Municipal Separate Storm Sewer System (MS4) Overview

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MS4s The Future of Storm Water Management
Points of Emphasis

1. MS4 Defined and Identified
2. MS4 Regulation
3. MS4 Program Management
4. MS4 Assessment
5. MS4 Case Reviews
MS4 is the acronym for Municipal Separate Storm Sewer System. The term is used interchangeably to represent:

1) municipalities permitted under an MS4 permit

2) the storm drain system in a municipality in which pollutants and storm water discharge to larger water bodies (i.e., river, sea).
MS4s are regulated under an MS4 Permit issued by its permitting/enforcement authority which may be EPA or the State.

The NPDES program was delegated in the mid 1990’s to: Arkansas, Louisiana, Oklahoma and Texas. These states issue and regulate their own MS4 permit. The NPDES program for the state of New Mexico has not been delegated but is managed by EPA including Tribal Lands and Oil and Gas facilities.
When referring to MS4s as a permitted municipality, there are two types:

1) Phase I MS4; and,

2) Phase II MS4
Under the 1987 Clean Water Act Amendments, the U.S. EPA developed new regulations to address storm water that might impact water quality. These new "Municipal Separate Storm Sewer System" (MS4) regulations were set up in two Phases dependent upon population and are enforced by the U.S. EPA.
MS4 Requirements

Each designated MS4 entity was required to obtain a permit from its permitting and enforcement authority. The initial permit period runs for five (5) years. The permit application required the development of a Storm Water Management Plan (SWMP) which is basically an action plan for the MS4 entity to institute required Control Measures, which are identified in the permit.
Phase I-Large and medium municipalities permitted are required to implement fourteen Control Measures:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Pesticides, Herbicides, and Fertilizers Application
4. Construction Site Runoff
5. Post-Construction Site Runoff
6. Areas of New Development and Significant Re-Development
7. Commercial and Industrial High Risk Runoff
8. Illicit Discharge Detection and Elimination
9. Municipal Pollution Prevention and Good Housekeeping Practices
10. Roadways
11. Spill Prevention and Response
12. Structural Control
13. Flood Project Management
14. Monitoring
Phase II- Small municipalities are required to implement six Control Measures:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Construction Site Runoff
4. Post-Construction Site Runoff
5. Illicit Discharge Detection and Elimination
6. Municipal Pollution Prevention and Good Housekeeping Practices
EPA developed and piloted the MS4 Self-Assessment in 2014. The Assessment is composed of fourteen Modules.

Phase I MS4s are required to complete all fourteen Modules and Phase II MS4s are required to complete 6 of the 14 Modules. The Modules contain questions specific to each Control Measure that the MS4 is required to implement.
Case Reviews

• Progress and Needs for Improvement
Signs of MS4 Program Progress

Program strengths and weakness identified and areas for improvement;

Program perception and awareness increased;

SWMP reviewed and updated;

Economic and Budgetary Benefits;

More program focusing, staff responsibilities and assignments identifiable and resources inventoried and evaluated.
Areas for Improvement

- Develop quantifiable Measurable Goals
- Develop and implement all Control Measures
- Hire sufficient and qualified staff
- Update the Storm Water Management Plan (SWMP)
- Conduct routine inspections
- Take timely enforcement action
- Maintain resources and equipment
- Timely document inspection reports and related info
- Ensure city owned facilities are properly permitted and operating under a SWPPP.
EPA may be back.
MS4 Sequential Assessment

Coming March 2016
To view the MS4 Self-Assessment Modules go to web link:

Arkansas
http://www.epa.gov/ar/compliance-assurance-and-enforcement-arkansas

Louisiana
http://www.epa.gov/la/compliance-assurance-and-enforcement-louisiana

New Mexico

Oklahoma
http://www.epa.gov/ok/compliance-assurance-and-enforcement-oklahoma

Texas
http://www.epa.gov/tx/compliance-assurance-and-enforcement-texas
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