

Section 5

New Development and Redevelopment

5.1 Purpose

New development and redevelopment activities often offer opportunities to design and implement modern, permanent site and building features that may reduce or eliminate stormwater pollution throughout the lifetime of a facility or development. On the other hand, construction activities associated with development can contribute significant amounts of pollutants if BMPs are not properly deployed or "housekeeping" practices are not implemented. This section describes the process by which the permittees will continue to manage new development and redevelopment projects to help reduce or eliminate pollutant discharges to the Maximum Extent Practicable (MEP).

5.2 New Development and Redevelopment Program

The New Development/Redevelopment program element is organized into six program areas. Each of these elements is discussed in the following sections.

5.2.1 Water Quality Management Plan (WQMP)

The Management Committee developed the *Model Water Quality Management Plan Guidance* (2004, amended June 2005) to meet the following goals:

- Develop and implement programs and policies to minimize the effects of urbanization on site hydrology, urban runoff flow rates or velocities and pollutant loads. This goal may be achieved through watershed-based structural treatment controls, in combination with site-specific BMPs.
- Reduce pollutants in post-development runoff to MEP.
- Reduce or eliminate discharge of any listed pollutant to an impaired waterbody on the 303(d) list that causes or contributes to an exceedance of a receiving water quality objective.

Although a separate document, the WQMP (as amended) is part of this MSWMP. Thus, when the MS4 Permit states that the permittees are to implement the MSWMP, the WQMP is incorporated by reference.

The WQMP is a living document in the sense that what is required to achieve MEP continues to change over time as experience is gained in what technologies work best to control pollutants. In addition, the findings from the bacteria source evaluation study that will be conducted to support the MSAR Bacteria TMDL may result in the need to update the WQMP (see Section 9 for additional information). Accordingly, the WQMP will be periodically reviewed and, if needed, revised to incorporate new or revised procedures to control pollutants discharged in stormwater from new

developments and redeveloped areas. For example, the permittees have identified the need to review and, where appropriate, update Tables 2-1 and 2-5 of the WQMP.

For industrial sites, structural infiltration treatment BMPs may be used to protect groundwater as long as the proposed project can demonstrate that the use of such BMPs will not cause or contribute to an exceedance of groundwater water quality objectives, source control and pollution prevention control BMPs are implemented at the site, and the structural infiltration treatment BMPs are located at least 100 feet horizontally from any water supply wells.

When a building is being proposed for which no anticipated use is designated, or when an unanticipated element of land use or occupancy is proposed after the basic building has already been completed, the permittees will include language in the permit conditions to require the applicant to submit chemical management plans, if applicable. The submitted chemical management plans will be distributed to the appropriate departments for review and approval. Certificates and permits may be withheld if required BMPs are not or cannot be incorporated. Certificates and permits may also be withheld if, because of the proposed use of the building, the presence of onsite structural infiltration treatment BMPs may pose a risk to groundwater.

5.2.2 Construction Activities

Proper implementation of BMPs during construction activities is essential for reducing water quality impacts. Though the time required for construction is minimal compared to the life of a project, construction activities can be responsible for a majority of the impact if stormwater runoff issues are not handled properly. To reduce pollutants in runoff from construction sites during all construction phases, the permittees have implemented a program that addresses:

- Pollution prevention measures and public education
- Grading ordinance and other local requirements
- Verification of coverage under the State's General Permit
- Prioritization and inspection of construction sites
- Procedures for reporting non-compliance
- Verification of compliance with WQMP

Construction sites will be inspected at least twice each year, once during the rainy season and once during the dry season, and any construction site larger than 50 acres, will be considered a high priority site. In addition, any site found in significant non-compliance with the Statewide General Permit(s) or the MS4 Permit is automatically deemed a high priority site and must be inspected at least once per month until full compliance is restored.

As noted above, applicable construction activities are required to comply with the NPDES General Construction Permit from the State Water Resources Control Board (SWRCB). Although the permittees do not have the authority to enforce the state-issued general construction permit, the permittees have implemented the following requirements to support compliance with this permit:

- Require a copy of the State Board WDID notification as proof that a NOI was filed with the SWRCB prior to issuing grading permits; and
- Notify the RWQCB of any General Construction Permit infractions or non-compliance.

For projects that do not require coverage under the General Construction Permit, the permittees will ensure that the following requirements are defined on permit plan cover sheets as either general or special notes:

- All grading projects, regardless of size, will require an erosion control plan to prevent sediment from entering storm drains or waterbodies.
- Construction sites shall be maintained by implementation of BMPs to the maximum extent practicable.
- The following discharges into the storm drain system are prohibited: discharges that could have an impact on human health or the environment, cause or threaten to cause pollution, contamination, or nuisance; discharges that exceed any applicable water quality standard contained in a Statewide Water Quality Control Plan or local Basin Plan; and discharges containing a hazardous substance equal to or in excess of a reportable quantity listed in Federal Regulations 40 CFR Parts 117 and 302.
- Materials that can cause or contribute to pollution or a violation of any applicable water quality standard include, but are not limited to, sediments, solid or liquid chemicals spills; wastes from paints, stains, sealants, glues, limes, pesticides or herbicides, wood preservatives or solvents; asbestos fibers, paint flakes or stucco fragments; fuels, oils, lubricants, or hydraulic, radiator and battery fluids; fertilizers; vehicle/equipment wash water or concrete wash water; concrete, detergent or floatable wastes; wastes from any engine/equipment steam cleaning or chemical degreasing; and chlorinated potable water line flushings.
- Unless exempted or authorized by an NPDES permit, all non-stormwater discharges require prior approval by the local stormwater agency or the SWRCB.
- During construction, temporary storage of such materials, identified above, must occur in a designated area, physically separated from potential stormwater runoff, with ultimate disposal in accordance with local, state, and federal requirements.
- Dewatering of contaminated groundwater, or discharging contaminated solids via surface erosion is prohibited.

