runoff.

Pollutants Identified

Oil and other petroleum based fluids from vehicles and illegal dumping
Old vehicle tires
Batteries
Soaps and detergents from home vehicle washing
Power washing of parking lots
Pesticides and fertilizers

Related Ordinances

The following City Ordinances enacted by the City of Sturgis may be effected by MS4 regulations:

Title 2 Contractor Licensing and Construction Regulations
Title 11 Health and Sanitation
Title 18 Zoning
Title 19 Subdivision of Land
Title 34 Flood Damage Prevention
Title 36 Code Enforcement

The main requirement of the Phase II regulations, and South Dakota's General Permit for Storm Water Discharges from Small MS4s, is for the MS4 operator – i.e., Sturgis – to develop and implement a storm water management program to address six minimum control measures. The SWMP is intended to reduce pollutant levels to "maximum extent possible" to protect water quality and comply with the Clean Water Act. Each control measure has a set of measurable goals that are expected to result in a reduction in pollutants within the city.

The six minimum control measures are:

1) Public education and outreach;
2) Public participation/involvement;
3) Illicit discharge detection and elimination;
4) Construction site storm water runoff control;
5) Post-construction storm water management; and,
6) Pollution prevention/good housekeeping for municipal operations.

1. Public Education and Outreach on Storm Water Impacts.

To satisfy this minimum control measure, the permittee must implement public education activities, which include the following:

1. Distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges and the steps the public can take to reduce pollutants in storm water runoff.
2. Target local businesses with informational materials appropriate to them on potential storm water impacts of improper waste disposal and illegal discharges.

2020-2024

In each of the years from 2020 through 2024, inclusive, city staff will conduct the following activities:

1. Continue MS4 activities including public education appropriate for the Sturgis community. Continue identifying and enhancing education and outreach materials as necessary. Identify resource needs for budgeting purposes and reviewing effectiveness of education and outreach activities. Explore existing programs and materials available from local, state, and federal sources that can be modified to meet the needs of Sturgis.

   Publish at least one topic to be included in the monthly newsletter promoting existing city services and events, promoting the complaint-based system of addressing illicit storm water discharges and general pollution and littering within the city limits, and promoting increased awareness of storm water quality as well as other environmental concerns.

   Existing programs that are currently promoted in monthly newsletters include the bi-annual spring and fall cleanup event, the seasonal self-service grass and leaf disposal program, weekly residential solid waste collection, self-service recycling program, regular street cleaning, etc. Storm water topics may include general discussion of:

   - the harmful effects of storm water pollution;
   - "Did-You-Know?" stormwater facts and common sources of urban storm water pollution, including improper use and disposal of pesticides and fertilizers, oil and grease from roadways and parking lots, sediment from construction sites, pet waste, and carelessly discarded trash such as cigarette butts, paper wrappers, and plastic bottles; and
   - the complaint-based system of addressing illicit storm water discharges and general pollution and littering within the city limits

   Progress will be measured by the number of newsletters distributed which contain the specific article.

2. Develop and distribute MS4 information sheets to temporary businesses that apply for vending licenses during the annual Sturgis Motorcycle Rally. Include information related to city inspections and enforcement of MS4 related ordinances. The number of contacts made based on the number of inspections logged by the inspection staff

will provide the measure of effort toward this activity.

3. Expand and update the Sturgis Storm water web page as necessary. Online resources with links to relevant federal websites will be included.

4. Install storm sewer markers on storm sewer inlets as necessary with staffing or volunteers if available.

   In 2015, all the storm sewer inlets within the Sturgis business district and along all major streets were stenciled with a message discouraging the disposal of harmful items. This comprehensive stenciling project was completed through a coordinated effort using city staff and members of the SD Department of Corrections work release program.

   However, since the use of storm sewer stenciling can be contradictory to the message being sent to the public, the City of Sturgis has chosen to install Duracast Storm Drain Markers. The multi-layered markers are UV- and abrasion-resistant, and field-tested for an estimated life span of up to 30 years. The installation of these markers will commence in the summer of 2019 in conjunction with the regular bi-annual cleaning of catch basins. This process will continue on a seasonal basis until all inlets are marked. The physical field efforts will be augmented with media publicity and news articles.

