

November 18, 2009

Item No. 12

Supporting Document No. 10

MS4 Permit Comparison:
Tentative Order R9-2009-0002 to the
Current Orange County MS4 Permit
(Order No. R9-2002-01)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN DIEGO REGION

MS4¹ Permit Comparison:

Tentative Order No. R9-2009-0002 (Orange County MS4 Permit)

To

The Current Orange County MS4 Permit (Order No. R9-2002-01)

Background

This document addresses the question of whether adoption of some permit provisions are expected to increase, decrease or not effect the cost of permit implementation as compared to the current permit. A permit comparison was previously done for the Tentative Order (version R9-2007-002) for the April 11, 2007 Regional Board Public Workshop. The original comparison was included as Supporting Document 4, and can be found on the Regional Board website:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/oc_stormwater.shtml

Discussion

The tentative (November 18, 2009) Orange County MS4 NPDES Permit, Tentative Order R9-2009-0002, would replace the current Orange County MS4 NPDES Permit. The Tentative Order includes significant modifications to the current Orange County permit based on the results and implementation of requirements of the current permit by the Copermitttees. Effluent and receiving water monitoring, review of Annual Reports, special studies and grant programs have lead to new and modified requirements under the Tentative Order. Further modifications result from the 2006 Clean Water Act section 303(d) listings, Total Maximum Daily Loads (TMDLs), State Board Orders and Resolutions, and from new information regarding management and technology for storm water discharges from MS4s. All changes have been made to improve water quality, meet water quality standards, and meet the mandate of the Clean Water Act to protect the chemical, physical and biological integrity of waters of the United States. USEPA audits of MS4 permits have also identified the need for measurable criteria in MS4 permits.

¹ MS4 = Municipal Separate Storm Sewer System

Permit Section in Tentative Order No. R9-2009-002	Current Orange County MS4 Permit, Order No. R9-2002-01	Explanation
B. Non-storm Water Discharges		
Removes exemptions for: <ul style="list-style-type: none"> ▪ Landscape Irrigation ▪ Lawn Watering ▪ Irrigation Water ▪ Fire Suppression System Maintenance 	These categories of discharge are exempt under the current Order.	Landscape irrigation, lawn watering and irrigation water are no longer exempted non-storm water discharges. These discharges have been identified by the Copermittees as a source and conveyance of pollutants and must be addressed as illicit discharges. The Regional Board has identified that the discharges associated with building fire suppression systems contain waste and do not qualify as an exempted discharge under water line flushing or fire fighting activities. As illicit discharges, these are to be prohibited by the Copermittees and incorporated into existing IC/ID programs. No increase in program cost is expected from this change.
C. Non-storm Water Numeric Effluent Limitations (NELs)		
This Section has been added to the Tentative Order.	Not in current Order.	New section requiring non-storm water discharges from the MS4 to meet numeric effluent limitations. Limitations are based on monitoring collected under R9-2002-01, TMDLs, 303(d) listings and the sensitivity of receiving waters. No increase in monitoring costs is expected as language is flexible to match existing IC/ID monitoring efforts under R9-2002-01. The cost of non-compliance with effluent limitations cannot be determined. The Regional Board recognizes the difficulty in determining the source and nature of discharges exceeding NELs.
D. Storm Water Action Levels		
This Section has been added to the Tentative Order. This is an additional monitoring requirement.	Not in current Order.	New section requiring storm water discharges from the MS4 to be monitored and compared to action levels. An exceedance of an action level is to be used in the iterative process. Increased program costs are expected from monitoring. The direct monitoring of storm water discharge over a specific drainage area is expected to evaluate BMPs and program effectiveness, which may decrease program costs over the long term.
E. Legal Authority		
Section C.1. has been added.	Not in current Order.	Section C.1.j has been added to the Order to ensure that Copermittees can ensure best management practices (BMPs) implemented by third parties are effective. A one-time cost is expected to update legal authority, if not already in place.

Permit Section in Tentative Order No. R9-2009-002	Current Orange County MS4 Permit, Order No. R9-2002-01	Explanation
F. Jurisdictional Runoff Management Program (JRMP)		
<p>This Section has been streamlined and now includes:</p> <ul style="list-style-type: none"> ▪ F.1 Development Planning ▪ F.2 Construction ▪ F.3 Existing Development ▪ F.4 Illicit Discharge Detection/Elimination ▪ F.5 Public Participation <p>Commercial and Industrial program requirements have been combined under F.3.</p> <p>The Section has additional specificity regarding site inspections and maintenance.</p> <p>Section F.1 has added requirements for the following:</p> <ul style="list-style-type: none"> ▪ Priority Development Project (PDP) identification ▪ Implementing low impact development (LID) ▪ Hydromodification criteria ▪ Tracking post-construction BMPs <p>Section F.1.h. Requires the development of a Hydromodification Management Plan (HMP).</p>	<p>Education Requirements is a separate section in the current Order (F.4). Section F.6 in the current Order is solely for Home Owners Associations. The Commercial and Industrial program requirements are in separate sections in the current Order.</p> <p>The current Order requires site inspections and maintenance.</p> <p>LID, hydromodification criteria, some PDPs categories, and BMP tracking are not required under the current Order. The existing Order recommends, but does not require, LID.</p> <p>No HMP is required in current Order.</p>	<p>The removal and combination of JRMP elements is expected to streamline and reduce costs associated with JRMP and JRMP Reporting requirements. Similar elements with similar requirements have been combined. Home Owners Associations are now included under Existing Development's residential section, while Commercial and Industrial have been combined under Existing Development. The Education Requirements section has been completely removed. Education requirements have been incorporated into individual sections, where appropriate.</p> <p>Additional specificity has been added for inspecting large sites and those sites adjacent to high priority receiving waters. Additional maintenance requirements are included for municipal areas. Any costs associated with these changes are unknown.</p> <p>For new and re-development, new requirements for identifying PDPs, implementing LID and hydromodification controls, and verifying/tracking post-construction BMPs will require Copermittees to update their development/redevelopment review process and management programs. There is an expected cost associated with these updates. LID is now required to meet the Maximum Extent Practicable (MEP) standard for storm water</p> <p>The Regional Board expects that there will be additional costs associated with the Copermittees' development of a HMP. The HMP is expected to build upon existing knowledge of hydromodification criteria is necessary to meet the MEP standard for storm water.</p>

