

5.0 MS4 FACILITY MAINTENANCE

5.1 OVERVIEW

Daily activities at MS4 owned and operated facilities and projects, and throughout the MS4 community as a whole, have the potential for pollutants to come into contact with stormwater. Therefore, it is very important to implement a number of measures to minimize the potential for stormwater to come into contact with these potential sources of pollution. This section will help new and established MS4 communities develop and/or strengthen their maintenance program for operations at their facilities and on MS4 projects.



Provided by the City of Goshen Stormwater Department. The picture shows chemicals stored in an organized manner with containment to prevent spills from entering a

5.2 SITE ASSESSMENT

5.2.1 Written Documentation for Maintenance Activities at MS4 Facilities

Regulation: 327 IAC 15-13-17 (b) (2) (general)	Controls for reducing or eliminating the discharge of pollutants from operational areas, including roads, parking lots, maintenance and storage yards, and waste transfer stations. Maintenance is defined as any activities done to maintain equipment, the building, infrastructure, or materials stored on-site requiring maintenance such as dumpsters, material stockpiles, etc.
Implementation BMPs	<ul style="list-style-type: none"> • Create and maintain written documentation for maintenance activities. This could be SOPs, SWPPPs, P2&GHMs, or other applicable format. • Review each written document annually with municipal employees and update as needed. • New employees are to receive training on written documents during orientation. • Written documents are to be placed in a location that is easily accessible to all employees.
Programmatic Indicator	None.
Possible Measurable Goals	<ul style="list-style-type: none"> • Number of written documents updated annually or the date of the last update. • Decrease the amount of spills occurring at MS4 owned facilities and at offsite locations where MS4 employees are working. • Monitor spill prevention and clean-up practices and implement additional measures as needed.
Documentation	<ul style="list-style-type: none"> • Document installation of spill prevention measures. • Document the type, size, and time required to clean-up a spill.
Advanced BMPs (optional)	None.
Additional Resources	Partners for a Clean Environment (PACE), Colorado – Municipal Stormwater Operations

5.2.2 Municipal Facility Stormwater Pollution Prevention Plan (SWPPP) or Pollution Prevention and Good Housekeeping Manual (P2&GHM) or Program Document(s)

Regulation: 327 IAC 15-13-17 (a)	An MS4 operator shall develop an SWQMP that includes a commitment to develop and implement a program to prevent or reduce pollutant runoff from municipal operations.
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Implementation BMPs	<ul style="list-style-type: none"> • A SWPPP, P2&GHM, or Program Document(s) should be created for each MS4 owned facility where the potential for pollutants to runoff exists. Program Documents can include SOPs, handbooks, written policies, etc. • Implement employee training on pollution prevention and good housekeeping (refer to Section 2.0 for more information on training requirements). • Additional employee training is to be conducted after each update. This can be as simple as a memo to all employees in the facility with the updated SWPPP, P2&GHM, or Program Document(s) or a hands-on/in person training.
Programmatic Indicator	None.
Possible Measurable Goals	Track the number of SWPPP, P2&GHM or other program documents updated annually or the date of the last update.
Documentation	<ul style="list-style-type: none"> • Number of MS4 owned facility SWPPPs, P2&GHMs, or Program Document(s) updated annually. • The SWPPP, P2&GHM, or Program Document(s) is to be placed in a visible and easily accessible location. • A SWPPP, P2&GHM, or Program Document(s) will be updated as inspections are conducted, spill events occur, changes in employees that are part of a Pollution Prevention Team, stormwater BMPs are updated or changed, etc.
Advanced BMPs (optional)	None.
Additional Resources	<ul style="list-style-type: none"> • USEPA - Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators, EPA 833-B-09-002 • Berkeley County (CA) Stormwater Management Program - Pollution Prevention/Good Housekeeping Manual • Washington Department of Ecology - City of Kent (WA) Public Works Operations Facility & Vector Solids Facility SWPPP - • Toledo Metropolitan Area Council of Governments – Pollution Prevention and Good Housekeeping Practice for Municipal Operations • Riverside County Flood Control and Water Conservation District – Appendix J: Template Pollution Prevention Plan for Municipal Facilities

5.2.3 Up-to-Date Inventory of Materials Stored and Used On-Site Daily

Regulation: 327 IAC 15-13-17 (b) (2)	Controls for reducing or eliminating the discharge of pollutants from operational areas, including roads, parking lots, maintenance and storage yards, and waste transfer stations.
Implementation BMPs	<ul style="list-style-type: none"> • Create and maintain written documents/procedures for chemical storage practices. This could be SOPs, SWPPPs, P2&GHMs, or other applicable format. • Review each procedure annually with municipal employees and update as needed. • New employees are to receive training on procedures during orientation. • Procedures are to be filed in a location that is easily accessible to all employees. • Implement employee training on stored materials (refer to Section 2.0 for more information on training requirements).
Programmatic Indicator	None.

