

March 21, 2016

Santa Ana Regional Water Quality Control Board,  
Attn: Barbara Barry  
3737 Main Street, Suite 500  
Riverside, CA 92501  
barbara.barry@waterboards.ca.gov

Re: COMMENTS DRAFT TMDL-SPECIFIC PERMIT REQUIREMENTS FOR THE  
STATE WATER RESOURCES CONTROL BOARD'S INDUSTRIAL GENERAL  
STORM WATER PERMIT SAN DIEGO CREEK AND NEWPORT BAY TOXICS  
TOTAL MAXIMUM DAILY LOAD

Ms. Barry,

On behalf of Orange County Coastkeeper (“OCCK”), we thank you for the opportunity to comment on proposed Waste Load Allocation for the San Diego Creek and Newport Bay Toxics TMDL for incorporation into the General Permit for Stormwater Associated with Industrial Activities (“Permit” or “General Permit”). OCCK supports the importation of the numeric Waste Load Allocation (“WLA”) from the TMDL directly into the General Permit. However the proposed incorporation of the WLA as Numeric Action Level rather than an effluent limitation is inconsistent with the requirements of the Clean Water Act, and creates an illegal compliance schedule. Further, because the WLA is incorporated into an adaptive management process rather than as an effluent limitation, the submission fails to meet the data and analysis requirements set out in the Permit. For these reasons OCCK requests that staff revisit the proposed WLA incorporation, and apply the straightforward process contemplated by the TMDL and the Clean Water Act to submit a straightforward, stand alone numeric effluent limitation consistent with the concentration based WLA in the applicable TMDL.

## **I. Statutory Background**

### **A. NPDES Permit Program WQBELs**

Permitting agencies must ensure that all NPDES permits that authorize discharges of storm water associated with industrial activity include both technology based (“TBELs”) and water quality based (“WQBELs”) water quality protections of the Clean Water Act. (*See* 33 U.S.C. §§ 1311(b)(1)(A)-(C), 1342(a)(1), 1342(b)(1), 1342(b)(2), 1342(p)(3)(A).), *see also Defenders of Wildlife v. Browner* (9th Cir. 1999) 191 F.3d 1159, 1163-65.) The water quality protections that must be adopted in all NPDES permits include:

(1) water quality based effluent limitations (“WQBELs”) that require strict compliance with Water Quality Standards, and that implement Waste Load Allocations (“WLAs”) in any applicable TMDLs. (33 U.S.C. §§ 1311(b)(1)(A)-(C), 1318(a)(A), 1342(a)(1), 1342(b)(1)(A), 1342(p)(3)(A).). These effluent limitations are defined as “any restriction imposed...on quantities, discharge rates, and concentrations of “pollutants” which are “discharged” from “point sources” into “waters of the United States”...” 33 USC § 1362(11).

(2) requirements to monitor discharges to ensure that dischargers comply with water quality based pollution limits. 40 C.F.R. § 122.44(d)(1), 122.44(i), and 122.48.)

### **B. TMDL Incorporation into NPDES Permits.**

A TMDL is the total load of a particular pollutant that a water body can sustain, on a daily basis, and still ensure that the water quality standards applicable to that water body for the same pollutant can be met. (*See* 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.2(i).) Each TMDL must be “established at a level necessary to implement the applicable water quality standards” and must include the individual WLAs for point sources discharging into the water body, as well as load allocations for non-point sources and natural background sources. (33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.2(i).) WLAs are “[t]he portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution.” (40 C.F.R. § 130.2(h).) Thus a discharge of pollutants in excess of a WLA by definition contributes to exceedances of Water Quality Standards and impairment in the receiving water.

The agency establishing a TMDL may include “an implementation plan as a formal statement of how the level of that pollutant can and will be brought down to or be kept under the TMDL.” (*Meiburg*, 296 F.3d at 1030.) TMDLs developed by California’s water boards must include a program of implementation for achieving water quality objectives, and all TMDLs must be incorporated into Basin Plans with an implementation schedule. (*See* Memorandum from William R. Attwater, Chief Counsel, State Water Resources Control Board, to Gerard J. Thibeault, Executive Officer, Santa Ana Regional Water Quality Control Board, March 1, 1999.) The program of implementation consists of a “description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private,” a “time schedule for the actions to be taken,” and a “description of surveillance to be undertaken to determine compliance with objectives.” (Water Code § 13242.)

TMDLs are not self-executing, but must be implemented “by adjusting pollutant discharge requirements in ... NPDES permits.” (*City of Arcadia*, 265 F.Supp.2d at 1144.) Once a TMDL with WLAs is developed, the permitting agency *must* incorporate the WLAs into applicable NPDES permits as WQBELs. (40 C.F.R. § 122.44(d)(1)(vii)(B); 40 C.F.R. § 130.2(h). In doing so, the permitting agency must ensure that the effluent limits of the NPDES permit “are consistent with the assumptions and requirements of any available wasteload allocation [WLA] for the discharge” (40 C.F.R. § 122.44(d)(1)(vii)(B).)

An NPDES permit may only include a compliance schedule when such schedules are expressly

authorized by the state's water quality control plans. *Star-Kist Caribe*, 1989 EPA App. LEXIS, at \*7; 33 U.S.C. § 1313(e)(3)(F). The Santa Ana Region Basin Plan has no implementation schedule for the metals parameters in the San Diego Creek/New Port Bay TMDL. *Basin Plan* at 5-160-181.

The Inland Surface Water Plan ("ISWP"), which implements the California Toxics Rule ("CTR"), authorized 10-year compliance schedules for achieving CTR criteria. The ISWP included a specific sunset provision where no NPDES compliance schedules for CTR-based limits could extend beyond May 18, 2010. See ISWP at 19. Nor were compliance schedules authorized to be included in NPDES permits after that date. *Id.* Thus entities were required to achieve compliance with WQS based on CTR criteria no later than May 18, 2010. *Id.* On May 1, 2001, EPA approved the ISWP-authorized 10-year compliance schedule. See May 1, 2001 EPA Letter re: Implementation of Toxics Standards for Inland Surface Waters. While the ISWP also initially provided a separate compliance schedule for development of CTR based TMDLs over a 20-year period, in its October 23, 2006 letter, EPA expressly disapproved this extended compliance schedule. See October 23, 2006 EPA Letter re: California SIP, Compliance Schedule Provisions. Given EPA's actions on the ISWP, the State Board stated that May 18, 2010 was the final compliance deadline to meet CTR criteria reasoning: "the effect of the CTR's sunset provision was to 'limit the longest time period for compliance to ten years after the effective date of the CTR,' which is May 18, 2010." State Board Memo dated September 15, 2006 Re: CTR Compliance Schedules. In addition, the State Board Policy confirms that the ISWP is the authority for including compliance schedules in NPDES permits for achieving compliance with CTR-based limits, and that those schedules cannot extend beyond May 18, 2010. See State Board Resolution No. 2008-0025 at 4.

Thus any possible compliance schedule for copper, cadmium, lead, zinc, mercury, or chromium, all pollutants regulated under CTR, expired over five years ago.

### **C. The Clean Water Act Requires that Permitting Agencies Include Sufficient Monitoring**

The Clean Water Act requires the permitting agency to adopt monitoring requirements in NPDES permits that will produce the information necessary to make efficient compliance determinations. (*Sierra Club*, 813 F.2d at 1491-92; *County of Los Angeles*, 725 F.3d at 1208-1209 (discussing the necessity and purpose of self-monitoring in context of general NPDES permits).)

Clean Water Act implementing regulations set forth the monitoring requirements that must be in NPDES permits. (See 40 C.F.R. §§ 122.44(i), 122.48.) Among these requirements is the express mandate that NPDES permits include provisions "to assure compliance with permit limitations" through the monitoring of the amount of pollutants discharged, the volume of effluent discharged from each outfall, and "other measurements as appropriate." (40 C.F.R. § 122.44(a)(1)(i)-(iii).) Thus, the State Board must adopt NPDES permits that include requirements to collect the data and information necessary to effectively determine compliance with the terms of the permit—including compliance with a WLA based effluent limitation. (See *County of Los Angeles*, 725

F.3d at 1207.)

## **II. General Industrial Permit Requirements**

### **A. Receiving Water Limitations**

As stated in the Permit, “Pursuant to CWA section 301(b)(1)(C) and Water Code section 13377, this General Permit requires compliance with receiving water limitations based on water quality standards.” (Fact Sheet at 22.) The Permit does so via an effluent limitation:

Dischargers shall ensure that industrial discharges and authorized NSWDC do not cause or contribute to an exceedance of any applicable water quality standard in any affected receiving water. (Permit at 21.)

Thus consistent with the Clean Water Act’s mandate, a stand-alone requirement of the Permit is a prohibition on discharges that cause or contribute to receiving water impairment.

### **B. Water Quality Based Corrective Actions**

Where a discharger violates the prohibition on causing or contributing to receiving water impairment, the Permit provides a program intended to bring the discharger into compliance. Where Discharger is notified by a Regional Water Board or who determines the discharge is causing or contributing to an exceedance of a water quality standard, it must comply with the Water Quality Based Corrective Actions found in Section XX.B of this General Permit:

- a. Conduct a facility evaluation to identify pollutant source(s) within the facility that are associated with industrial activity and whether the BMPs described in the SWPPP have been properly implemented;
- b. Assess the facility’s SWPPP and its implementation to determine whether additional BMPs or SWPPP implementation measures are necessary to reduce or prevent pollutants in industrial storm water discharges to meet the Receiving Water Limitations (Section VI); and,
- c. Certify and submit via SMARTS documentation based upon the above facility evaluation and assessment that:
  - i. Additional BMPs and/or SWPPP implementation measures have been identified and included in the SWPPP to meet the Receiving Water Limitations (Section VI); or
  - ii. No additional BMPs or SWPPP implementation measures are required to reduce or prevent pollutants in industrial storm water discharges to meet the Receiving Water Limitations (Section VI). (Permit at 67.)

### **C. Monitoring**

The monitoring program implemented in the General Industrial Permit is intended to evaluate BMPs rather than establish compliance with Water Quality Standards. *See* Permit at pp. 24, 47, 57 (“The proposed monitoring requirements in this General Permit are not designed to assess pollutant loading or determine compliance with TMDL-specific effluent limits.”) Responding to environmental commenters requesting quantitative sampling sufficient to evaluate compliance with receiving water limitations, the State Board pointed to the complexities relating to monitoring storm water run-off:

Unlike continuous point source discharges (e.g., publicly owned treatment works), storm water discharges are variable in intensity and duration. The concentration of pollutants discharged at any one time is dependent on many complex variables... Multiple samples would need to be collected over many hours. To determine the pollutant mass loading, the storm water discharge flow must also be measured each time a sample is collected. For a quantitative monitoring approach to yield useful pollutant loading information, the installation of automatic sampling devices and flow meters at each discharge location would usually be necessary... In addition, qualified individuals would be needed to conduct the monitoring procedures, and to handle and maintain flow meters and automatic samplers are needed. (Fact Sheet at 48.)

Thus the Permit requires visual observations, combined with sampling for a limited set of parameters, four times per year (maximum). (Permit at 39.)

### **D. TMDLs**

While acknowledging that all NPDES permits must include effluent limitations consistent with the WLAs in TMDLs, the General Permit deferred including those limitations when adopted, and instead required submission of proposed WLAs from the RWQCBs. (Fact Sheet at p. 23-26.) The State Board explained:

To date, the relevant waste load allocations assigned to industrial storm water discharges are not directly translatable to effluent limitations. Many of the TMDLs lack sufficient facility specific information, discharge characterization data, implementation requirements, and compliance monitoring requirements. Accordingly, an analysis of each TMDL applicable to industrial storm water discharges must to be performed to determine if it is appropriate to translate the waste load allocation into a numeric effluent limit, or if the effluent limit is to be expressed narratively using a BMP approach.

The State Board goes on to explain that the monitoring program in the General Permit is inadequate to evaluate TMDL compliance:

This method of monitoring may not appropriately serve as TMDL compliance sampling since grab samples are only representative of the particular moment in time when the sample was taken. Since storm water is highly variable, four grab samples per year may

not provide sufficient confidence that the effluent limit is being met. An alternative monitoring scheme may be necessary to determine the facility's impact on the receiving water and to determine compliance with any assigned effluent limits. Questions concerning whether sampling results should be grab samples, composite samples, flow-weighted averaged over all drainage areas, etc. cannot be determined for each concentration-based TMDL without a more thorough analysis.