Permit Section in Tentative Order No. R9-2009-002	Current Orange County MS4 Permit, Order No. R9-2002-01	Explanation
F. Jurisdictional Runoff Management Program (JRMP) continued		
Section F.2, F.3. Now requires annual reporting to the Regional Board, prior to commencement of the rainy season, of sites with alleged violations.	No required reporting of sites with alleged violation in current Order prior to rainy season commencement.	The requirement to report sites with alleged violations may result in a minimal additional cost, but is expected to streamline enforcement and inspections though more effective communication.
Section F.3.d. New section requiring Copermittees to implement a retro-fitting program.	No retro-fitting requirements under the current Order.	The new retrofitting section does not require retrofits, but requires identification and prioritization of retrofit opportunities. This is expected to work with existing County-wide retrofitting studies.
Section F.4.b. New requirement that MS4 map must use GIS.	The use of GIS was recommended, not required, under the current Order.	New requirement that MS4 map must use GIS. Costs unknown, as the use of GIS was recommended under R9-2002-01.
G. Watershed Runoff Management Program (WRMP)		
The WRMP section has been streamlined and now requires a Watershed Workplan.	The current Order requires an Annual Report.	The WRMP section has been streamlined to focus on high priority water quality issues, which are identified by the Copermittees, and now requires a Watershed Workplan instead of an Annual Report. The workplan includes less and/or more streamlined reporting requirements. The workplan is expected to work in concert with JRMP requirements, TMDLs, and monitoring efforts. This may reduce program costs.
The WRMP section includes a section specific to Aliso Creek.	Not in current Order	This section in the Tentative Order incorporates requirements of an Investigative Order issued by the Regional Board on October 18, 2005 to the Copermittees in the Aliso Creek watershed. This section only applies to those Copermittees. This is not expected to increase costs.
H. Fiscal Analysis		
The proposed Business Plan has been removed.	No significant changes.	The Business Plan has been removed, thus there are no significant changes.
I. Total Maximum Daily Loads		
This Section has been added to the Tentative Order.	Not in current Order.	The current Order does not have any adopted TMDLs to include. Federal Regulations require that new/re-issued NPDES permits be consistent with Wasteload Allocations of any approved TMDLs. Increased costs associated with monitoring and meeting waste load reductions are expected.
K. Reporting		
A section allowing Copermittees to request alternate reporting schedules and/or criteria has been added to the Tentative Order.	Not in current Order.	Copermittees may now request different reporting schedules and/or criteria. This may reduce costs for the Copermittees.

Permit Section in Tentative Order No. R9-2009-002	Current Orange County MS4 Permit, Order No. R9-2002-01	Explanation
Attachment E – Receiving Waters and MS4 Discharge Monitoring and Reporting		
Mass loading has been reduced to two events and some constituents have been added.	Copermittees are currently monitoring three events under the current Order.	Some constituents have been added pursuant to federal regulations. Others have been added based upon existing data. Any changes in cost are unknown.
Algae must be incorporated into bioassessment efforts. Indicator bacteria monitoring is no longer required. Fewer bioassessment events are required.	The current Order requires a higher number of bioassessment monitoring events and requires sampling for Indicator Bacteria.	The number of and requirements for bioassessment monitoring events has been reduced. This is expected to reduce monitoring costs. However, algae must now be incorporated in bioassessment. This cost is unknown.
A Regional Bacteria Monitoring Program has replaced the Coastal Storm Drain Monitoring.	The current Order requires Coastal Storm Drain Monitoring.	Coastal Storm Drain Monitoring has been replaced with a Regional Bacteria Monitoring Program. This is expected to streamline notifications, improve sampling efficiency and reduce costs for the Copermittees.
Storm Water Action Level Monitoring is now required.	Storm Water Action Level monitoring is a new monitoring requirement.	This is expected to increase costs, but the magnitude is unknown (see Section D, above).
A Trash Special Study is required.	This is a new monitoring requirement.	The Trash Special Study has been written with flexibility to allow Copermittees to integrate trash monitoring with existing efforts. This is expected to be an increased cost.
Sediment Toxicity Special Study is required.	This is a new monitoring requirement.	The Sediment Toxicity Special Study has been added to bioassessment monitoring in response to current monitoring efforts, other State Findings and peer-reviewed scientific research. This is expected to increase costs.
Allows Participation in Regional Monitoring Programs.	Not in current Order.	The Copermittees may participate in regional monitoring efforts in lieu of other requirements if approved by the Executive Officer. If utilized, this may reduce costs.
The proposed High Priority Inland Aquatic Habitat monitoring has been removed.	Not in current Order.	The monitoring requirement has been removed, thus there are no anticipated costs.