What is a Municipal Separate Storm Sewer System (MS4)?

The U.S. EPA's storm water program addressed storm water runoff in two phases. Phase I addressed storm water runoff from large and medium MS4s. Large municipalities with a separate storm sewer system serving a population greater than 250,000 and medium municipalities with a service population between 100,000 and 250,000 had to obtain NPDES permits. Initial application deadlines for large and medium municipalities were November 16, 1992 and May 17, 1993, respectively. As part of their individual NPDES permit applications, the large and medium MS4s had to develop a storm water management program (SWMP). This program includes minimum control measures, such as activities for public education, public participation, prevention of illicit discharge, inspection and monitoring of construction, post-construction and pollution prevention activities.

6 MINIMUM CONTROL MEASURES (MCM)

1. Public Education
2. Public Participation
3. Illicit Discharge
4. Construction Activities
5. Post-Construction
6. Pollution Prevention

1. PUBLIC EDUCATION

The City of Pasadena has a Public Participation and Education Program covering the outreach and public participation: PPE

- The City of Pasadena develops a Public Participation and Education bilingual program PPE.
- This program covers presentations, booth events, supporting organization of environmental events, conferences, meetings, projects, etc.
- Children are a very important part of this education
- The City partners with stakeholders, Pasadena Independent School District, businesses, industry, organizations to accomplish this mission
- The main message for residents and visitors of Pasadena is to reduce pollutants in storm water
run-off. For more information on Opportunities to partner with the City on educational activities call 713-475-7264

2. **PUBLIC PARTICIPATION**
The City of Pasadena includes its PPE program not only education, but also public participation. The program offers different opportunities to participate on environmental volunteering. Residents of all ages, education, backgrounds, etc., can help the environment and the community, according to their time, age and skills. Activities are available for individuals and groups.

Programs:
- Walk The Waterway
- Adopt-A-Waterway
- Adopt-A-Street
- Adopt-A-Park
- Adopt-A-Trail
- Mark the Storm Drain
- Environmental Inspector Aid
- Environmental Education Aid
- Environmental Office Aid
For more information, go to Volunteer Pasadena

3. **ILLICIT DISCHARGE DETECTION & ELIMINATION**
- The City has developed, implement, and enforce a program to detect and eliminate illicit discharges.
- The City has developed a storm sewer system map
- The City Effectively prohibits non-stormwater discharges and implements appropriate enforcement procedures.
- Periodic Environmental Inspections of businesses and industry are conducted to prevent any run off.
- General storm water system monitoring is also developed to detect any potential infrastructural problems.

4. **CONSTRUCTIONPOST-CONSTRUCTION ACTIVITIES**
The City develops, Implements, and Enforces:
- Ordinance for stormwater runoff from construction activities
- Greater than or equal to one acre
- Part of a larger common plan of development or sale
5. CONSTRUCTIONPOST-CONSTRUCTION ACTIVITIES
For Post-construction development, implement and enforce projects ensuring that controls are in place to prevent run off and to minimize water quality impact.

6. POLLUTION PREVENTION
To prevent pollution, the City:
• Trains and educates employees
• Prevents or reduce pollutant runoff
• Maintains parks and open space
• Monitors fleet and building maintenance
• Monitors new construction and land disturbances
• Monitors Storm water system maintenance