   Storm sewer markers will be installed in conjunction with the regular bi-annual cleaning of catch basins. The physical field efforts will be augmented with media publicity, public service announcements, and interviews. Units of measure will be reports of the numbers of markers ordered per year by field staff, number of markers installed, and documentation of media coverage of marker installation efforts by city staff and volunteers.

5. Develop topical brochures to be made available at City offices.

   The use and availability of brochures will standardize the MS4 message the City is bringing to the public. These brochures will be topical, such as a brochure identifying common stormwater pollutants. Brochures will be made available at the City Finance Office, Department of Planning and Permitting, and Public Works. PDF copies of the brochures will also be made available on the stormwater information page of the city website. Measurable goal is the number of flyers completed and printed.

6. Create opportunities for public speaking events.

   Staff will create and offer presentations upon request to service organizations, schools, special interest groups, etc. regarding all City programs and services that reduce storm water pollution. Though not intended to be an all-inclusive list, other programs may consist of spring and fall cleanup weeks, grass and leaf disposal, recycling, etc. Activity will be measured by the number of speaking engagements requested.

7. Send quarterly newsletter to contractors registered with the City of Sturgis.

Implementation of a quarterly contractor newsletter began in 2017. The newsletter includes informational articles specific to large and small contractors working within the city limits. Activity will be measured by the inclusion of at least one article dedicated to stormwater pollution prevention per newsletter.

8. Develop and promote informational materials targeting local businesses.

   Informational pamphlets will be created specific to high-risk businesses, reminding them of the impacts of improper waste disposal and illegal discharges. Businesses targeted for possible pollutants include the following:

   - Convenience stores/gas stations
   - Automotive services
   - Restaurants
   - Temporary vendors for the annual motorcycle rally

   Activity will be measured by the completion of the pamphlets and the number of businesses contacted.

2. Public Involvement/Participation

To satisfy this minimum control measure, the permittee must develop and implement procedures for involving the public in the SWMP, including the following:

1. Include the public in developing, reviewing, and implementing the SWMP;
2. Make efforts to reach out and engage the entire community;
3. Comply with any applicable public notice requirements using an effective mechanism for reaching the public; and
4. Document efforts to involve the public and ensure that members of the community were given opportunities to be involved.

2020-2024

In each of the years from 2020 through 2024, inclusive, the city will conduct the following activities:

1. Hold public meetings to receive input on proposed storm water management program changes.

   This level of notification provides the entire community equal opportunity to be informed of MS4 Program activities considered by the City Council and to participate in the process of developing, reviewing, and implementing the Sturgis MS4 Program. Staff will fulfill statutory requirements of SDCL 1-25-1.1. Notice of meetings of public bodies -- Violation as misdemeanor for all City Council meetings.

   All public bodies shall provide public notice, with proposed agenda, at least twenty-four hours prior to any meeting, by posting a copy of the notice, visible to the public, at the principal office of the public body holding the meeting, and, for special or rescheduled meetings, delivering, in person, by

mail or by telephone, the information in the notice to members of the local news media who have requested notice. For special or rescheduled meetings, all public bodies shall also comply with the public notice provisions of this section for regular meetings to the extent that circumstances permit.

Satisfactory implementation of this statutory requirement and best management practice will be assumed unless otherwise indicated by successful litigation against the City for failure to provide statutory public notice of City Council meetings.

In addition, agendas provided to the local news media in the event of special or rescheduled meetings involving the MS4 Program or other existing programs with a storm water quality benefit will be provided in the council report as a measure of compliance and completion of this best management practice activity.

2. Approach local agencies for potential partnership opportunities, such as Meade County. Goal will be measured by agreement signed by the parties involved.

3. Continue to actively promote and conduct current city programs with an associated storm water quality benefit – spring and fall cleanup, recycling, grass and leaf disposal, residential solid waste collection. The level of success and community participation will be measured in tons of material diverted for proper disposal.