Additionally, monitoring and assessment requirements must be developed for all of the TMDLs to determine compliance with or progress towards meeting TMDL requirements. The proposed monitoring requirements in this General Permit are not designed to assess pollutant loading or determine compliance with TMDL-specific effluent limits. (Fact Sheet at pp. 47-48.)

As a result, the State Board included in the General Permit specific requirements for the RWQCB's submissions of WLAs to be incorporated into the General Permit:

The Regional Water Boards will submit to the State Water Board the following information for each of the TMDLs listed in Attachment E:

- Proposed TMDL-specific permit requirements, including any applicable effluent limitations, implementation timelines, additional monitoring requirements, reporting requirements, an explanation of how an exceedance of an effluent limitation or a violation of the TMDL will be determined, and required deliverables consistent with the TMDL(s);
- An explanation of how the proposed TMDL-specific permit requirements, timelines, and deliverables are consistent with the assumptions and requirements of applicable waste load allocation(s) to implement the TMDL(s);
- Where a BMP-based approach is proposed, an explanation of how the proposed BMPs will be sufficient to implement applicable waste load allocations; and
- Where concentration-based monitoring is required, an explanation of how the required monitoring, reporting and calculation methodology for an exceedance of an effluent limitation or a violation of the TMDL(s) will be sufficient to demonstrate compliance with the TMDL(s). (Fact Sheet at p. 25.)

#### **E. NALs and Exceedance Response Actions**

Separate from the technology based and water quality based narrative effluent limitations, (TBEL and QBEL) the General Permit includes a compliance scheme based on Numeric Action Levels, or NALs. Like the Water Quality Based Corrective Actions requirement, Exceedance Response Actions are intended to bring the discharger into compliance. The NAL limits are not effluent limitations for purposes of the Clean Water Act. Rather, they are a trigger

for an adaptive management process. The State Boards states:

This ERA process provides Dischargers with an adaptive management-based process to develop and implement cost-effective BMPs that are protective of water quality and compliant with this General Permit. This process is also designed to provide Dischargers with a more defined pathway towards full compliance. Fact Sheet p. 56

The permit itself specifically states:

The NALs are not intended to serve as technology-based or water quality-based numeric effluent limitations. The NALs are not derived directly from either BAT/BCT requirements or receiving water objectives. NAL exceedances defined in this General Permit are not, in and of themselves, violations of this General Permit. (Permit at 11.) *See also* Fact Sheet at 57 (“...the NALs in this General Permit are approximate values used to provided feedback to the Discharger on site performance, and are not numeric criteria or limitations.”)

Where NAL are exceeded, the discharger is required to undertake “Tier One” or “Tier Two” site evaluation and reporting, including a review of the SWPPP, and a description of BMPs that “are expected” to meet NALs. While the Tier One reporting requires implementation of the BMPs to meet the NAL standards, Tier Two is more ambiguous as to actual implementation of pollution controls. (Permit pp.49-52.) And while implementation of identified BMPs is required, achieving NAL levels in the discharge is not required by the NAL process. *Id.*

### **III. San Diego Creek and Newport Bay Toxics TMDL**

As required by the General Permit, the staff for the Santa Ana Regional Board has prepared a draft WLA for metals for the San Diego Creek/Newport Bay Toxics for consideration by the State Board for incorporation into the General Permit. Unfortunately, rather than proposing a simple effluent limitation consisting of the WLA articulated in the TMDL, staff proposes to incorporate the metals elements of the TMDL via the NAL scheme. *Attachment A*, p.1. Incorporating the WLA via the NAL section of the permit is illegal and inappropriate for at least four reasons: 1) NALs are evaluation triggers, not effluent limitations, and WLAs can be incorporated only via effluent limitations; 2) the NAL scheme results in an illegal compliance schedule; 3) the NAL scheme uses annual averages—which would permit exceedances of the WLA ; 4) the NAL scheme includes no requirement to actually comply with the NAL standards. Further, the proposal fails to provide the data and analysis required by the General Permit for WLA submissions—information that could be readily provided if the WLA was simply proposed as an effluent limitation. For these reasons, Orange County Coastkeeper requests that staff revisit the proposed WLA for incorporation into the Permit, and submit the concentration based WLA set out in the TMDL for incorporation as an effluent limitation, with compliance required immediately.

**A. NPDES Permits Must Incorporate WLAs via Effluent Limitations, and NALs are not Effluent Limitations**

As the Permit repeatedly states, the NAL standards are not effluent limitations as defined by the Clean Water Act and Porter Cologne. Rather, the NAL standards are adaptive management tools, to trigger a compliance mechanism, and provide a pathway towards compliance. Permit, p. 11; Fact Sheet pp. 56, 57, 60. The Permit specifically points out that NALs *are not* derived from receiving water objectives, and justifies the monitoring, exceedance determination, and other NAL program elements on that basis. Fact Sheet, p. 58-59 (“...the NALs in this General Permit are approximate values used to provide feedback to the discharger on site performance, and are not numeric criteria or limitations. Therefore it is not necessary to include these insignificant values in the calculations for the NALs.”) The NAL do not impose restrictions on “quantities, discharge rates, and concentrations of “pollutants” which are “discharged” from “point sources” into “waters of the United States”...” 33 USC § 1362(11). Instead they trigger an evaluation process—with no ultimate requirement that the NAL levels be achieved.

As noted above, the Clean Water Act requires the permitting agency to incorporate the WLAs into applicable NPDES permits as Water Quality Based *Effluent Limitations*. (40 C.F.R. § 122.44(d)(1)(vii)(B); 40 C.F.R. § 130.2(h). In doing so, the permitting agency must ensure that the *effluent limits* of the NPDES permit “are consistent with the assumptions and requirements of any available wasteload allocation [WLA] for the discharge” (40 C.F.R. § 122.44(d)(1)(vii)(B).) Because NALs are not effluent limitations, the WLA cannot be incorporated into the Permit as NALs.

**B. Incorporation of the WLA as NALs Results in an Illegal Compliance Schedule**

The NAL adaptive management scheme provides for self-evaluation triggered by NAL level exceedances, SWPPP modifications, and reporting. After an NAL exceedance, a discharger has until 1 January of the following year to submit a “Level One Evaluation” documenting any changes to operations or BMPs intended to address the NAL exceedance. Permit p.49-50. If the exceedance continues, the discharger is required to submit a “Level Two Evaluation” by 1 January of the following year. *Id* at 51. One year after that, the discharger is required to submit a “Level 2 ERA Technical Report.” This report requires evaluation of sources, BMPs necessary to achieve compliance, a costs and alternatives analysis, and “off-ramp” studies, such as non-industrial or natural source evaluations. Permit p. 51-52. The Level 2 reporting requirements do not mandate compliance with NAL standards. *Id*. Finally, Level 2 dischargers will be automatically provided an additional six month extension for report submission upon filing a complete application, and additional extensions may be granted by the Regional Board. Permit p. 55. Thus the NAL program provides for between 12 and 42 months to respond to NAL level exceedances, with additional unlimited extensions at the Regional Board’s discretion.

Thus even assuming that the NAL adaptive management plan ensures compliance with NAL standards (which it does not), the NAP plan allows for virtually the entire five year permit cycle to meet that standard. A WLA incorporated into Permit as an NAL would be provided with the



same 12 to 45 month compliance schedule. And while this extended schedule may make sense for an adaptive management program, the Clean Water Act imposes strict limitations on compliance schedules for WQBELs.

An NPDES permit may only include a compliance schedule when expressly authorized by the state's water quality control plans. *Star-Kist Caribe*, 1989EPA App. LEXIS, at \*7; 33 U.S.C. § 1313(e)(3)(F). And neither the TMDL nor the Santa Ana Region Basin Plan has an implementation schedule for the metals parameters in the San Diego Creek/New Port Bay TMDL. *Basin Plan* at 5-160-181. In any event, any proposed compliance schedule, even if authorized, could not extend past 2010 for CTR pollutants—the pollutants addressed by the proposed WLA incorporation. Both the ISWP and the CTR prohibit compliance schedules for CTR pollutants extending beyond 18 May 2010. ISWP at 19. Thus any compliance schedule for copper, cadmium, lead, mercury, or chromium issued in 2016 is by definition illegal.

Because incorporating the metals WLA for San Diego Creek and Newport Bay as NALs results in illegal compliance schedules, this proposal must be replaced with a straightforward effluent limitation consistent with the numeric concentration standards articulated in the TMDL.

### **C. The Draft San Diego/Newport Bay WLA Incorporation Fails to Provide the Data and Analysis required by the Permit**

The General Permit sets out detailed requirements for the data and analysis required for the WLA submissions for inclusion in the Permit. Had staff proposed a straightforward inclusion of the concentration based limits set out in the TMDL as an effluent limitation, with immediate compliance required, staff could appropriately rely on the TMDL and Technical Support Documents developed by EPA to meet these requirements.

However, because the WLA is proposed as NALs rather than effluent limitations, staff must make the required showings—and they do not. (Fact Sheet at p. 25.) The draft WLA fails, among other things, to provide any: 1) explanation of how an exceedance of an effluent limitation or a violation of the TMDL will be determined; 2) explanation of how the proposed TMDL-specific permit requirements, timelines, and deliverables are consistent with the assumptions and requirements of applicable waste load allocation(s) to implement the TMDL(s); or 3) explanation of how the required monitoring, reporting and calculation methodology for an exceedance of an effluent limitation or a violation of the TMDL(s) will be sufficient to demonstrate compliance with the TMDL(s).

Rather, to support its conclusion that compliance with the IGP Requirements, the NALs in Table 2, and the TMDL-based NALs in Table E-1 equals compliance with the San Diego Creek and Newport Bay Toxics TMDLs, the draft states:

The ERA requirement is consistent with the recommended implementation actions in the Toxics TMDL. Minimum BMPs (Section X.H.1) are also required in the Industrial General Permit *could* reduce discharges of pollutants identified in the Toxics TMDL by

minimizing the contact of industrial materials and activities to storm water through source control BMPs. Draft WLA p.4 (emphasis added).

These circular and conclusory statements do not provide the explanations required by the Permit, and as the basis of an administrative decision would constitute an abuse of discretion. Further, the Recommended Implementation Actions referenced consist of one page of general statements made by EPA in 2002—and not an implementation plan. TMDL Summary Document, at 74. And the failure of staff to evaluate the mechanics and adequacy of the proposed NAL based WLA is illustrated by the draft WLA's failure to distinguish between NALs evaluated as instantaneous maximum, or annual average. The TMDLs WLAs are articulated as acute and chronic, and apply "at all times of the year", meaning that the annual average calculation in the NAL program would be inconsistent with the TMDL. TMDL Summary Document, at 47.

Again, rather than creating substantial and likely insurmountable obstacles to WLA incorporation into the General Permit by attempting complicated implementation, Coastkeeper requests that staff merely incorporate the concentration based WLA set out in the TMDL as an effluent limitation into its draft IGP WLA.

OCCK thanks you for the opportunity to comment on the WLA incorporation draft. Please call my office with questions about any of the above.

Sincerely yours,



Daniel Cooper  
Lawyers for Clean Water, Inc.  
Attorneys for Coastkeeper

cc: Colin Kelly, Orange County Coastkeeper

GSI Job No. 4100

March 24, 2016

Ms. Barbara Berry  
Santa Ana Regional Water Quality Control Board  
Riverside, CA 92501

By Electronic Mail to: [barbara.barry@waterboards.ca.gov](mailto:barbara.barry@waterboards.ca.gov)

**Subject: Comment Letter— TMDL-specific permit language for Toxic Pollutants for San Diego Creek and Newport Bay proposed for Industrial General Permit**

Dear Ms. Barry:

GSI Environmental (GSI) is submitting these comments on behalf of the Newport Harbor Shipyard (NHS) located in Newport Beach California. These comments pertain to the Santa Ana Regional Water Quality Control Board's (Regional Water Board's) draft proposed language to incorporate the Toxic Pollutants TMDL for San Diego Creek and Newport Bay into the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities (Order No. 2014-0057-DWQ) ("Industrial General Permit" or "IGP").

NHS was founded in 1984 and conducts its operations on the Lido Peninsula at 151 Shipyard Way, #5. NHS employs approximately 35 personnel and its primary industrial activities include: boat maintenance and repair, painting, (bottom painting and topside painting), sanding, fiberglass repairs, polishing, crane work and vessel modification. NHS has the capacity to dry dock vessels up 180000 pounds, which is the largest capacity in Newport Beach and as such, it serves as a vital resource to emergency maritime services in Newport Harbor.