Possible Measurable Goals	<ul style="list-style-type: none"> • Maintain a chemical list of containers 5 gallons and greater. • Maintain a list of all chemicals and materials on site. • Number of SOPs updated annually.
Documentation	Document installation of spill prevention measures.
Advanced BMPs (optional)	None.

5.2.4 Management Procedures of Stockpile Storage and Maintenance

Regulation: 327 IAC 15-13-15 (k) (4) and 327 IAC 15-13-17 (b) (2)	<p>In addition to the requirements of 327 IAC 15-5-6.5(a)(7), the MS4-operated project stormwater pollution prevention plan must address the following areas:</p> <p>(4) Temporary staging and material stockpile areas</p> <p>Controls for reducing or eliminating the discharge of pollutants from operational areas, such as, storage stockpiles (soil, gravel, rock, sand etc.).</p>
Implementation BMPs	<ul style="list-style-type: none"> • Create and maintain written documents/procedures for material stockpiles at MS4 owned facilities and at MS4 owned projects. This could be SOPs, SWPPPs, P2&GHMs, or other applicable format. • Review the procedures annually with municipal employees and update as procedures are revised. • Temporary material stockpiles need to have perimeter protection measures installed to prevent runoff from coming into contact with stormwater. • Permanent material stockpiles need to be placed in a contained area that prevents runoff from coming into contact with stormwater. • If indicated from inspections, implement erosion and sediment control measures for soil stockpiles. • Implement employee training on storage of stockpiles (refer to Section 2.0 for more information on training requirements).
Programmatic Indicator	None.
Possible Measurable Goals	<ul style="list-style-type: none"> • Number and location of stockpiles at an MS4 facility or MS4 project. • Type and number of protection measures implemented to keep material stockpiles from coming into contact with stormwater. • Number of material stockpiles contained.
Documentation	Documentation of the BMPs used to prevent stormwater from coming into contact with material stockpiles or runoff from material stockpiles.
Advanced BMPs (optional)	Place permanent material stockpiles under cover.

5.2.5 Management Procedures for MS4 Owned and Operated Projects

Regulation: 327 IAC 15-5-6.5 327 IAC 15-13-15 (i), (j), and (k)	<p>Stormwater Runoff Associated with Construction Activity:</p> <p>(i) For those construction activities operated by the MS4 operator or MS4 municipalities within the MS4 area, construction plans must be submitted to the local SWCD, IDEM, or other entity designated by the department for review and approval. If the MS4 operator does not receive either a notice of deficiency or an approval within thirty-five (35) days of the submittal, the plan will be considered adequate.</p> <p>(j) In addition to the requirements of 327 IAC 15-5-6.5, the MS4-operated project construction plans must include a traffic phasing plan for those projects that have the potential to alter vehicular traffic routes.</p> <p>(k) In addition to the requirements of 327 IAC 15-5-6.5(a)(7), the MS4-operated project stormwater pollution prevention plan must address the</p>
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	<p>following areas outside of right-of-ways:</p> <ol style="list-style-type: none"> (1) Utility relocation areas. (2) Material hauling and transportation routes/roads. (3) Borrow pits. (4) Temporary staging and material stockpile areas. (5) Temporary disposal areas for waste materials.
Implementation BMPs	<ul style="list-style-type: none"> • Create a SWPPP or equivalent plan for all MS4 owned and operated projects disturbing one acre or more of land or are part of a larger common plan of development or sale. • Implement employee training on stored materials (refer to Section 2.0 for more information on training requirements).
Programmatic Indicator	None.
Possible Measurable Goals	<ul style="list-style-type: none"> • Number of MS4 owned and operated projects with a SWPPP. • Date the SWPPP was last reviewed or revised.
Documentation	Each project's SWPPP is one form of documentation. Additionally, inspection reports are to be filled out weekly and within one business day of a 0.5 inch rain event.
Advanced BMPs (optional)	<ul style="list-style-type: none"> • Create a SWPPP or equivalent for all MS4 owned and operated projects. • Include a discussion about erosion and sediment control measures at each project pre-construction meeting.
Additional Resources	<ul style="list-style-type: none"> • IDEM - Construction/Land Disturbance Stormwater Permitting (327 IAC 15-5, Rule 5) • 327 IAC Water Pollution Control Division – NPDES General Permit Rule Program (Rule 5 Permit)