

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
April 10 and 11, 2013

ITEM: 8

SUBJECT: Public Hearing: Issuance of an NPDES Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region (Tentative Order No. R9-2013-0001, NPDES No. CAS0109266) (*Wayne Chiu, Laurie Walsh, Christina Arias*).

PURPOSE: To receive public testimony and consider adoption of Tentative Order No. R9-2013-0001 (Tentative Order).

RECOMMENDATION: Adoption of the revised Tentative Order No. R9-2013-0001 is recommended.

KEY ISSUES:

1. Provision E.3 of the Tentative Order includes design standards for post-construction structural best management practices (BMPs) that are required to be implemented by Priority Development Projects. This includes requirements to implement structural BMPs to retain pollutants and manage impacts caused by hydromodification. Several stakeholders object to the Tentative Order's exclusion of any exemptions from the hydromodification management requirements. Stakeholders also object to the requirement that redevelopment projects must implement BMPs to replicate the hydrology associated with the *pre-development* runoff condition rather than the *pre-project* runoff condition.
2. Pursuant to the federal Clean Water Act and regulations adopted thereunder, Attachment E of the Tentative Order incorporates water quality based effluent limitations (WQBELs) derived from Total Maximum Daily Loads (TMDLs). The municipal entities regulated under the Tentative Order (Copermittees) object to the inclusion of WQBELs because they do not believe the WQBELs are achievable. The County of San Diego further asserts that the San Diego Water Board is vested with the discretion

to elect to not incorporate the Beaches and Creeks Bacteria TMDL provisions in the Tentative Order at this time.

3. The Tentative Order includes discharge prohibitions and receiving water limitations in Provision A that require discharges to be controlled so as not to cause or contribute to exceedances of water quality standards in receiving waters. The Copermittees assert that they are increasingly vulnerable to San Diego Water Board enforcement action(s) and citizen suits if they are shown to be causing or contributing to an exceedance of water quality standards in violation of Provision A. The Copermittees assert that the Tentative Order should be modified to provide a partial or complete exemption from enforcement for violations of Provision A while a Copermittee engages in an iterative process of improving controls. A provision of this type is commonly referred to as a “safe harbor” provision.

DISCUSSION:

Thirty-nine municipal, county government, and special district entities (Copermittees) located in San Diego County, southern Orange County and southwest Riverside County (**Supporting Document 1**) own and operate large MS4s which discharge storm water (wet weather) runoff and non-storm water (dry weather) runoff to surface waters throughout the San Diego Water Board's jurisdiction. The MS4 discharges of wet weather and dry weather runoff are a leading cause and contributor to adverse impacts on receiving waters throughout the San Diego Region, consequently impairing their beneficial uses. The most recent Clean Water Act sections 303(d) and 305(b) update of the State's Integrated Report was completed in 2010 and listed approximately 450 distinct pollutant/waterbody combinations within the San Diego Region as impaired. Impairments were due to elevated levels of bacteria, sediment, nutrients, various metals, pesticides, and other stressors commonly found in MS4 runoff. Although the specific causes of many of the impairments for the San Diego Region are not yet known, it is known that most of the impairments are downstream of, or within, urbanized settings, and therefore directly affected by dry weather and wet weather runoff. The dimensions of the dry weather and wet weather runoff problem clearly highlight the continuing need for comprehensive, creative and effective storm water regulation.

The Tentative Order (**Supporting Document 2**) is a regional MS4 NPDES permit that proposes to jointly cover all 39 Copermittees in a phased manner as their current MS4 permits expire, or upon request for earlier coverage prior to permit expiration. The Tentative Order covers multiple MS4 discharge points to receiving waters throughout the San Diego Region. All MS4 Copermittees in the San Diego Region have been previously notified that they may ultimately be regulated under the Tentative Order. Copermittees covered by the current San Diego County MS4 permit (Order No. R9-2007-0001) will be subject to the Tentative Order following its adoption. Copermittees covered by the Orange County and Riverside County MS4 permits (Order Nos. R9-2009-0002 and R9-2010- 0016, respectively), will be subject to the Tentative Order at a later date after the San Diego Water Board receives and considers their Report of Waste Discharge and makes any necessary changes to the Order.

The Tentative Order implements the NPDES permitting requirements in the federal Clean Water Act, the Code of Federal Regulations, and the California Water Code. Attachment F of the Tentative Order is a detailed Fact Sheet that comprehensively sets forth the principal background information and facts, regulatory and legal citations, references, and additional explanatory information in support of the proposed requirements. If adopted, the Tentative Order will remain in effect for a five-year fixed term.