NHS's SIC Code is 3732 and submitted an NOI for coverage under the IGP (WDID 830I020135). The industrial activities exposed to storm water are approximately 49000 square feet and the majority of storm water runoff from the industrial areas discharge to the sanitary sewer under permits with the City of Newport Beach and the Orange County Sanitation District. During larger rain events, when the allowable capacity of the sanitary sewer discharge is reached, NHS discharges storm water the Rhine Cannel in Lower Newport Bay.

Our comments on the proposed on the proposed language to incorporate the TMDLs is presented below. In addition to these specific comments, GSI also requests that the Regional Water Board consider comments submitted by the California Storm Water Quality Association (CASQA).

1. The Toxics TMDL<sup>1</sup> states that there are six shipyards operating on the bay and that these shipyards discharge don't discharge to the bay because they are connected to the sewer through sumps. The Water Board should be made aware that this statement may not be completely accurate. In the case of the NHS, flows during smaller rain events are directed to the sewer, but larger rain events have the potential to discharge to the bay. While GSI is uncertain about specific practices employed at other shipyards, we are concerned that the Water Board may not fully appreciate the impact of the proposed TMDL requirements on these six shipyards under the mistaken premise that industrial runoff to the Bay will not occur from these operations. At least in the case of NHS, discharges to the Bay are likely to occur during larger rain events and consequently, the impact of the TMDL requirements will likely be significant for these dischargers.

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2. Even though the majority of storm water from NHS's industrial operations is discharged to the sanitary sewer, NHS has recently installed a state-of-the-art advanced media storm water treatment system to treat runoff prior to discharge to the sanitary sewer along with flows that may discharge to the Bay when the allowable sewer system capacity is exceeded. The NHS treatment system consists of a sump, sump pump, tanks, bag filters, media filters and a flocculent injection system to treat storm water that is generated off the industrial portion of its operations. NHS has been testing and optimizing the treatment system to evaluate compliance with the IGP NALs in the event a discharge to the Bay is required when the allowable discharge capacity to the sewer is reached. Even with this advanced media filter, it has proven difficult to consistently achieve the NALs in the IGP, particularly for copper and zinc. To the extent that the TMDL based NALs presented in Table E-1 are significantly lower than the current IGP NALs, it is apparent that even state-of-the-art advanced media filtration systems will not be capable of consistently meeting these new requirements. As such, the Water Board should be made aware that these new standards can't be consistently met with currently available state-of-the art treatment technology.
3. As a result of the technology limitations described above, the Water Board should include specific language that compliance with the IGP and TMDLs can be achieved through an adaptive management approach consisting of implementing Water Board approved BMPs, similar to what is described as "non-numeric expressions of the WQBEL" in EPA's November 26, 2014 memo titled *"Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm water Sources and NPDES Permit Requirements Based on Those WLAs.'*" A copy of that memorandum is attached to this letter.
4. In addition to expressly providing for implementation of BMPs as a measure of compliance with the TMDL-based NALs, the Water Board should also allow for evaluating compliance on a mass-loading basis, instead of only using concentration for compliance with the TMDL-based NALs. This is an important issue for dischargers who implement measure to reduce or avoid storm water discharges to receiving waters, such as NHS, who as described above discharges to the sanitary sewer in most cases. This would also benefit dischargers who capture and reuse storm water and those that implement green-infrastructure measures, including infiltration or similar Low Impact Development (LID) BMPs.
5. The Water Board should clarify that the monitoring and reporting requirements of the IGP also pertain to the TMDL-based NALs, including use of average concentrations for all samples collected throughout an entire monitoring season to assess compliance with the TMDL-based NALs.
6. The TMDL-Based NALs for Cu, Cr, Pb, and Zn in Rhine Channel are based on California Toxic Rule (CTR) Saltwater Criterion Maximum Concentration (The dissolved metal concentration) multiplying conversion factors from CTR (CF for saltwater acute criteria) to the total recoverable metal concentrations. In general, the CTR default conversion factors overestimate the dissolved portion of metals in storm water and have tendency to be conservative.<sup>2</sup> As a result, the proposed TMDL-Based NALs for metals in Rhine Channel are over estimated and are not appropriate to be applied into Industrial General Permit.

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<sup>2</sup> Total Maximum Daily Loads for Metals Los Angeles River and Tributaries, U.S. Environmental Protection Agency Region 9, California Regional Water Quality Control Board Los Angeles Region, June 2005.

March 24, 2016  
GSI Job No. 4100



EPA's Metal Translator Guidance<sup>3</sup> indicates “EPA encourages that site specific data be generated to develop site specific translators.” NHS has collected empirical data that demonstrates that the dissolved portions of metals (Cu and Zinc) are significantly lower compared to the CTR default CF values. This further points that the current TMDL-Based NALs for metals in Rhine Channel are overestimated. Based on the foregoing, the Water Board should allow dischargers the option to develop site-specific metal translators and not require all dischargers to use the default CTR values.

GSI appreciates the opportunity to offer comments on behalf of NHS. Please contact the undersigned at (949) 679-1070 with any questions or would like to discuss our comments further.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tim S.' followed by a stylized flourish.

Timothy S. Simpson, PE  
Vice President and Principal Engineer

Attachment

Cc: Jesse Salem, Newport Harbor Shipyard CEO

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<sup>3</sup> The Metals Translator: Guidance For Calculating A Total Recoverable Permit Limit From A Dissolved Criterion, United States Environmental Protection Agency, Office Of Water (4305), EPA 823-B-96-007, June 1996.




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460


NOV 26 2014

OFFICE OF WATER

MEMORANDUM

SUBJECT: Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs"

FROM: Andrew D. Sawyers, Director  
Office of Wastewater Management 

Benita Best-Wong, Director  
Office of Wetlands, Oceans and Watersheds 

TO: Water Division Directors  
Regions 1 - 10

This memorandum updates aspects of EPA's November 22, 2002 memorandum from Robert H. Wayland, III, Director of the Office of Wetlands, Oceans and Watersheds, and James A. Hanlon, Director of the Office of Wastewater Management, on the subject of "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" (hereafter "2002 memorandum"). Today's memorandum replaces the November 12, 2010, memorandum on the same subject; the Water Division Directors should no longer refer to that memorandum for guidance.

This memorandum is guidance. It is not a regulation and does not impose legally binding requirements on EPA or States. EPA and state regulatory authorities should continue to make permitting and TMDL decisions on a case-by-case basis considering the particular facts and circumstances and consistent with applicable statutes, regulations, and case law. The recommendations in this guidance may not be applicable to a particular situation. EPA may change or revoke this guidance at any time.

Background

Stormwater discharges are a significant contributor to water quality impairment in this country, and the challenges from these discharges are growing as more land is developed and more impervious surface is created. Stormwater discharges cause beach closures and contaminate shellfish and surface drinking water supplies. The increased volume and velocity of stormwater discharges causes streambank erosion, flooding, sewer overflows, and basement backups. The decreased natural infiltration of rainwater reduces groundwater recharge, depleting

our underground sources of drinking water.<sup>1</sup> There are stormwater management solutions, such as green infrastructure, that can protect our waterbodies from stormwater discharges and, at the same time, offer many other benefits to communities.

Section III of the 2002 memorandum recommended that for NPDES-regulated municipal and small construction stormwater discharges, effluent limits be expressed as best management practices (BMPs) or other similar requirements, rather than as numeric effluent limits. The 2002 memorandum went on to provide guidance on using “an iterative, adaptive management BMP approach” for improving stormwater management over time as permitting agencies, the regulated community, and other involved stakeholders gain more experience and knowledge. EPA continues to support use of an iterative approach, but with greater emphasis on clear, specific, and measurable permit requirements and, where feasible, numeric NPDES permit provisions, as discussed below.

Since 2002, States and EPA have obtained considerable experience in developing TMDLs and WLAs that address stormwater sources (see Box 1 in the attachment for specific examples). Monitoring of the impacts of stormwater discharges on water quality has become more sophisticated and widespread.<sup>2</sup> The experience gained during this time has provided better information on the effectiveness of stormwater controls to reduce pollutant loadings and address water quality impairments. In many parts of the country, permitting agencies have issued several rounds of stormwater permits. Notwithstanding these developments, stormwater discharges remain a significant cause of water quality impairment in many places, highlighting a continuing need for more meaningful WLAs and more clear, specific, and measurable NPDES permit provisions to help restore impaired waters to their beneficial uses.

With this additional experience in mind, on November 12, 2010, EPA issued a memorandum updating and revising elements of the 2002 memorandum to better reflect current practices and trends in permits and WLAs for stormwater discharges. On March 17, 2011, EPA sought public comment on the November 2010 memorandum and, earlier this year, completed a nationwide review of current practices used in MS4 permits<sup>3</sup> and industrial and construction stormwater discharge permits. As a result of comments received and informed by the reviews of EPA and state-issued stormwater permits, EPA is in this memorandum replacing the

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<sup>1</sup> See generally [Urban Stormwater Management in the United States](#) (National Research Council, 2009), particularly the discussion in Chapter 3, *Hydrologic, Geomorphic, and Biological Effects of Urbanization on Watersheds*.

<sup>2</sup> Stormwater discharge monitoring programs have expanded the types pollutants and other indices (e.g., biologic integrity) being evaluated. This information is being used to help target priority areas for cleanup and to assess the effectiveness of stormwater BMPs. There are a number of noteworthy monitoring programs that are ongoing, including for example those being carried out by Duluth, MN, Capitol Region Watershed District, MN, Honolulu, HI, Baltimore or Montgomery County, MD, Puget Sound, WA, Los Angeles County, CA, and the Alabama Dept. of Transportation, among many others. See also Section 4.2 (Monitoring/Modeling Requirements) of EPA’s *Municipal Separate Storm Sewer System Permits: Post-Construction Performance Standards & Water Quality-Based Requirements – A Compendium of Permitting Approaches* (EPA, June 2014), or “MS4 Compendium” available at [http://water.epa.gov/polwaste/npdes/stormwater/upload/sw\\_ms4\\_compendium.pdf](http://water.epa.gov/polwaste/npdes/stormwater/upload/sw_ms4_compendium.pdf), for other examples of note.

<sup>3</sup> See [EPA’s MS4 Permit Compendium](#), referenced in the above footnote.

November 2010 memorandum, updating aspects of the 2002 memorandum and providing additional information in the following areas:

- Including clear, specific, and measurable permit requirements and, where feasible, numeric effluent limitations in NPDES permits for stormwater discharges;
- Disaggregating stormwater sources in a WLA; and
- Designating additional stormwater sources to regulate and developing permit limits for such sources.

**Including Clear, Specific, and Measurable Permit Requirements and, Where Feasible, Numeric Effluent Limitations in NPDES Permits for Stormwater Discharges**

At the outset of both the Phase I and Phase II stormwater permit programs, EPA provided guidance on the type of water quality-based effluent limits (WQBELs) that were considered most appropriate for stormwater permits. See Interim Permitting Policy for Water Quality-Based Limitations in Storm Water Permits [61 FR 43761 (August 26, 1996) and 61 FR 57425 (November 6, 1996)] and the Phase II rulemaking preamble 64 FR 68753 (December 8, 1999). Under the approach discussed in these documents, EPA envisioned that in the first two to three rounds of permit issuance, stormwater permits typically would require implementation of increasingly more effective best management practices (BMPs). In subsequent stormwater permit terms, if the BMPs used during prior years were shown to be inadequate to meet the requirements of the Clean Water Act (CWA), including attainment of applicable water quality standards, the permit would need to contain more specific conditions or limitations.

There are many ways to include more effective WQBELs in permits. In the spring of 2014, EPA published the results of a nationwide review of current practices used in MS4 permits in *Municipal Separate Storm Sewer Systems Permits: Post-Construction Performance Standards & Water Quality-Based Requirements – A Compendium of Permitting Approaches* (June 2014). This MS4 Compendium demonstrates how NPDES authorities have been able to effectively establish permit requirements that are more specifically tied to a measurable water quality target, and includes examples of permit requirements expressed in both numeric and non-numeric form. These approaches, while appropriately permit-specific, each share the attribute of being expressed in a clear, specific, and measurable way. For example, EPA found a number of permits that employ numeric, retention-based performance standards for post-construction discharges, as well as instances where permits have effectively incorporated numeric effluent limits or other quantifiable measures to address water quality impairment (see the attachment to this memorandum).

EPA has also found examples where the applicable WLAs have been translated into BMPs, which are required to be implemented during the permit term to reflect reasonable further progress towards meeting the applicable water quality standard (WQS). Incorporating greater specificity and clarity echoes the approach first advanced by EPA in the 1996 Interim Permitting Policy, which anticipated that where necessary to address water quality concerns, permits would be modified in subsequent terms to include “more specific conditions or limitations [which] may include an integrated suite of BMPs, performance objectives, narrative standards, monitoring triggers, numeric WQBELs, action levels, etc.”