3. Illicit Discharge Detection and Elimination.

To satisfy this minimum control measure, the permittee must develop, implement, and enforce procedures to detect and eliminate illicit discharges into the permittee's MS4. The permittee must:

1. Develop, if not already completed, a storm sewer system map showing the location of all municipal storm sewer outfalls and the names and location of all waters of the state that receive discharges from those outfalls.
2. To the extent allowable under state or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges into the storm sewer system, and implement appropriate enforcement procedures and actions.
3. Develop and implement a plan to detect and address non-storm water discharges, including illicit discharges and illegal dumping, to the system. The plan must include the following components:
   - procedures for locating priority areas likely to have illicit discharges;
   - procedures for tracing the source of an illicit discharge;
   - procedures for removing the source of the discharge; and
   - procedures for evaluating and assessing the illicit discharge plan.
4. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

1. Maintain a map showing the location of all municipal storm sewer outfalls, including major natural tributaries, to the Bear Butte Creek drainage.

   The Sturgis GIS contains a layer showing the location of all storm drains and improved drainage channels. This information was inputted in 2012. Field verification of the locations of storm sewer inlets was completed in 2018. Field attribute data is a continuing process. Updates are made as improvements to the system are made. The measurable goal for this BMP is the completion of the map and entry of attributes into the GIS data.

2. Develop and adopt an ordinance, or ordinance revisions, providing authority for implementing Sturgis's plan to detect and address non-storm water discharges, including illicit discharges and illegal dumping, to the storm water management system that complies with the requirements of the federal Phase II rules and South Dakota's General Permit for Storm Water Discharges from Small MS4s.

3. Develop a plan to detect and address non-storm water discharges, including illicit discharges and illegal dumping, to the storm water management system that complies with the requirements of the federal Phase II rules and South Dakota's General Permit for Storm Water Discharges from Small MS4s as provided above.

   This best management practice is mandated by the Phase II regulations and South Dakota's General Permit for Storm Water Discharges from Small MS4s. The measurable goal for this BMP is a written plan or standard operating procedure that has been approved by the Sturgis City Council.

   Units of measure for this BMP are undetermined at this time, but will be specified on the actual plan developed and adopted by the City. Reportable units of measure may include:
   - number of septic tanks removed from service and replaced with the City's sanitary sewer collection service,
   - prioritization of areas for inspections,
   - inspections conducted,
   - illicit connections and illegal dumping reported,
   - cleanups conducted,
   - illicit discharges detected and eliminated.

   Receive and respond to confidential complaints of illicit discharges and illegal dumping into the storm water management system and other general pollution or littering within the city limits of Sturgis. Public involvement and participation will be measured by the number of legitimate confidential complaints received by the Code Enforcement Officer and/or another city staff member.

4. Construction Site Storm Water Runoff Control.

To satisfy this minimum control measure, the permittee must develop, implement, and enforce requirements for construction activities to address pollutants in storm water runoff to the MS4. At a minimum, activities disturbing one or more acres must be addressed. Construction activities disturbing less than one acre must also be included if that construction

activity is part of a larger common plan of development or sale that would disturb at least an acre.

1. The selected mechanism must include the development and implementation of, at a minimum:
   a. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under state or local law;
   b. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;
   c. 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;
   d. Procedures for site plan review that consider potential water quality impacts;
   e. Procedures for receipt and consideration of information submitted by the public; and
   f. Procedures for site inspection and enforcement of control measures.
2. The following mechanisms can assist in meeting the requirements of this measure:
   a. The MS4 operator can incorporate storm water pollution prevention requirements (such as erosion control plans, design standards, and/or the use of BMPs) into an existing "Building Permit" or development approval process.
   b. The MS4 operator can reference the state's Storm Water Construction Permit requirements and provide cooperation or assistance to the state in determining compliance with their program, such as providing information on active construction projects and reporting lack of erosion control measures.

2020-2024

1. Develop a list of basic erosion and sediment control techniques, and encourage contractors, developers, homebuilders, and property owners to use those basic erosion and sediment control techniques to reduce or eliminate the migration of sediment off their respective construction sites and properties.

   Attainment of this best management practice will be measured in terms of a handout containing the list of basic erosion and sediment control techniques, and the number of handouts shared with contractors and property owners at opportune times such as the issuance of building permits and/or grading permits. In lieu of a handout, this information may be provided during building permit application.

