
Los Angeles MS4 Permit: Board Workshop

Metropolitan Water District

April 5, 2012

Storm Water Management Program: Minimum Control Measures

- Outlined in 40 CFR 122.26(d)(2)(iv)
 - Industrial / Commercial Program
 - Development Construction Program
 - Illicit Connections/Illicit Discharges Elimination Program
 - Public Agency Activities Program
 - New Development/Redevelopment Program
 - Public Information and Participation Program

Minimum Control Measures Customization

- Staff working proposal represents baseline, or default requirements
- Permittees may propose *customized actions* to achieve equivalent pollutant control
 - Based on water quality conditions in the area under the Permittee's jurisdiction or within the watershed management area
 - Executive Officer approval required

Minimum Control Measure - Public Information and Participation Program

- Increase public awareness and knowledge about the adverse impacts of storm water pollution, and change the behavior of target audiences to reduce pollution.
- Flexibility to customize based on water quality issues in implementation area
- Implementation scale
 - Individual jurisdiction
 - Watershed
 - County wide

Public Information and Participation Program – Key Elements

- Public Participation
 - Mechanisms for public reporting
 - Events to involve the public in pollution prevention and clean-up
- Residential Outreach
 - PSAs/advertising campaigns addressing targeted issues
 - Distribute activity specific educational materials at retail locations
 - Provide schools with educational materials on stormwater pollution (*"Erase the Waste" or CEEIN materials may be used*)
 - Maintain website with educational materials / links

Minimum Control Measure – Industrial/Commercial Sources

- Ensure implementation of BMP and eliminate illicit connections/discharges from industrial/commercial facilities to control the discharge of pollutants to the MS4

- Flexibility to customize based on
 - Inspection history
 - Industrial sectors
 - Subwatershed areas

Industrial/Commercial Facilities Control Program – Key Elements

- Watershed-based database of all industrial and commercial facilities
- Outreach & business assistance program
- Two inspections of all designated industrial/commercial facilities within 5 years
 - Ensure BMP implementation (CASQA BMP manual)
 - Verify permit coverage and No Exposure Condition (if Necessary)
- Progressive enforcement, where necessary
- Significant Difference from 2001
 - No corporate outreach
 - Prescriptive BMP implementation (CASQA manual)

Minimum Control Measure - New Development and Redevelopment

- Minimize the impacts of development and significant redevelopment projects on water quality and hydrology
- Flexibility to customize through incentives for replenishing groundwater and retrofitting existing development
- Key Requirements
 - On-site retention of the storm water runoff volume resulting from the 85th percentile, 24-hour storm or the 0.75 inch 24-hour storm, whichever is greater
 - Off-site mitigation required where on-site retention is technically infeasible

Minimum Control Measure- New Development and Redevelopment

■ Storm Water Management Options

- Most Preferred: On-site retention or Off-site regional groundwater replenishment
- Medium Preferred: Off-site infiltration/bioretention or Retrofit of existing development (e.g. green streets)
- Least Preferred: On-site biofiltration systems, sized to treat 1.5 times the water quality design volume that could not be addressed by any of the other management options

Minimum Control Measure- New Development and Redevelopment

- Significant Differences from 2001
 - Prioritization of on-site retention
 - The allowance for groundwater replenishment projects and retrofit projects in lieu of on-site retention
 - Prioritization of off-site retention over on-site biofiltration
 - Greater specificity of biofiltration BMP design
 - Requirement to monitor effectiveness of treatment BMPs

Minimum Control Measure- New Development and Redevelopment

Hydromodification

- Applies to “Natural Drainage Areas”
- Requirements
 - On-site retention of 95th percentile, 24-hour storm, or
 - BMP implementation to ensure the runoff flow rate, volume, velocity, and duration do not exceed pre-development condition for 2-year, 24-hour rainfall event
 - The Erosion Potential (Ep) in the receiving water channel will approximate 1, as determined by a Hydromodification Analysis Study
- Significant Difference
 - The inclusion of very specific and detailed hydromodification requirements

Minimum Control Measure – Development Construction Program

- Ensure implementation of BMPs to reduce the contribution of pollutants from construction activities to the MS4

- Key Requirements
 - Inventory of grading permits, encroachment permits, demolition permits, building permits, or construction permits
 - Development, review and written approval of a Erosion and Sediment Control Plan (ESCP)
 - BMP implementation (per CASQA or Caltrans manual)
 - Education outreach for construction site operators

Minimum Control Measure – Development Construction Program

- Significant Difference(s)
 - Electronic Inventory
 - Elimination of Local SWPPP Requirement
 - Prescriptive BMP implementation (e.g. CASQA manual and Caltrans Manual)
 - Tiered BMP Approach
 - e.g. Non-storm water management listed for larger sites
 - Risk Level BMP Implementation
 - e.g. Sites discharging to sediment/siltation require enhanced BMPs
 - Inspection frequency related to risk level

Minimum Control Measure –Illicit Connections and Illicit Discharges Elimination

- Effectively prohibit non-storm water discharges to the MS4
- Key Requirements
 - MS4 mapping
 - Implementation of Non-Stormwater Outfall-Based Monitoring Program to Detect IC/IDs
 - Development procedures for conducting source investigations for IC/IDs
 - Development of procedures for eliminating for IC/IDs
 - Mechanism for public reporting of illicit discharges
 - Spill response plan

Minimum Control Measure –Illicit Connections and Illicit Discharges Elimination

- Significant Difference(s)
 - Elimination of illicit connection screening for all MS4 pipes of a given size
 - Use of field sampling/monitoring to identify potential ICs/IDs
 - Development of a protocol to eliminate ICs/IDs

Minimum Control Measure – Public Agency Activities Program

- Minimize storm water pollution impacts from permittee owned or operated facilities and activities

- Key Requirements
 - Maintain an inventory and map of all Permittee-owned or operated facilities

 - Implement activity specific BMPs (such as catch basin cleaning, open channel maintenance, street sweeping, and appropriate pesticide application)

 - Conduct inventory of retrofitting opportunities

 - Training of employees and contractors

Minimum Control Measure – Public Agency Activities Program

- Significant Difference(s)
 - Implementation of prescriptive BMPs (e.g Caltrans Manual)
 - Implementation of an Integrated Pesticide Management Program
 - Inventory of retrofitting opportunities