EPA also recently completed a review of state-issued NPDES industrial and construction permits, which also revealed a number of examples where WQBELs are expressed using clear, specific, and measurable terms. Permits are exhibiting a number of different approaches, not unlike the types of provisions shown in the MS4 Compendium. For example, some permits are requiring as an effluent limitation compliance with a numeric or narrative WQS, while others require the implementation of specific BMPs that reduce the discharge of the pollutant of concern as necessary to meet applicable WQS or to implement a WLA and/or are requiring their permittees to conduct stormwater monitoring to ensure the effectiveness of those BMPs. EPA intends to publish a compendium of permitting approaches in state-issued industrial and construction stormwater permits in early 2015.

### Permits for MS4 Discharges

The CWA provides that stormwater permits for MS4 discharges “shall require controls to reduce the discharge of pollutants to the maximum extent practicable ... and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” CWA section 402(p)(3)(B)(iii). Under this provision, the NPDES permitting authority has the discretion to include requirements for reducing pollutants in stormwater discharges as necessary for compliance with water quality standards. *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1166 (9th Cir. 1999).

The 2002 memorandum stated “EPA expects that most WQBELs for NPDES-regulated municipal and small construction stormwater discharges will be in the form of BMPs, and that numeric limitations will be used only in rare instances.” As demonstrated in the MS4 Compendium, NPDES permitting authorities are using various forms of clear, specific, and measurable requirements, and, where feasible, numeric effluent limitations in order to establish a more objective and accountable means for reducing pollutant discharges that contribute to water quality problems.<sup>4</sup> Where the NPDES authority determines that MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion, EPA recommends that the NPDES permitting authority exercise its discretion to include clear, specific, and measurable permit requirements and, where feasible, numeric effluent limitations<sup>5</sup> as necessary to meet water quality standards.

NPDES authorities have significant flexibility in how they express WQBELs in MS4 permits (see examples in Box 1 of the attachment). WQBELs in MS4 permits can be expressed as system-wide requirements rather than as individual discharge location requirements such as

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<sup>4</sup> The MS4 Compendium presents examples of different permitting approaches that EPA has found during a nationwide review of state MS4 permits. Examples of different WQBEL approaches in the MS4 Compendium include permits that have (1) a list of applicable TMDLs, WLAs, and the affected MS4s; (2) numeric limits and other quantifiable approaches for specific pollutants of concern; (3) requirements to implement specific stormwater controls or management measures to meet the applicable WLA; (4) permitting authority review and approval of TMDL plans; (5) specific impaired waters monitoring and modeling requirements; and (6) requirements for discharges to impaired waters prior to TMDL approval.

<sup>5</sup> For the purpose of this memorandum, and in the context of NPDES permits for stormwater discharges, “numeric” effluent limitations refer to limitations with a quantifiable or measurable parameter related to a pollutant (or pollutants). Numeric WQBELs may include other types of numeric limits in addition to end-of-pipe limits. Numeric WQBELs may include, among others, limits on pollutant discharges by specifying parameters such as on-site stormwater retention volume or percentage or amount of effective impervious cover, as well as the more traditional pollutant concentration limits and pollutant loads in the discharge.

effluent limitations on discharges from individual outfalls. Moreover, the inclusion of numeric limitations in an MS4 permit does not, by itself, mandate the type of controls that a permittee will use to meet the limitation.

EPA recommends that NPDES permitting authorities establish clear, specific, and measurable permit requirements to implement the minimum control measures in MS4 permits. With respect to requirements for post-construction stormwater management, consistent with guidance in the 1999 Phase II Rule, EPA recommends, where feasible and appropriate, numeric requirements that attempt to maintain pre-development runoff conditions (40 CFR § 122.34(b)(5)) be incorporated into MS4 permits. EPA's MS4 Compendium features examples from 17 states and the District of Columbia that have already implemented retention performance standards for newly developed and redeveloped sites. See Box 2 of the attachment for examples.

### Permits for Industrial Stormwater Discharges

The CWA requires that permits for stormwater discharges associated with industrial activity comply with section 301 of the Act, including the requirement under section 301(b)(1)(C) to contain WQBELs to achieve water quality standards for any discharge that the permitting authority determines has the reasonable potential to cause or contribute to a water quality standard excursion. CWA section 402(p)(3)(A), 40 CFR § 122.44(d)(1)(iii). When the permitting authority determines, using the procedures specified at 40 CFR § 122.44(d)(1)(ii), that the discharge causes or has the reasonable potential to cause or contribute to an in-stream excursion of the water quality standards, the permit must contain WQBELs as stringent as necessary to meet any applicable water quality standard for that pollutant. EPA recommends that NPDES permitting authorities use the experience gained in developing WQBELs to design effective permit conditions to create objective and accountable means for controlling stormwater discharges. See box 3 in the attachment for examples.

Permits should contain clear, specific, and measurable elements associated with BMP implementation (*e.g.*, schedule for BMP installation, frequency of a practice, or level of BMP performance), as appropriate, and should be supported by documentation that implementation of selected BMPs will result in achievement of water quality standards. Permitting authorities should also consider including numeric benchmarks for BMPs and associated monitoring protocols for estimating BMP effectiveness in stormwater permits. Benchmarks can support an adaptive approach to meeting applicable water quality standards. While exceeding the benchmark is not generally a permit violation, exceeding the benchmark would typically require the permittee to take additional action, such as evaluating the effectiveness of the BMPs, implementing and/or modifying BMPs, or providing additional measures to protect water quality.<sup>6</sup> Permitting authorities should consider structuring the permit to clarify that failure to implement required corrective action, including a corrective action for exceeding a benchmark, is a permit violation. EPA notes that, as many stormwater discharges are authorized under a general

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<sup>6</sup> For example, Part 6.2.1 of EPA's 2008 MSGP provides: "This permit stipulates pollutant benchmark concentrations that may be applicable to your discharge. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data are primarily for your use to determine the overall effectiveness of your control measures and to assist you in knowing when additional corrective action(s) may be necessary to comply with the effluent limitations ..."

permit, NPDES authorities may find it more appropriate where resources allow to issue individual permits that are better tailored to meeting water quality standards for large industrial stormwater discharges with more complex stormwater management features, such as multiple outfalls and multiple entities responsible for permit compliance.

### All Permitted Stormwater Discharges

As stated in the 2002 memorandum, where a State or EPA has established a TMDL, NPDES permits must contain effluent limits and conditions consistent with the assumptions and requirements of the WLAs in the TMDL. See 40 CFR § 122.44(d)(1)(vii)(B). Where the TMDL includes WLAs for stormwater sources that provide numeric pollutant loads, the WLA should, where feasible, be translated into effective, measurable WQBELs that will achieve this objective. This could take the form of a numeric limit, or of a measurable, objective BMP-based limit that is projected to achieve the WLA. For MS4 discharges, CWA section 402(p)(3)(B)(iii) provides flexibility for NPDES authorities to set appropriate deadlines for meeting WQBELs consistent with the requirements for compliance schedules in NPDES permits set forth in 40 CFR § 122.47.

The permitting authority's decision as to how to express the WQBEL(s), either as numeric effluent limitations or as BMPs, with clear, specific, and measurable elements, should be based on an analysis of the specific facts and circumstances surrounding the permit, and/or the underlying WLA, including the nature of the stormwater discharge, available data, modeling results, and other relevant information. As discussed in the 2002 memorandum, the permit's administrative record needs to provide an adequate demonstration that, where a BMP-based approach to permit limitations is selected, the BMPs required by the permit will be sufficient to implement applicable WLAs. Permits should also include milestones or other mechanisms where needed to ensure that the progress of implementing BMPs can be tracked. Improved knowledge of BMP effectiveness gained since 2002<sup>7</sup> should be reflected in the demonstration and supporting rationale that implementation of the BMPs will attain water quality standards and be consistent with WLAs.

EPA's regulations at 40 CFR § 122.47 govern the use of compliance schedules in NPDES permits. Central among the requirements is that the effluent limitation(s) must be met "as soon as possible." 40 CFR § 122.47(a)(1). As previously discussed, by providing discretion to include "such other provisions" as deemed appropriate, CWA section 402(p)(3)(B)(iii) provides flexibility for NPDES authorities to set appropriate deadlines towards meeting WQBELs in MS4 permits consistent with the requirements for compliance schedules in NPDES permits set forth in 40 CFR § 122.47. See *Defenders of Wildlife v Browner*, 191 F.3d at 1166. EPA expects the permitting authority to document in the permit record the basis for determining that the compliance schedule is "appropriate" and consistent with the CWA and 40 CFR § 122.47. Where a TMDL has been established and there is an accompanying implementation plan that provides a schedule for an MS4 to implement the TMDL, or where a comprehensive, integrated plan addressing a municipal government's wastewater and stormwater obligations under the NPDES program has been developed, the permitting authority should consider such

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<sup>7</sup> See compilation of current BMP databases and summary reports available at [http://water.epa.gov/infrastructure/greeninfrastructure/gi\\_performance.cfm](http://water.epa.gov/infrastructure/greeninfrastructure/gi_performance.cfm), which has compiled current BMP databases and summary reports.

schedules as it decides whether and how to establish enforceable interim requirements and interim dates in the permit.

EPA notes that many permitted stormwater discharges are covered by general permits. Permitting authorities should consider and build into general permits requirements to ensure that permittees take actions necessary to meet the WLAs in approved TMDLs and address impaired waters. A general permit can, for example, identify permittees subject to applicable TMDLs in an appendix, and prescribe the activities that are required to meet an applicable WLA.

Lastly, NPDES permits must specify monitoring requirements necessary to determine compliance with effluent limitations. See CWA section 402(a)(2); 40 CFR 122.44(i). The permit could specify actions that the permittee must take if the BMPs are not performing properly or meeting expected load reductions. When developing monitoring requirements, the NPDES authority should consider the variable nature of stormwater as well as the availability of reliable and applicable field data describing the treatment efficiencies of the BMPs required and supporting modeling analysis.

### **Disaggregating Stormwater Sources in a WLA**

In the 2002 memorandum, EPA said it “may be reasonable to express allocations for NPDES-regulated stormwater discharges from multiple point sources as a single categorical wasteload allocation when data and information are insufficient to assign each source or outfall individual WLAs.” EPA also said that, “[i]n cases where wasteload allocations are developed for categories of discharges, these categories should be defined as narrowly as available information allows.” Furthermore, EPA said it “recognizes that the available data and information usually are not detailed enough to determine waste load allocations for NPDES-regulated stormwater discharges on an outfall-specific basis.”

EPA still recognizes that “[d]ecisions about allocations of pollutant loads within a TMDL are driven by the quantity and quality of existing and readily available water quality data,” but has noted the difficulty of establishing clear, specific, and measurable NPDES permit limitations for sources covered by WLAs that are expressed as single categorical or aggregated wasteload allocations. Today, TMDL writers may have more information—such as more ambient monitoring data, better spatial and temporal representation of stormwater sources, and/or more permit-generated data—than they did in 2002 to develop more disaggregated TMDL WLAs.

Accordingly, for all these reasons, EPA is again recommending that, “when information allows,” WLAs for NPDES-regulated stormwater discharges be expressed “as different WLAs for different identifiable categories” (e.g., separate WLAs for MS4 and industrial stormwater discharges). In addition, as EPA said in 2002, “[t]hese categories should be defined as narrowly as available information allows (e.g., for municipalities, separate WLAs for each municipality and for industrial sources, separate WLAs for different types of industrial stormwater sources or dischargers).” EPA does not expect states to assign WLAs to individual MS4 outfalls; however, some states may choose to do so to support their implementation efforts. These recommendations are consistent with the decision in *Anacostia Riverkeeper, Inc. v. Jackson*, 2011 U.S. Dist. Lexis 80316 (July 25, 2011).

In general, states are encouraged to disaggregate the WLA when circumstances allow to facilitate implementation. TMDL writers may want to consult with permit writers and local authorities to collect additional information such as sewer locations, MS4 jurisdictional boundaries, land use and growth projections, and locations of stormwater controls and infrastructure, to facilitate disaggregation. TMDLs have used different approaches to disaggregate stormwater to facilitate MS4 permit development that is consistent with the assumptions and requirements of the WLA. For example, some TMDLs have used a geographic approach and developed individual WLAs by subwatershed<sup>8</sup> or MS4 boundary (*i.e.*, the WLA is subdivided by the relative estimated load contribution to the subwatershed or the area served by the MS4). TMDLs have also assigned percent reductions<sup>9</sup> of the loading based on the estimated wasteload contribution from each MS4 permit holder. Where appropriate, EPA encourages permit writers to identify specific shares of an applicable wasteload allocation for specific permittees during the permitting process, as permit writers may have more detailed information than TMDL writers to effectively identify reductions for specific sources.