Comprehensive Stakeholder Process

The Tentative Order was developed over a two-year period beginning in February 2011 through a participatory approach designed to actively engage key stakeholders (i.e. USEPA, environmental organizations, business groups, the building industry, and Copermittees). This transparent and comprehensive stakeholder participation process included workshops, meetings, presentations, and extensive opportunities for stakeholders to review various drafts of the Tentative Order and provide written comments (**Supporting Document 3**). As a result, the Tentative Order has gone through many substantial revisions over this time period and now incorporates many stakeholder recommendations throughout the document.

The Tentative Order was noticed and released for formal public review on October 31, 2012 for a 71-day comment period (**Supporting Document 4**). A total of 89 timely comment letters were received by the end of the comment period on January 11, 2013 (**Supporting Document 5**). The San Diego Water Board has provided written responses to these comments (**Supporting Document 6**). Additionally, the Tentative Order has been revised in response to these comments. The revisions are highlighted in redline/strikeout text in the revised Tentative Order (**Supporting Document 7**).

Need for Innovative Permitting Approach

Since 1990, the San Diego Water Board has issued four iterations of MS4 permits to the Copermittees in each county within the San Diego Region. The MS4 permit requirements have progressively become more prescriptive and include very little detail about what the desired outcomes of the required actions are expected to achieve. Compliance with the MS4 permit requirements has essentially been reduced to tracking numbers of actions rather than tracking progress towards actual improvements in the quality of receiving waters or discharges from the MS4s. The result has been an increase in actions being implemented by the Copermittees, with little or no ability to determine any corresponding improvements to receiving water quality.

In contrast, the Tentative Order significantly modifies the prescriptive action-based regulatory approach of the current MS4 permits to an outcome-based approach, with a focus on measuring and achieving improvements in MS4 discharges and receiving water quality. A key feature of the Tentative Order is that it provides an adaptive management pathway for the Copermittees to select and address the highest priority water quality issues through a non-punitive iterative process. This process is incorporated in watershed-specific Water Quality Improvement Plans, which are described in Provision B of the Tentative Order. The Water Quality Improvement Plans must be developed through a collaborative effort by the Copermittees in each Watershed Management Area, and other key stakeholders, including representatives from the San Diego Water Board. The Water Quality Improvement Plans must include descriptions of the highest priority pollutants or conditions in a specific watershed, goals and strategies to address those pollutants

or conditions, and time schedules associated with those goals and strategies. By allowing the Copermittees to expend their resources to address the highest priority issues, they will no longer be required to address “all pollutants, all of the time,” as was the premise of previous storm water permits. In this sense, the Tentative Order is strategic, cost-effective, and water quality outcome-based.

The San Diego Water Board believes the concept of the Water Quality Improvement Plan has great promise and will allow the Copermittees to more flexibly deploy resources to achieve goals that will yield the greatest water quality improvements. In general, stakeholders overwhelmingly support the concept. Twenty-nine individual stakeholders submitted comments in support of the Water Quality Improvement Plan concept (summarized in Comment number B-2). The San Diego Water Board did not receive a single comment opposing the concept.

Flexible Land Development Requirements

The Tentative Order establishes San Diego Region-wide structural BMP standards for both pollutant control and hydromodification management, to be included on all new and redevelopment Priority Development Projects. These requirements are necessary to ensure that receiving waters are protected from altered flow regimes and pollutant loads associated with land development.

The Copermittees and several building industry and engineering design consultants commented that the Tentative Order should include site-specific structural BMP requirements because, in some cases, implementation would be infeasible due to site specific factors, and in other cases, there would be little water quality benefit from implementing BMPs on each and every project. Commenters objected to the exclusion of any exemptions from the hydromodification management requirements (specifically, projects that discharge to channels lined with concrete along their beds and banks). Commenters also objected to the requirement to use the *pre-development* runoff conditions as baselines for BMP design as opposed to the *pre-project* runoff conditions. Finally, the San Diego County Copermittees and some engineering design consultants argue that the Tentative Order is requiring substantial revisions of the San Diego County

Hydromodification Management Plan (HMP; adopted by the San Diego Water Board in Resolution No. R9-2010-0066), even though the Copermittees have just begun to implement the HMP and spent over \$1 million for its development.