5.2.3 Post-Construction Requirements

Co-Permittee activities related to development projects that are complete and have begun to function for their intended use are discussed in other sections of the MSWMP. Specifically, industrial and commercial activities are discussed in Section 4 and residential activities are addressed in Section 7. Additional corollary activities are discussed in Section 3 (Illegal Discharges) and Section 8 (Public Information and Participation).

5.2.4 Educational Program for Developers and Contractors

The WQMP, with all of its attachments, contain the legal, administrative, and technical information needed to acquaint developers and contractors with the NPDES program. San Bernardino County developers and contractors have been implementing erosion control plans for many years and are familiar with that portion of the program.

The Building Industry Association and the Associated General Contractors have been asked to assume responsibility for alerting their members of the information contained in the WQMP, which is made available by the Co-Permittees as part of the development review process.

5.2.5 Performance Bond Program

Performance bonds are commonly used for reclamation permits associated with mining activities. These bonds are required to ensure that funds are available to address environmental clean-ups, especially if the mining company fails. The concept of a performance bond could also be applied to stormwater program elements (for example, new development activities). Examples of the application of performance bonds to these types of stormwater elements exist in other states.

During the next permit term the permittees will consider developing a performance bond program that can serve as a model for the region. Given the legal issues involved in establishing and implementing the bond program locally, once a model is developed implementation of the program within each permittee's jurisdiction would be at their discretion.

5.2.6 Training

Co-Permittee staffs that implement the new development and redevelopment program are targeted for stormwater-specific training and education. This may include staff from several departments and programs, including the building department, fire department, and code enforcement.

The targeted staff receives general stormwater training and task-specific education and coordination that introduce staff to basic stormwater concepts including regulations, pollutants of concern, potential sources, BMPs, and general program activities. The MAPPs online training program, which is discussed further in Section

6, is the key method used to provide general stormwater training. The online training is supplemented by various other training efforts, including live presentations, on the job site visits and tailgate meetings by the permittees. For those already trained, refresher training is provided at least once during the permit term to keep staff up-to-date. Training and education activities are documented and reported annually to the principal permittee.

Since new business practice methods and pollution prevention methods are being developed continually, the Training Subcommittee will assess and, if necessary, update educational materials previously developed for staff training.

5.3 Performance Commitments

The permittees propose to implement the following performance commitments to implement the program elements established to address new development and redevelopment activities:

- 5-1. The Management Committee will periodically review and, where appropriate, revise the WQMP to incorporate program updates, for example new technologies to control pollutants, findings from studies, and recommendations from program audits. In addition, in the first year of the MS4 Permit term, the permittees will review and revise, as needed, WQMP Tables 2-1 and 2-5.
- 5-2. Each Co-Permittee will implement the approval process for building, grading, and similar permits as described by the WQMP. Individual departments within each permittee's jurisdiction (for example, Engineering or Planning) will incorporate the BMPs which are subject to their review.
- 5-3. Each Co-Permittee will require applicants to prepare a WQMP that conforms to the requirements of the WQMP Guidance (June 9, 2005, or as amended) and incorporate all identified structural and non-structural BMPs into the completed development.
- 5-4. When a development is being proposed for which no specific use is identified, each Co-Permittee will require that appropriate BMPs be considered before the development is approved for use and occupancy.
- 5-5. For projects that require coverage under the General Construction Permit, at a minimum, each Co-Permittee will continue to require the applicant to submit a copy of the State Board WDID notification prior to issuance of a grading permit.
- 5-6. Each permittee will notify the RWQCB of any General Construction Permit violations noted during the permittees' site inspection activities conducted as part of inspection activities for other local permits.

- 5-7. For grading projects that do not require coverage under the General Construction Permit, each Co-Permittee will require general or special notes on plan sheets as detailed in the MSWMP.
- 5-8. Each permittee will provide general stormwater training for all targeted employees using online training modules (MAPPS training). Training materials will be updated or supplemented as needed to facilitate information sharing. New employees will be trained at the next scheduled course offering or within six months of starting, whichever occurs first. Refresher training will be provided at least once during the permit term for staff that has already received the basic training course materials.
- 5-9. Staff will be provided sufficient training to facilitate implementation of stormwater program procedures applicable to new development and redevelopment activities.
- 5-10. Each Co-Permittee will document and report training, education, and coordination activities to the Principal Permittee in the MS4 Solution database.
- 5-11. To promote consistency in WQMP implementation, the permittees will develop standardized WQMP review checklist templates that may be adapted by each Co-Permittee for their jurisdiction.
- 5-12. Management Committee will develop a performance bond program model for use by individual permittees. Once developed, implementation of the program will be at the discretion of each permittee.