### **Designating Additional Stormwater Sources to Regulate and Developing Permit Limits for Such Sources**

The 2002 memorandum states that “stormwater discharges from sources that are not currently subject to NPDES regulation may be addressed by the load allocation component of a TMDL.” Section 402(p)(2) of the Clean Water Act (CWA) requires industrial stormwater sources, certain municipal separate storm sewer systems, and other designated sources to be subject to NPDES permits. Section 402(p)(6) provides EPA with authority to identify additional stormwater discharges as needing a permit.

In addition to the stormwater discharges specifically identified as needing an NPDES permit, the CWA and the NPDES regulations allow for EPA and NPDES authorized States to designate additional stormwater discharges for regulation. See: 40 CFR §§122.26 (a)(9)(i)(C), (a)(9)(i)(D), (b)(4)(iii), (b)(7)(iii), (b)(15)(ii) and 122.32(a)(2). Accordingly, EPA encourages permitting authorities to consider designation of stormwater sources in situations where coverage under NPDES permits would, in the reasonable judgment of the permitting authority and, considering the facts and circumstances in the waterbody, provide the most appropriate mechanism for implementing the pollution controls needed within a watershed to attain and maintain applicable water quality standards.

If a TMDL had previously included a newly permitted source as part of a single aggregated or gross load allocation for all unregulated stormwater sources, or all unregulated sources in a specific category, the NPDES permit authority could identify an appropriate allocation share and include a corresponding limitation specific to the newly permitted stormwater source. EPA recommends that any additional analysis used to identify that share and develop the corresponding limit be included in the administrative record for the permit. The

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<sup>8</sup> Wissahickon Creek Siltation TMDL (Pennsylvania) [www.epa.gov/reg3wapd/tmdl/pa\\_tmdl/wissahickon/index.htm](http://www.epa.gov/reg3wapd/tmdl/pa_tmdl/wissahickon/index.htm).

<sup>9</sup> Liberty Bay Watershed Fecal Coliform Bacteria TMDL (Washington).

<https://fortress.wa.gov/ecy/publications/SummaryPages/1310014.html> and Upper Minnehaha Creek Watershed Nutrients and Bacteria TMDL (Minnesota) <http://www.pca.state.mn.us/index.php/view-document.html?gid=20792>

permit writer's additional analysis would not change the TMDL, including its overall loading cap.

In situations where a stormwater source addressed in a TMDL's load allocation is not currently regulated by an NPDES permit but may be required to obtain an NPDES permit in the future, the TMDL writer should consider including language in the TMDL explaining that the allocation for the stormwater source is expressed in the TMDL as a "load allocation" contingent on the source remaining unpermitted, but that the "load allocation" would later be deemed a "wasteload allocation" if the stormwater discharge from the source were required to obtain NPDES permit coverage. Such language would help ensure that the allocation is properly characterized by the permit writer should the source's regulatory status change. This will help the permit writer develop limitations for the NPDES permit applicable to the newly permitted source that are consistent with the assumptions and requirements of the TMDL's allocation to that source.

If you have any questions please feel free to contact us or Deborah Nagle, Director of the Water Permits Division, or Tom Wall, Director of the Assessment and Watershed Protection Division.

cc: Association of Clean Water Administrators  
TMDL Program Branch Chiefs, Regions 1 – 10  
NPDES Permits Branch Chiefs, Regions 1 – 10

Attachment: MS4 and Industrial Stormwater Permit Examples

## ATTACHMENT: MS4 and Industrial Stormwater Permit Examples

### BOX 1. Examples of WQBELs in MS4 Permits:

1. Numeric expression of the WQBEL: The MS4 Permit includes a specific, quantifiable performance requirement that must be achieved within a set timeframe. For example:
  - Reduce fine sediment particles, total phosphorus, and total nitrogen loads by 10 percent, 7 percent, and 8 percent, respectively, by September 30, 2016 (2011 Lake Tahoe, CA MS4 permit)
  - Restore within the 5-year permit term 20 percent of the previously developed impervious land (2014 Prince George's County, MD MS4 permit)
  - Achieve a minimum net annual planting rate of 4,150 planting annually within the MS4 area, with the objective of an MS4-wide urban tree canopy of 40 percent by 2035 (2011 Washington, DC MS4 permit)
  - Discharges from the MS4 must not cause or contribute to exceedances of receiving water limits for Diazinon of 0.08µg/L for acute exposure (1 hr averaging period) or 0.05µg/L for chronic exposure (4-day averaging period), OR must not exceed Diazinon discharge limits of 0.072 µg/L for acute exposure or 0.045µg/L for chronic exposure (2013 San Diego, CA Regional MS4 permit)
  
2. Non-numeric expressions of the WQBEL: The MS4 Permit establishes individualized, watershed-based requirements that require each affected MS4 to implement specific BMPs within the permit term, which will ensure reasonable further progress towards meeting applicable water quality standards.
  - To implement the corrective action recommendations of the Issaquah Creek Basin Water Cleanup Plan for Fecal Coliform Bacteria (part of the approved Fecal Coliform Bacteria TMDL for the Issaquah Creek Basin), King County is required during the permit term to install and maintain animal waste education and/or collection stations at municipal parks and other permittee owned and operated lands reasonably expected to have substantial domestic animal use and the potential for stormwater pollution. The County is also required to complete IDDE screening for bacteria sources in 50 percent of the MS4 subbasins, including rural MS4 subbasins, by February 2, 2017 and implement the activities identified in the Phase I permit for responding to any illicit discharges found (2013 Western Washington Small MS4 General Permit)
  - For discharges to Segment 14 of the Upper South Platte River Basin associated with WLAs from the approved *E. coli* TMDL, the MS4 must identify outfalls with dry weather flows; monitor priority outfalls for flow rates and *E. coli* densities; implement a system maintenance program for listed priority basins (which includes storm sewer cleaning and sanitary sewer investigations); install markers on at least 90% of storm drain inlets in areas with public access; and conduct a public outreach program focused on sources that contribute *E. coli* loads to the MS4. By November 30, 2018, dry weather discharges from MS4 outfalls of concern must not contribute to an exceedance of the *E. coli* standard (126 cfu per 100 ml for a geometric mean of all samples collected at a specific outfall in a 30-day period) (2009 Denver, CO MS4 Permit)
  
3. Hybrid approach with both numeric and non-numeric expressions of the WQBEL:
  - Discharges of trash from the MS4 to the LA River must be reduced to zero by Sept. 2016. Permittees also have the option of complying via the installation of defined "full capture systems" to prevent trash from entering the MS4 (2012 Los Angeles County, CA MS4 Permit).
  - To attain the shared, load allocation of 27,000 metric tons/year of sediment in the Napa River sediment TMDL, municipalities shall determine opportunities to retrofit and/or reconstruction of road crossings to minimize road-related sediment delivery ( $\leq 500$  cubic yards/mile per 20-year period) to stream channels (2013 CA Small MS4 General Permit).

**Box 2. Examples of Retention Post Construction Standards for New and Redevelopment in MS4 Permits**

- 2009 WV small MS4 permit: Keep and manage on site the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation.
- 2011 DC Phase I MS4 permit: Achieve on-site retention of 1.2" of stormwater from a 24-hour storm with a 72-hour antecedent dry period through evapotranspiration, infiltration and/or stormwater harvesting.
- 2012 Albuquerque, NM Phase I MS4 permit: Capture the 90<sup>th</sup> percentile storm event runoff to mimic the predevelopment hydrology of the previously undeveloped site.
- 2010 Anchorage, AK Phase I MS4 permit: Keep and manage the runoff generated from the first 0.52 inches of rainfall from a 24 hour event preceded by 48 hours of no measureable precipitation.
- 2013 Western WA small MS4 permit: Implement low impact development performance standards to match developed discharge durations to pre-developed durations for the range of pre-developed discharge rates from 8% of the 2-year flow to 50% of the 2-year flow.



**BOX 3. Examples of QBELs in Industrial (including Construction) Stormwater Permits:**

1. Numeric expression of the QBEL: The permit includes a specific, quantifiable performance requirement that must be achieved:
  - Pollutant concentrations shall not exceed the stormwater discharge limits specified in the permit (based on state WQS), including (for example): Cadmium-0.003 mg/l; Mercury-0.0024 mg/l; Selenium-0.02 mg/l (2013 Hawaii MSGP)
  - Beginning July 1, 2010, permittees discharging to impaired waters without an EPA-approved TMDL shall comply with the following effluent limits (based on state WQS), including (for example): Turbidity-25 NTU; TSS-30 mg/l; Mercury-0.0021 mg/l; Phosphorus, Ammonia, Lead, Copper, Zinc-site-specific limits to be determined at time of permit coverage (2010 Washington MSGP)
  - If discharging to waters on the 303(d) list (Category 5) impaired for turbidity, fine sediment, or phosphorus, the discharge must comply with the following effluent limit for turbidity: 25 NTU (at the point of discharge from the site), or no more than 5 NTU above background turbidity when the background turbidity is 50 NTU or less, or no more than a 10% increase in turbidity when background turbidity is more than 50 NTU. Discharges to waterbodies on the 303(d) list (Category 5) for high pH must comply with the numeric effluent limit of pH 6.5 to 8.5 su (2010 Washington CGP) (2010 Washington CGP)
2. Narrative expression of the QBEL: The permit includes narrative effluent limits based on applicable WQS:
  - New discharges or new dischargers to an impaired water are not eligible for permit coverage, unless documentation or data exists to show that (1) all exposure of the pollutant(s) of concern to stormwater is prevented; or (2) the pollutant(s) of concern are not present at the facility; or (3) the discharge of the pollutant(s) of concern will meet instream water quality criteria at the point of discharge (for waters without an EPA-approved TMDL), or there is sufficient remaining WLAs in an EPA-approved TMDL to allow the discharge and that existing dischargers are subject to compliance schedules to bring the waterbody into attainment with WQS (2011 Vermont MSGP; similar requirements in RI, NY, MD, VA, WV, SC, AR, TX, KS, NE, AZ, CA, AK, OR, and WA permits)
  - In addition to other applicable QBELs, there shall be no discharge that causes visible oil sheen, and no discharge of floating solids or persistent foam in other than trace amounts. Persistent foam is foam that does not dissipate within one half hour of point of discharge (2014 Maryland MSGP)
3. Requirement to implement additional practices or procedures for discharges to impaired waters:
  - For sediment-impaired waters (without an approved TMDL), the permittee is required to maintain a minimum 50-foot buffer zone between any disturbance and all edges of the receiving water (2009 Kentucky CGP)
  - For discharges to impaired waters, implement the following: (1) stabilization of all exposed soil areas immediately, but in no case later than 7 days after the construction activity in that portion of the site has temporarily or permanently ceased (as compared to 14 days for no-impaired waters); (2) temporary sediment basins must meet specified design standards if they will serve an area of 5 or more acres (as compared to 10 or more acres for other sites); (3) retain a water quality volume of 1 inch of runoff from the new impervious surfaces created by the project (though this volume reduction requirement is for discharges to all waters, not just impaired waters) (2013 Minnesota CGP).
  - If the site discharges to a water impaired for sediment or turbidity, or to a water subject to an EPA-approved TMDL, the permittee must implement one or more of the following practices: (1) compost berms, compost blankets, or compost socks; (2) erosion control mats; (3) tackifiers used with a perimeter control BMP; (4) a natural buffer of 50 feet (horizontally) plus 25 feet (horizontally) for 5 degrees of slope; (5) water treatment by electro-coagulation, flocculation, or filtration; and/or (6) other substantially equivalent sediment or turbidity BMP approved by the state (2010 Oregon CGP)



## California Stormwater Quality Association®

*Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation*

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March 23, 2016

Santa Ana Regional Water Quality Control Board  
Attn: Barbara Barry

Subject: Preliminary Comment Letter–Draft TMDL-specific permit language for Toxic Pollutants for San Diego Creek and Newport Bay proposed for Industrial General Permit

Dear Ms. Barry:

The California Stormwater Quality Association (CASQA) appreciates the opportunity to provide comments on the Santa Ana Regional Water Quality Control Board's (Regional Water Board's) draft proposed language for potential incorporation into the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities (Order No. 2014-0057-DWQ) ("Industrial General Permit" or "IGP").

You indicated that the Regional Water Board would submit proposed TMDL-specific permit requirements to the State Water Resources Control Board (State Water Board) for the State Water Board to consider adoption and incorporation into the Industrial General Permit. The Regional Water Board will take no formal action regarding the proposed TMDL-specific permit language, but may consider changes from the initial proposal in finalizing its submittal to the State Water Board.