In response to comments received, the Tentative Order was substantially revised (**Supporting Document 7**). Firstly, an exemption from the hydromodification management requirements was added for projects discharging to concrete-lined channels that are lined along bed and banks from the point of discharge all the way to an enclosed embayment or the Pacific Ocean. Secondly, the Tentative Order was revised to include a new provision allowing the possibility of offsite compliance in lieu of implementing structural BMPs onsite. Provision B.3.b.(4) of the revised Tentative Order describes an optional Watershed Management Area Analysis that the Copermittees may choose to undertake in order to identify candidate offsite projects and additional exemptions from hydromodification management requirements. The analysis promoted in Provision B.3.b.(4) is expected to result in innovative opportunities for water quality improvements and is supported by the latest research pertaining to hydromodification management. Provision E.3 of the Tentative Order describes specific requirements for land development and how they interrelate to the optional Watershed Management Area Analysis. Additional information on this issue is located in section VIII of the Fact Sheet and the response to Comment number E3c-2.

Thirdly, Attachment C to the Tentative Order (Definitions) has been revised to include a definition for "Pre-Development Runoff Conditions" to clarify the expectations associated with a redevelopment project subject to this requirement (**Supporting Document 7**). The intent of using a "pre-development" standard is not to replicate the historical hydrology thought to have existed at a site at some point in time. The intent is that developers estimate the runoff conditions from a site using characteristics of the underlying soil, not the runoff conditions associated with impervious surfaces. The result will be post-project runoff conditions that contain fewer pollutants, and are less likely to cause erosion to downstream receiving waters, which may in turn allow the receiving water to recover from the impacts caused by hydromodification. This is discussed thoroughly in the response to Comment number E3c2-2.

Finally, contrary to comments received by the San Diego County Copermittees and others, the San Diego County HMP will not require significant revision to meet the requirements of the Tentative Order. This is because the premise of the hydromodification management BMP requirements, which are to control storm water runoff conditions for Copermittee-defined range of flows, is unchanged. The San Diego County HMP will need updating to incorporate the pre-development baseline standard discussed above, but the methodology, assumptions, and computer modeling used to develop the San Diego County HMP will not require revision.

Appropriately Incorporates TMDLs

Federal regulations at 40 CFR 122.44(d)(1)(vii)(B) require that NPDES permit conditions be consistent with the assumptions and requirements of wasteload allocations (WLAs) in adopted TMDLs. Because the Tentative Order is an NPDES permit, Attachment E incorporates provisions that implement TMDLs. The load allocations (LAs), WLAs, and compliance schedules established in the TMDLs were developed as Basin Plan amendments and are duly adopted regulations of the San Diego Water Board.

The proceedings for developing the TMDLs involved extensive opportunities for public participation, review and comment, as well as scientific peer review. The proceedings included consideration of the dischargers' ability to comply with the LAs and WLAs, development of appropriate compliance time schedules, and economic considerations (e.g., costs to implement and comply with the TMDLs). The various TMDLs were then adopted by the San Diego Water Board in 2002, 2005, 2007, 2008 and 2010 as amendments to the Basin Plan and were subsequently approved by the State Water Resources Control Board, State Office of Administrative Law and USEPA. TMDLs are not independently enforceable. The Tentative Order simply implements the WLAs assigned to the Copermittees as required by federal regulations, but does so in a manner that provides the Copermittees with maximum flexibility to demonstrate compliance. Additional information on this issue is located in the Tentative Order at section IX of the Fact Sheet.

The Copermittees also submitted comments stating that the TMDLs should not be included in the Tentative Order until the water quality objectives for which they are based are amended to be “achievable.” They also asked for specific provisions to be included, such as a re-opener provision in the event that TMDLs are eventually amended. Additionally, they asked for the inclusion of load-based water quality based effluent limits (WQBELs; which are derived from WLAs), adjustable interim TMDL compliance dates, and additional TMDL compliance determination options.

In response to the Copermittees’ comments, the Tentative Order was revised to include several of the Copermittees’ requests. An explicit re-opener provision was added, as well as load-based WQBELs, adjustable interim TMDL compliance dates, and additional TMDL compliance determination options. However, wholesale exclusion of the TMDLs or WQBELs themselves from the Tentative Order is not an option under the Federal NPDES Permit Regulations. Further, any adjustments that are warranted to the TMDLs, or the water quality objectives on which they are based, must be made through the Basin Plan Amendment process, which is outside the proceedings for adoption of the Tentative Order.