2. Require Erosion and Sediment Control (ESC) plans for any land disturbance greater than 1,000 sq. ft.

   Planning for sediment and erosion control practices and procedures in advance of starting construction is an important step in preventing sediment from entering the MS4. A draft ordinance and guidance will be prepared in 2020. A final ordinance and ESC guidance will be available by 2024.

3. Require the use of appropriate perimeter controls on construction sites.

ESC requirements will be revised to require all construction sites on slopes in excess of five percent (5%) and in areas where calculations indicate pooling of water behind the structure to use steel-reinforced silt fencing. Additional requirements include proper installation and maintenance of these and other perimeter controls. Traditional perimeter controls, such as a standard silt fence, have higher failure rates when water pools behind the control. Requiring steel-reinforced silt fence, which is standard silt fence fortified with chain-link fencing and steel stakes, in critical areas will reduce damage to perimeter controls during storm events.

5. Post-Construction Storm Water Management in New Development and Redevelopment

To satisfy this minimum control measure, the permittee must develop, implement, and enforce measures to address storm water runoff from new development and redevelopment projects that disturb at least one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. Strategies developed and implemented must include:

1. A combination of structural and non-structural BMPs that are appropriate for the community.
2. Use of an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under state or local law.
3. Requirements to ensure adequate long-term operation and maintenance of BMPs.

2020-2024

1. Conduct inventory of non-conforming landscaping.

   Current city ordinance Title 18 requires a percentage of green space required. Not only is this a community aesthetics issue, but vegetation in accordance with city ordinance has a positive effect in terms of reducing impervious surface and storm water runoff and water quality improvements. The measurable goal will be a mapped inventory of non-conforming lands in Sturgis.

2. Reduce directly connected impervious surfaces by enforcing landscaping requirements for commercial properties.

3. Adopt a plan for the replacement of non-conforming boulevard landscape materials with grass or other permeable living materials.

   Adoption of a plan by the Sturgis City Council will measure the progress toward implementing this best management practice.

4. Expand MS4 maintenance, which includes street sweeping and catch basin cleaning, to include storm drain flushing and camera inspections.

6. Pollution Prevention/Good Housekeeping for Municipal Operations.

To satisfy this minimum control measure, the permittee must develop and implement pollution prevention guidelines for preventing or reducing pollutant runoff from municipal operations.

1. The permittee must prevent or reduce storm water pollution from facilities and activities such as:
    - streets, roads, highways, municipal parking lots;
    - maintenance and storage yards;
    - fleet or maintenance shops with outdoor storage areas;
    - salt and sand storage locations and snow disposal areas operated by the permittee;
    - waste transfer stations;
    - park and open space maintenance;
    - fleet and building maintenance;
    - street maintenance;
    - new construction of municipal facilities; and
    - storm water system maintenance.
2. The permittee must include training to inform employees of impacts associated with illicit discharge and improper disposal of waste from municipal operations.

2020-2024

1. Develop and distribute general information to all City operations regarding the purpose of the Storm Water Phase 2 Program.

    This best management practice is meant to partially address the staff training requirement mandated by the Phase II regulations and South Dakota's General Permit for Storm Water Discharges from Small MS4s. This information will also be intended to encourage each entity to begin observing and logging activities and locations within their facilities that will become part of their pollution prevention plans. A copy of the information sheet and the number information sheets distributed to City staff will measure this goal.

2. Expand storm sewer cleaning and inspection program.

    Multi-objective reasons for expanding this program as proposed include:
    - Ensuring level of service of storm sewers,
    - Providing for the proper recovery and disposal of debris and other materials stored temporarily in storm sewers, and
    - Supporting and facilitating the Illicit Discharge Detection and Elimination control measure of the proposed Sturgis's Storm Water Phase 2 Program.
    - documentation of departmental staff training regarding pollution prevention plans standard operating procedures pertaining to urban storm water quality improvements.

    Approval, support and adoption of the program by the City Council will measure progress toward completion of this best management practice. Progress will also be measured in terms of linear feet of storm sewer cleaned and inspected and an annual summary/report of findings and condition.