As you know, the process of amending the Industrial General Permit to address each of the thirty-five relevant TMDLs listed on Attachment E to the permit is multifaceted and complex. As a statewide non-profit organization, CASQA generally does not have the ability or the direction from its varied membership to develop comments on specific TMDLs or Regional Water Board proceedings. In this case, CASQA will participate at the level of broad issues and principles, particularly how proposals integrate into the Industrial General Permit, and the clarity and feasibility at the discharger level.

The following bullet points very briefly summarize our general concerns and related issues:

**1. Integration with the Industrial General Permit requirements and structure:**

**a. Clarification of who must take the Required Actions, and acknowledgement of the relevance of the IGP Pollutant Source Assessment in monitoring decisions:**

The Proposed Language lists "Responsible Parties" as all dischargers in the defined watersheds. However, the key statement showing who must take actions under the TMDL appears only at the end of the Required Actions section:

*“TMDL-based NALs are applicable if sampling of these constituents is required pursuant to Section XI of the Permit.”* The specific provision in the Permit determining what constituents must be sampled for is Section XI.B.6, which, in turn, defines constituents based on a Pollutant Source Assessment in the facility’s SWPPP (X.G.2), along with certain minimum listed constituents.

We suggest that the language more explicitly and prominently state that this TMDL’s Required Actions relating to a particular pollutant apply only if existing Section XI.B.6 of the Permit requires the discharger to sample for that pollutant. The Fact Sheet could explain that Section XI.B.6 requires sampling when an industrial pollutant is identified under the SWPPP pollutant source assessment.<sup>1</sup>

**b. Applicability of all numeric action level (NAL)-related Permit Requirements:**

The Proposed Language for the Order should more clearly reflect applicability of all the Exceedance Response Action provisions in the Permit to the TMDL-based NALs, including the timing, actions, and reports associated with the three levels – Baseline, Level 1 and Level 2. The Fact Sheet shows this is the intent of the Regional Water Board. However, it could be more clearly stated by clarifying language in the Proposed Language section to read:

*Dischargers in compliance with the IGP requirements (2014-0057-DWQ) pertaining to the NALs in Table 2, and the TMDL-based NALs in Table E-1, will be considered to meet the requirements of the San Diego Creek and Newport Bay Toxics TMDLs.*

This would ensure that the steps required match the NAL-based requirements and reporting requirements of IGP Section XII (Exceedance Response Actions).

**c. Recognition that compliance with TMDL-related Permit requirements is compliance with receiving water limitations for the Applicable Pollutant:**

The purpose of TMDL-based permit requirements is to satisfy Clean Water Act requirements for provisions addressing exceedance with water quality objectives. As is recognized in other California NPDES permits, compliance with the TMDL-based permit requirements satisfies receiving water limits for the relevant constituent. To clearly address this, the Proposed Language should state that compliance with its requirements would constitute compliance with Receiving Water Limitations of IGP Section VI.A, as well as Effluent Limitation Section V.C with respect to the particular constituent involved.

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<sup>1</sup> This would also minimize confusion as to whether pollutants present but entirely unrelated to the facility’s industrial activities trigger the requirements, which should be left to the Permit terms (i.e. industrial pollutants referred to in Section X and XI, and Stormwater Associated with Industrial Activity as defined in Permit Finding 2 and the Glossary in Attachment C).

**2. Mid-Year Compliance:**

Adoption of TMDL-related provisions in the middle of a reporting year could lead to ambiguity regarding determining compliance with the NALs for that reporting year. Proposed Language should clearly define how compliance with the IGP, including required response actions, will be determined for both (1) the reporting year in which the TMDL is adopted and (2) subsequent reporting years.

**3. NAL Satisfaction Based on Volume or Mass Reduction, or Watershed Management Plan Elements:**

We suggest that options be added allowing credit for volume reduction best management practices (BMPs) in meeting TMDL-based NALs. Meeting concentration-based levels may not be appropriate for sites that have the ability to collect and infiltrate, use, or discharge to sewer systems volumes from most events, or a large proportion of volumes from events. Options also should include the ability to coordinate with municipal permittee watershed management plans and regional BMPs to achieve load reductions.

**4. Concerns regarding Achievability of NALs:**

Facility treatment control BMPs appear not to be available or capable of achieving some of the TMDL-based concentration NALs, notably including the 0.0058 mg/L NAL for copper. There is a larger issue of the appropriateness of these levels as NALs measured against varying and periodic stormwater discharges. Ideally, achieving these levels instream should be harmonized with the pollutant load reduction measures in watershed management planning at the municipal level.

We appreciate the opportunity to offer comments and we look forward to working with you on this issue. Please contact CASQA Executive Director Geoff Brosseau at (650) 365-8620 if you have any questions or would like to discuss our comments further.

Sincerely,



Jill Bicknell, Chair  
California Stormwater Quality Association

cc: Laurel Warddrip, State Water Board  
CASQA Board of Directors and Executive Program Committee



**California Council for Environmental and Economic Balance**

101 Mission Street, Suite 1440, San Francisco, California 94105  
415-512-7890 phone, 415-512-7897 fax, [www.cceeb.org](http://www.cceeb.org)

March 31, 2016

San Francisco Bay Regional Water Quality Control Board

Attention: Christine Boschen

1515 Clay Street, Suite 1400

Oakland, CA 94612.

Via email: [Christine.boschen@waterboards.ca.gov](mailto:Christine.boschen@waterboards.ca.gov)

Los Angeles Regional Water Quality Control Board

Attention: Pavlova Vitale

320 West 4<sup>th</sup> Street, Suite 200

Los Angeles, CA 90013

Via email: [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov)

Santa Ana Regional Water Quality Control Board

Attention: Barbara Barry

3737 Main Street, Suite 500

Riverside, CA 92501

Via email: [barbara.barry@waterboards.ca.gov](mailto:barbara.barry@waterboards.ca.gov)

San Diego Regional Water Quality Control Board

Attention: Erica Ryan

2375 Northside Drive, Suite 100

San Diego, CA 92108

Via email: [sandiego@waterboards.ca.gov](mailto:sandiego@waterboards.ca.gov)

**Subject: Comments on Draft TMDL IGP Requirements**

Dear Ms. Boschen, Ms. Vitale, Ms. Barry, and Ms. Ryan:

On behalf of the California Council for Environmental and Economic Balance (CCEEB), I am pleased to provide comments in response to the recent notices regarding the incorporation of Total Maximum Daily Load (TMDL)-specific permit requirements for the State Water Resources Control Board's Industrial General Storm Water Permit (IGP).

CCEEB is a coalition of business, labor, and public leaders that works together to advance strategies to achieve a sound economy and a healthy environment. Founded in 1973, CCEEB is a non-profit and non-partisan organization.

With many of the requirements proposed to be applied to implement TMDL provisions in other watersheds, we respectfully request that the comments outlined in this letter be considered for all TMDL implementation proposals noticed and the overarching reopener of the IGP later this year, including:

### **Region 2 – San Francisco Regional Water Quality Control Board**

- Sonoma Creek
- Napa River

### **Region 4 – Los Angeles Regional Water Quality Control Board**

- Los Angeles River
- Long Beach City Beaches & Los Angeles River Estuary
- San Gabriel River
- Los Cerritos Channel
- Santa Clara River
- Calleguas Creek & Watershed
- Oxnard Drain #3
- Ventura River/Ventura Coastal
- Colorado Lagoon
- Santa Monica Bay
- Marina Del Rey
- Ballona Creek, Estuary & Sepulveda Channel
- Los Angeles & Long Beach Harbors, Machado Lake, Dominguez Channel
- Los Angeles Area Lakes

### **Region 8 – Santa Ana Regional Water Quality Control Board**

- San Diego Creek
- Newport Bay
- San Gabriel River and Impaired Tributaries

### **Region 9 – San Diego Regional Water Quality Control Board**

- Chollas Creek
- Los Penasquitos Lagoon
- Rainbow Creek
- Shelter Island Yacht Basin
- Baby Beach in Dana Point Harbor and Shelter Island Shoreline
- Twenty Beaches and Creeks in SD Region

CCEEB appreciates the consideration of the following key points as overarching comments and recommendations with specific examples of TMDL sector-specific permit requirements that speak to the core issues raised.

### **Baseline Status for New Constituents**

Under proposals like that of the Los Angeles Regional Board, responsible dischargers would be placed in the Level 1 compliance status four months after the TMDL requirements are incorporated into the IGP. This is seemingly in conflict with the provisions in the IGP (p.49) that provide that at the beginning of NOI coverage all dischargers will be at baseline status for all parameters. Currently, the IGP provides that a discharger's status is only subject to change if sampling results for a particular parameter demonstrate an NAL exceedance.

Given that a number of the TMDL monitoring requirements to be incorporated into the IGP are new, responsible dischargers are unlikely to have data upon which to rely for assessing whether they are likely to have an exceedance or if additional BMPs might be required to prevent the exceedances. As an example, dischargers within the Los Angeles River watershed will be subject to requirements for metals (cadmium, copper, lead, zinc, selenium), nitrogen compounds (ammonia; applicable to specific SIC codes), and indicator bacteria. To date, IGP permittees have typically not measured concentrations of these constituents in discharges from their facilities. As such, they do not have data to guide whether control measures would be needed for these constituents much less would they know what control measures to utilize.

CCEEB recommends that all dischargers be placed at baseline for any new constituent where monitoring data is not available.

### **Options for Demonstrating Compliance**

CCEEB strongly recommends the IGP be amended in conjunction with the incorporation of the TMDL provisions to provide multiple options for dischargers to demonstrate compliance with TMDL requirements. Recent permit requirements adopted by the Los Angeles Regional Board, as an example, acknowledge that water quality based effluent limitations (WQBELs) derived from TMDLs for metals can be met in one of a few ways and result in compliance. Similarly, if receiving water bodies are in attainment of TMDL requirements and water quality objectives, IGP permittees should also be considered to be in compliance with TMDL requirements based on flexibility to meet those requirements.

### **Non-Industrial & Natural Background Pollutant Source Demonstrations, Loading Differences**

CCEEB urges the SWRCB to consider a regional approach to addressing issues related to non-industrial pollutant sources and natural background pollutant source demonstrations. Currently, the IGP allows Level 2 dischargers to demonstrate that the exceedance of a Numeric Action Level (NAL) is related to the presence of non-industrial pollutant sources or the source is tied to natural background not disturbed by industrial activities. In some cases,

regional boards have officially indicated industrial sources are not expected to be significant sources – if sources at all – of some pollutants such as bacteria (LA Regional Board) or of metals in storm water that can be a result of atmospheric deposition, and more. In this regard, exceedances of such constituents should not be assumed to be the result of industrial activity and yet it is the industrial community that bears the technical burden and associated costs of demonstrating the non-industrial or natural background source.

A solution to this issue may be to explicitly allow regional permittees to collaborate for the purpose of conducting studies and making regional demonstrations, as needed.

Additionally, CCEEB urges consideration of the fact that establishing numeric limits does not account for pollutant loading differences among permittees. One discharger might be responsible for loading one pound of copper into the waterway annually, while another may load a ton; however, under these TMDL scenarios they are treated equally because the limits are a concentration-based limit not a mass-based limit. While equal, it is not adjusted for risk.

As an example, the Orange County Coastkeeper commissioned a study<sup>1</sup> several years ago regarding copper loading into Newport Bay. The study broke down the loading by drainage basin. On a basin-by-basin total there were differences, but when evaluated by acreage, the highest loading was from the smallest drainage basin. This is a result of drainage that had a large boat yard that re-painted ship hulls within the watershed. They were allowing the copper-laden hull paint that was removed to be subsequently washed into the Bay. To level the playing field and address the impacts of the largest pollutant discharges, there should be consideration of working differentially with industries that load metals at higher rates than others by offering grants for treatment and comprehensive technical assistance to ensure the removal of as much metals as opposed to implementing a TMDL.

## **Metals Calculations**

Specific to calculations for metals, CCEEB recommends the state and regional boards implement the metals TMDLs proposed within the IGP upon considering the water effect ratio (WER) for copper and recalculated criteria for lead.