Receiving Water Limitations

Provision A of the Tentative Order includes discharge prohibitions and receiving water limitations language that are consistent with State Water Board Order WQ 99-05. In this precedential Order, the State Water Board prescribed an iterative process whereby an exceedance of a water quality standard triggers a process of BMP improvements. Order WQ 99-05 also directed that MS4 permits contain separately enforceable receiving water limitation provisions requiring discharges to be controlled so as not to cause or contribute to exceedances of water quality standards in receiving waters. Under this approach, when a discharger is shown to be causing or contributing to an exceedance of water quality standards, that discharger is in violation of the relevant discharge prohibitions and receiving water limitations of the permit and potentially subject to enforcement by the Water Boards or through a citizen suit, even if the discharger is actively engaged in the iterative process. The Copermittees commented extensively that they are increasingly vulnerable

to San Diego Water Board enforcement action(s) and citizen suits if they are shown to be causing or contributing to an exceedance of water quality standards in violation of Provision A of the Tentative Order. The vulnerability to enforcement action and citizen suits despite engagement in the iterative process was highlighted in a recent Ninth Circuit Court of Appeals decision. They have subsequently requested the addition of a “safe harbor” provision whereby implementation of the Water Quality Improvement Plan would constitute compliance with Provision A.

In response to these concerns, the revised Tentative Order (**Supporting Document 7**) now includes an alternative compliance option for the Copermittees, which, if properly implemented, would constitute compliance with Provision A. Newly created Provision B.3.c describes a compliance option designed to ensure that interim strategies proposed by the Copermittees to meet water quality standards must be verified by technically robust analyses demonstrating that the proposed strategies will be sufficient to result in attainment of water quality standards in receiving waters by a certain date. The revised Tentative Order clearly states that a Copermittee will be in compliance with receiving water limitations (i.e. the requirements of Provision A.1.a, A.1.c and A.2.a of the Prohibition and Limitations), if the specific set of requirements described in Provision B.3.c are incorporated and implemented as part of an accepted Water Quality Improvement Plan. Additional information on this issue is located in section VIII of the Fact Sheet (Attachment F to the Tentative Order) and in the response to Comment number A-1.

SIGNIFICANT CHANGES

As previously mentioned, the Tentative Order has been substantially revised to address concerns expressed by the Copermittees and other stakeholders. These revisions include:

1. A provision for exemptions from the hydromodification management requirements for land development projects discharging to concrete-lined channels;
2. The addition of an optional Watershed Management Area Analysis with provisions that will allow compliance with the structural BMP requirements to take place offsite, and provisions for identifying additional exemptions from the hydromodification management requirements;

3. Clarification of expectations associated with the requirement that redevelopment projects match the “pre-development” runoff conditions;
4. An explicit re-opener provision to incorporate changes to TMDL permit provisions in the event TMDLs are amended through the Basin Planning process;
5. The addition of load-based WQBELs to the requirements for the bacteria-related TMDLs;
6. The addition of a provision allowing the Copermittees to propose interim TMDL compliance dates for the Beaches and Creeks Bacteria TMDL;
7. Additional TMDL compliance determination options; and
8. The addition of a compliance option for Copermittees seeking unequivocal compliance with Provision A, Prohibitions and Limitations.

LEGAL CONCERNS: Responses to legal comments received during the public comment period are included in the Response to Comments document at Lgl-1 through Lgl-11 and Fnd-1 through Fnd-14.

SUPPORTING DOCUMENTS:

1. Regional MS4 Permit Map
2. Tentative Order No. R9-2013-0001, version released October 31, 2012 (On CD only)
3. Regional MS4 Permit Timeline
4. Notice of Public Review and Comment for Tentative Order No. R9-2013-0001, dated October 31, 2012
5. Comments Received by January 11, 2013 (On CD only)
6. San Diego Water Board Responses to Comments
7. Revised Tentative Order No. R9-2013-0001 with Changes in Redline/Strikeout, released March 27, 2013 Version
8. Notice of Public Hearing, dated March 5, 2013, Hearing Procedures and Order of Proceedings, dated March 15, 2013

PUBLIC NOTICE: The Notice of Public Hearing was mailed to all Copermittees and Natural Resource Agencies, e-mailed to interested persons, and posted on the San Diego Water Board website on March 6, 2013 (**Supporting Document 8**). A Notice of this Public Hearing was also published in San Diego, Orange, and Riverside County newspapers on March 7 and 8, 2013. Notice was also provided in the Meeting Notice and Agenda for the April 10 and 11, 2013 Board meeting, which is posted on the San Diego Water Board's website.