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