The Los Angeles Regional Board, in particular, adopted site-specific objectives (SSOs) for copper and lead (Order No. R15-004). The SSO for copper was based upon an extensive WER study<sup>2</sup> that took into account robust sample collection and toxicity testing. The study identified that copper was less toxic in ambient water in the Los Angeles River and its tributaries than in the laboratory water used to establish the default water quality criteria of the California Toxics Rule (CTR). Additionally, the study found wet weather conditions had lower potential to cause toxicity than dry weather conditions. In terms of lead, the SSO was based

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<sup>1</sup> Orange County Coastkeeper, Lower Newport Bay Copper/Metals Marina Study, July 2007

[http://d3n8a8pro7vhmx.cloudfront.net/coastkeeper/pages/47/attachments/original/1399483698/FinalCu\\_Report\\_0408.pdf?1399483698](http://d3n8a8pro7vhmx.cloudfront.net/coastkeeper/pages/47/attachments/original/1399483698/FinalCu_Report_0408.pdf?1399483698)

<sup>2</sup> Larry Walker Associations, Final Report – Los Angeles River Copper Water-Effect Ratio (WER) Study, June 2008

[http://www.waterboards.ca.gov/losangeles/board\\_decisions/basin\\_plan\\_amendments/technical\\_documents/77\\_New/Attachment%20A%20-%20FINAL%20LA%20River%20Cu%20WER%20Report%20-%2006-3-08.pdf](http://www.waterboards.ca.gov/losangeles/board_decisions/basin_plan_amendments/technical_documents/77_New/Attachment%20A%20-%20FINAL%20LA%20River%20Cu%20WER%20Report%20-%2006-3-08.pdf)

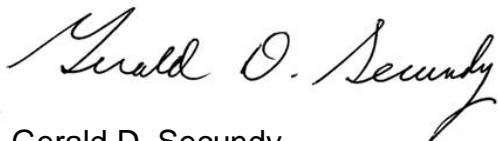


upon a study that incorporated updated toxicity data for lead and contemplated species present in the Los Angeles River watershed. Both SSOs indicated that the default water quality criteria of the CTR, which had been used to develop the original Metals TMDLs for the Los Angeles River, were conservative, and that higher copper and lead concentrations could be present in waters and provide an equivalent level of protection of aquatic species.

While the SSOs for lead and copper have seemingly not been approved by the State Water Resources Control Board, the Office of Administrative Law, or USEPA as of yet, the proposed IGP amendments do not reference these SSOs. As a matter of fact, the proposed IGP amendments in the Los Angeles Regional Board proposals provide WER default values of 1.0 unless site-specific WERs are approved with the IGPS amendments indicating no site-specific values have been approved for industrial storm water discharges. The language seems to suggest that WER(s) must be approved for individual discharges or types of discharges; however, the Los Angeles Regional Board's adopting resolution for these SSOs indicated that the SSO study "was to determine WERs for copper that would apply to all sources..." Because the SSOs developed by the WER and recalculation studies apply to receiving waters for both wet and dry weather conditions, the IGP TMDL requirements should be written to recognize these studies upon final approval and to facilitate the incorporation of the applicable SSOs for copper and lead into the IGP.

On behalf of CCEEB, I appreciate the opportunity to provide these comments. If you have questions regarding the points raised in this letter, please contact CCEEB Water, Chemistry and Waste Project Manager Dawn Koepke with McHugh, Koepke & Associates at (916) 930-1993. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Gerald D. Secundy". The signature is written in black ink and is positioned above the typed name and title.

Gerald D. Secundy  
CCEEB President



March 31, 2016

Ms. Barbara Barry  
Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501

Sent via electronic mail to: [barbara.barry@waterboards.ca.gov](mailto:barbara.barry@waterboards.ca.gov)

**RE: Comment – Draft TMDL - Industrial General Permit Requirements**

Dear Ms. Barry:

In order to legally incorporate TMDL waste load allocations (WLAs) into the Industrial General Permit (IGP or Permit), any BMP-based water quality based effluent limitations (WQBELs) must be sufficient to meet WLAs as demonstrated by discharger monitoring.

California Coastkeeper Alliance (CCKA) is a network of twelve Waterkeeper organizations working to protect and enhance clean and abundant waters throughout the state, for the benefit of Californians and California ecosystems. We appreciate the opportunity to provide comments to the Regional Water Board on the proposed WLAs from various TMDLs for incorporation into the IGP. This letter is intended to outline our major concerns with regional boards' proposed IGP TMDL incorporation. We reserve the right to submit additional comments when the State Board takes up the matter.

The Clean Water Act's TMDL program represents the Act's "safety net."<sup>1</sup> It is the bedrock component of the Clean Water Act, the backstop to ensure that the goals of the Act can be achieved when initial efforts fail. CCKA supports the importation of the numeric WLAs from the TMDL directly into the Permit. However the proposed incorporation of WLAs as Numeric Action Levels (NALs) or TMDL Action Levels (TALs) rather than WQBELs is inconsistent with the requirements of the Clean Water Act, and creates an illegal compliance schedule. Further, because the WLA is incorporated into an adaptive management process rather than as an effluent limitation, the submission fails to meet the data and analysis requirements set out in the Permit.

While the current proposals to develop a trigger for an adaptive management process leading to additional BMPs might ultimately play some useful role in implementing the TMDLs, it cannot be the exclusive approach taken, as is now the case. NALs and TALs are not lawful substitutes for WQBELs. For these reasons, CCKA requests that staff revisit the proposed WLA incorporation, and apply the straightforward process contemplated by the TMDL and the Clean Water Act to submit numeric effluent limitations consistent with the concentration based WLA in the applicable TMDL.

**I. TMDLS SHOULD BE INCORPORATED INTO THE PERMIT AS EFFLUENT LIMITATIONS—NUMERIC ACTION LIMITS OR TMDL ACTION LIMITS ARE NOT APPROPRIATE ON THEIR OWN.**

The use of NALs or TALs as the exclusive method of WLA incorporation is unlawful. Permitting agencies must ensure that NDPEs permits authorizing storm water discharges associated with industrial activities include both 1) technology based protections *and* 2) water quality based effluent protections in the form of WQBELs. As the

<sup>1</sup> Houck, Oliver A., The Clean Water Act TMDL Program 49 (Envtl. Law Inst. 1999).

State Board has recognized, the inclusion of WQBELs consistent with WLAs is non-discretionary.<sup>2</sup>

Regional Boards' current proposals relying on NALs or TALs represent neither a technology based nor a water quality based effluent limitation. TALs have the same permitting status as NALs.<sup>3</sup> The State Water Board has held that NALs are neither technology based nor water quality based effluent limitations.<sup>4</sup> Moreover, a NAL or TAL is used as a trigger for an adaptive management and monitoring program leading to development of BMPs, and only after a minimum of 10 months past incorporation must a discharger demonstrate that the facility's Stormwater Pollution Prevention Plan (SWPPP) is revised to include BMPs to prevent an exceedance of the TAL.

NALs or TALs create an illegal compliance schedule for metals and toxics, and may create schedules conflicting with existing Basin Plans for other pollutants, necessitating Basin Plan Amendments at a minimum. Since the WLAs are incorporated as triggers for an adaptive management process eventually requiring compliance with the numeric limits indirectly, rather than as a simple effluent limitation, the proposed incorporation creates impermissible compliance schedules, and also fails to meet the data and analysis requirements set out in the General Permit.

While the use of NALs or TALs might be an appropriate adaptive management measure, they can never be the sole, or even primary, approach to incorporating WLAs for TMDL constituents into the Permit—WQBELs must be an element of the WLAs. We urge the Regional and State Water Boards to incorporate the proposed WLAs, currently expressed as NALs or TALs, into the Permit as WQBELs—as the Clean Water Act requires. This direct approach should be coupled with the requirement that permittees implement BMPs necessary to achieve the numeric effluent limitations.

**II. IF BMP-BASED EFFLUENT LIMITATIONS ARE INCORPORATED INTO THE PERMIT, THE STATE WATER BOARD MUST REQUIRE THE DISCHARGER TO IMPLEMENT BMPs SUFFICIENT TO ACHIEVE THE WASTE LOAD ALLOCATION THROUGH DEMONSTRATED MONITORING.**

The Clean Water Act requires the permitting agency to adopt monitoring requirements in NPDES permits that will produce the information necessary to make efficient compliance determinations.<sup>5</sup> As the Permit dictates, the Regional Water Boards will submit to the State Water Board the following information for each of the TMDLs listed in Attachment E:

- Proposed TMDL-specific permit requirements, including any applicable effluent limitations, implementation timelines, additional monitoring requirements, reporting requirements, an explanation of how an exceedance of an effluent limitation or a violation of the TMDL will be determined, and required deliverables consistent with the TMDL(s);
- An explanation of how the proposed TMDL-specific permit requirements, timelines, and deliverables are consistent with the assumptions and requirements of applicable waste load allocation(s) to implement the TMDL(s);
- Where a BMP-based approach is proposed, an explanation of how the proposed BMPs will be sufficient to implement applicable waste load allocations; and
- Where concentration-based monitoring is required, an explanation of how the required monitoring, reporting and calculation methodology for an exceedance of an effluent limitation or a violation of the TMDL(s) will be sufficient to demonstrate compliance with the TMDL(s).<sup>6</sup>

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<sup>2</sup> General Permit Fact Sheet, pp. 23-26.

<sup>3</sup> Regional Board Notice, footnote 10, p.8.

<sup>4</sup> CAS000001 at 11.

<sup>5</sup> *Sierra Club*, 813 F.2d at 1491-92; *County of Los Angeles*, 725 F.3d at 1208-1209 (discussing the necessity and purpose of self-monitoring in context of general NPDES permits).

<sup>6</sup> Fact Sheet at p. 25.

Clean Water Act implementing regulations set forth the monitoring requirements that must be in NPDES permits.<sup>7</sup> Among these requirements is the express mandate that NPDES permits include provisions “to assure compliance with permit limitations” through the monitoring of the amount of pollutants discharged, the volume of effluent discharged from each outfall, and “other measurements as appropriate.”<sup>8</sup> Thus, the State Water Board must adopt NPDES permits that include requirements to collect the data and information necessary to effectively determine compliance with the terms of the permit—including compliance with a WLA based effluent limitation.<sup>9</sup>

If Regional Boards are to incorporate BMP based WQBELs to represent TMDL WLAs, then the Region and State boards should require the discharger to implement BMPs sufficient to meet WLAs as demonstrated by monitoring.

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The TMDL program is the essential means to achieving the Clean Water Act’s goal of restoring waters so that they are safe for swimming, fishing, drinking, and other “beneficial uses” that citizens enjoy, or used to be able to enjoy. We look forward to working with you to ensure clean, abundant water for California.

Sincerely,



Sean Bothwell  
Policy Director  
California Coastkeeper Alliance

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<sup>7</sup> See 40 C.F.R. §§ 122.44(i), 122.48.

<sup>8</sup> 40 C.F.R. § 122.44(a)(1)(i)-(iii).

<sup>9</sup> See *County of Los Angeles*, 725 F.3d at 1207.

**March 24, 2016**

*VIA ELECTRONIC MAIL ONLY*

Ms. Barbara Barry  
Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501  
[barbara.barry@waterboards.ca.gov](mailto:barbara.barry@waterboards.ca.gov)

**Subject: Comment Letter – Draft TMDL-Specific Permit Requirements for the State Water Resources Control Board’s Industrial General Storm Water Permit**

Dear Ms. Barry,

OC Public Works appreciates the opportunity to comment on the draft Total Maximum Daily Load (TMDL)-Specific Permit Requirements for the State Water Resources Control Board’s (State Water Board’s) Industrial General Storm Water Permit (IGP), Order No. 2014-0057-DWQ, NPDES Permit No. CAS000001. The TMDLs in question are the San Diego Creek and Newport Bay Toxics TMDLs (Toxics TMDLs) developed by United States Environmental Protection Agency (USEPA). We support the comments of CASQA and also offer the following:

1. The Toxics TMDLs were developed by USEPA in 2002 based on data collected prior to 2000. Since then, Regional Board, with assistance from watershed stakeholders, have developed updated TMDLs to replace many components of the Toxics TMDLs including a metals TMDL (under development) that will address all of the constituents listed in Attachment E. As part of this effort, some TMDL constituents (such as zinc, lead, and chromium) will likely be delisted for some water bodies during the IGP permit term. The provisions in Attachment E should provide for this eventuality.
2. Consistent with the Construction General Permit (CGP), 303(d) listed waters should be considered in the IGP similar to those subject to TMDLs. Currently the IGP simply requires the permittee to monitor for 303(d)-listed constituents without specifying implementation measures. Concentration-based numerical action levels (NALs) should be applied to the 303(d) listed constituents as well.
3. The Toxics TMDLs are highly technical and very complex and could be challenging to understand and implement for individual IGP permittees. The IGP allows similar industries

Ms. Barbara Barry  
March 24, 2016  
Page 2

to form industry-specific compliance groups to maximize efficiency and effectiveness. For the same reason, it may be advisable for IGP permittees to form compliance group based on watershed area. This will significantly improve the efficiency and effectiveness in complying with these TMDLs.

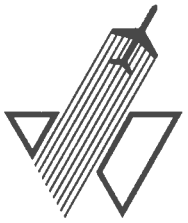
4. Newport Bay watershed stakeholders have a long history of working collaboratively on water quality issues and have formed a Toxics Reduction and Investigation Program (TRIP) to manage the toxic pollutants in the watershed holistically. IGP permittees within the watershed should have an option to join TRIP either individually or collectively to achieve the maximum efficiency and effectiveness.

If you have any questions, please contact Jian Peng at (714) 955-0650 or [jian.peng@ocpw.ocgov.com](mailto:jian.peng@ocpw.ocgov.com).

Very truly yours,



Chris Crompton, Interim Deputy Director  
OC Environmental Resources



JOHN WAYNE  
AIRPORT  
ORANGE COUNTY

Barry A. Rondinella,  
A.A.E./C.A.E.  
Airport Director

March 24, 2016

Ms. Barbara Barry  
Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501

Subject: John Wayne Airport Comments on the Draft TMDL-Specific Permit Requirements for the State Water Resources Control Board's Industrial General Permit

Dear Ms. Barry,

Thank you for the opportunity to provide comments on the Draft San Diego Creek and Newport Bay Toxics TMDLs. John Wayne Airport is one of the Dischargers within the San Diego Creek and Newport Bay watersheds defined in Figure 1-1 in Attachment E of the draft document. Attachment E presents several key issues of significant concern to John Wayne Airport. The pertinent issues and our corresponding comments relating to the draft document are presented below.

1. *Responsible Parties section includes Dischargers within the San Diego Creek and Newport Bay watersheds defined approximately by Hydrologic Unit Code (HUC) 10 (1807020402 and 1807020401) as determined by the Santa Ana Regional Water Quality Control Board.*

John Wayne Airport discharges to the Santa Ana Delhi Channel, which is listed as impaired by indicator bacteria. The Santa Ana Delhi Channel was not listed as an impaired waterbody for heavy metals including copper and zinc. We recommend the Regional Board revise the watersheds analysis and not use the proposed Hydrologic Unit Code 10 as the basis for Responsible Parties.

2. *Attachment E states "Industrial dischargers are required to meet the numeric action levels (NALs) for metals and other constituents specified in the Industrial General Permit (IGP; Table 2, Order 2014-0057-DWQ)...Industrial dischargers are also required to meet the TMDL-based NALs established herein for discharges of copper, lead, and zinc to San Diego Creek, other freshwater tributaries in the Newport Bay watershed, and Upper Newport Bay, Lower Newport Bay and the Rhine Channel; and the TMDL-based NAL for discharges of chromium to the Rhine Channel."*

The IGP requires industrial dischargers to comply with the Level 1 status and Level 2 Exceedance Response Actions (ERA) requirements if there are NAL exceedances. The NALs are not technology-based or water quality-based numeric effluent limitations. We recommend the language above be revised to include the ERA process within the table. The Fact Sheet shows this is the intent of the Regional Board. However, it could be more clearly stated by including the language in the table.

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Recommended Language: Industrial dischargers are required to develop and implement Exceedance Response Actions (ERAs) in the event of an NAL exceedance for metals and other constituents specified in the IGP (IGP; Table 2, Order2014-0057-DWQ)...Industrial dischargers are also required to develop and implement ERAs in the event of a TMDL-based NALs exceedance. The TMDL-based NALs are established herein...

3. *Attachment E does not define an NAL exceedance.*

Attachment E should be consistent with the IGP using the average annual concentration. A single grab sample should not be considered an NAL exceedance. We recommend including the definition of NAL exceedance or referencing the definition included in the IGP.

4. *Significant costs are associated with meeting the NALs with a low confidence that treatment at industrial facilities will be successful in lowering copper concentrations in the environment.*

Historical results for dischargers that have sampled for copper within the Cities listed in Attachment E, Figure 1-1, obtained from the State Water Resources Control Board's Stormwater Multiple Application and Report Tracking System (SMARTS), show that 92% have exceeded the proposed copper TMDL-based NAL and the current copper IGP NAL. Based on the 2015-2016 storm season, 79% of dischargers exceed the proposed copper TMDL-based NAL. It appears the IGP NALs will already require several dischargers, if not all dischargers, to install additional structural treatment controls.

Based on our preliminary analysis for the 85<sup>th</sup> percentile storm event, the cost to install additional structural treatment controls at JWA, such as a pressurized vessel treatment system with advanced media that may treat stormwater to meet the IGP NAL, could cost upwards of \$4 million in initial capital cost with an approximate annual operation and maintenance cost of \$300,000. In order to attempt to treat to the TMDL-based NALs, ion exchange may also be required, increasing the initial capital cost to approximately \$7 million. And, these treatment controls may not be feasible due to Federal Aviation Administration (FAA) limitations on installing infrastructure within certain areas on the airport property and the treatment systems may not reliably meet these NALs even after these significant capital expenditures.

JWA is very concerned about the potential significant costs to address pollutants that are naturally occurring in our soils and aurally deposited in significant amounts. Our efforts should be directed towards source controls first before resorting to treatment.

5. *With copper ubiquitous in our environment and in many products such as brake pads, tires, paints, and pesticides, we recommend working with industry and manufacturers to remove or replace copper, to the extent practicable, from these products that are applied or used throughout the watersheds and to participate in mitigating the effect of these pollutants. SB 346 (Brake pad law) is an example of removing copper from these products which is expected to drastically reduce*



copper concentrations by 2025. This will address much of the excess copper pollutants in our environment at the source.

6. John Wayne Airport is currently granting an easement for the Santa Ana-Delhi Channel Diversion Project that removes significant amounts of TMDL pollutants. A credit system for industrial dischargers should be established for contributions to TMDL-related projects. In addition, IGP permittees should be able to participate in the TMDL work groups as an option to comply with the TMDL provisions.

In addition to John Wayne Airport's comments, we concur and support the comments made by the CASQA and Orange County Public Works.

John Wayne Airport appreciates the opportunity to provide comments on the draft San Diego Creek and Newport Bay Toxics TMDLs. We support efforts to address watershed impairments and look forward to working with our watershed partners in identifying balanced initiatives to address these impairments.

Sincerely,



Melinda McCoy, PG  
Airport Environmental Engineer



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

MAR 24 2016

Barbara Barry  
Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501

Re: Proposed TMDL Requirements for General Permit No. CAS000001

Dear Ms. Barry:

The following are EPA Region 9's comments on the Santa Ana Regional Board's proposal for incorporating the requirements of the San Diego Creek and Newport Bay Toxics TMDLs into the State Water Board's industrial general permit (IGP) for stormwater discharges associated with industrial activity (NPDES permit No. CAS000001). The Regional Board's proposal was released for the public review on February 24, 2016.

The Regional Board's proposal appears to be intermingling requirements associated with TMDLs and those associated with Numeric Action Levels (NALs). Given the differences between the two, we recommend keeping them separate.

As explained in the Findings for the IGP, NALs are not intended to serve as either technology-based or water quality-based effluent limits, and exceedances of NALs by themselves are not violations of the permit. However, water quality-based effluent limits derived from applicable wasteload allocations (WLAs) from a TMDL are intended to be enforceable limits. NPDES regulations at 40 CFR 122.44(d)(1)(vii)(B) require effluent limits consistent with assumptions and requirements of applicable TMDLs. Incorporation of the WLAs from the Toxics TMDLs as NALs (as proposed) would be inconsistent with these regulations and EPA reserves the right to object to issuance of the proposed permit modification unless this concern is addressed. The IGP amendment must be revised to incorporate the relevant WLAs from the Toxics TMDLs into the IGP as numeric effluent limits.

We appreciate the opportunity to provide our views on the proposal. If you have any questions regarding this matter, please contact Eugene Bromley of the NPDES Permits Section at (415) 972-3510, or Peter Kozelka also of the NPDES Permits Section at (415) 972-3448.

Sincerely,

A handwritten signature in black ink that reads "David Smith".

David Smith, Manager  
NPDES Permits Office (WTR-2-3)



## STATE OF CALIFORNIA AUTO DISMANTLERS ASSOCIATION

3550 Watt Avenue, Suite 140—Sacramento, CA 95821—(916) 979-7088—Fax (916) 979-7089

March 31, 2016

San Francisco Bay Regional Water Quality Control Board  
Attention: Christine Boschen  
1515 Clay Street, Suite 1400  
Oakland, CA 94612.  
Via email: [Christine.boschen@waterboards.ca.gov](mailto:Christine.boschen@waterboards.ca.gov)

Los Angeles Regional Water Quality Control Board  
Attention: Pavlova Vitale  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013  
Via email: [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov)

Santa Ana Regional Water Quality Control Board  
Attention: Barbara Barry  
3737 Main Street, Suite 500  
Riverside, CA 92501  
Via email: [barbara.barry@waterboards.ca.gov](mailto:barbara.barry@waterboards.ca.gov)

San Diego Regional Water Quality Control Board  
Attention: Erica Ryan  
2375 Northside Drive, Suite 100  
San Diego, CA 92108  
Via email: [sandiego@waterboards.ca.gov](mailto:sandiego@waterboards.ca.gov)

**Subject:            Comments on Draft TMDL IGP Requirements**

Dear Ms. Boschen, Ms. Vitale, Ms. Barry, and Ms. Ryan:

On behalf of the State of California Auto Dismantlers Association (SCADA), I am pleased to provide comments in response to the recent notices regarding the incorporation of Total Maximum Daily Load (TMDL)-specific permit requirements for the State Water Resources Control Board's Industrial General Storm Water Permit (IGP).

SCADA represents approximately 150 small and medium sized businesses throughout California. SCADA was formed in 1959 to serve its members in the area of government relations, education, and business. SCADA members are licensed by the state Department of Motor Vehicles and take responsibility for recycling and disposing of End-of-Life Vehicles using environmentally responsible practices.

With many of the requirements proposed to be applied to implement TMDL provisions in other watersheds, we respectfully request that the comments outlined in this letter be considered for all TMDL implementation proposals noticed and the overarching reopener of the IGP later this year, including:

### **Region 2 – San Francisco Regional Water Quality Control Board**

- Sonoma Creek

- Napa River

#### **Region 4 – Los Angeles Regional Water Quality Control Board**

- Los Angeles River
- Long Beach City Beaches & Los Angeles River Estuary
- San Gabriel River
- Los Cerritos Channel
- Santa Clara River
- Calleguas Creek & Watershed
- Oxnard Drain #3
- Ventura River/Ventura Coastal
- Colorado Lagoon
- Santa Monica Bay
- Marina Del Rey
- Ballona Creek, Estuary & Sepulveda Channel
- Los Angeles & Long Beach Harbors, Machado Lake, Dominguez Channel
- Los Angeles Area Lakes

#### **Region 8 – Santa Ana Regional Water Quality Control Board**

- San Diego Creek
- Newport Bay
- San Gabriel River and Impaired Tributaries

#### **Region 9 – San Diego Regional Water Quality Control Board**

- Chollas Creek
- Los Penasquitos Lagoon
- Rainbow Creek
- Shelter Island Yacht Basin
- Baby Beach in Dana Point Harbor and Shelter Island Shoreline
- Twenty Beaches and Creeks in SD Region

SCADA appreciates your consideration of the following overarching comments and recommendations.

#### **Baseline Status for New Constituents**

With a number of the TMDL monitoring requirements to be incorporated into the IGP being new, permittees will not have existing data to rely upon for assessing potential for exceedances or if additional BMPs might be warranted to prevent the exceedances. Because some of the constituents are new, IGP permittees may not have historically measured concentrations of these constituents in discharges from their facilities. As such, they are not likely going to have data to base determinations about control measures on nor will they be clear about what measures would be necessary to manage these constituents.

In this regard, SCADA recommends that all dischargers be placed at baseline for any new constituent where monitoring data is not available. Responsible dischargers, like those that are SCADA members, should have the opportunity to begin at baseline status.

#### **Compliance Options**

Consistent with its previous comments to the State Water Resources Control Board (SWRCB), SCADA strongly recommends the IGP be amended with the incorporation of the TMDL provisions to allow various options for dischargers to demonstrate compliance with overall IGP and specific TMDL requirements. Some of the regional board provisions allow for multiple options to achieve compliance if receiving water bodies are in attainment of TMDL requirements and water quality objectives, IGP permittees should also be considered to be in compliance with TMDL requirements based on flexibility to meet those requirements.

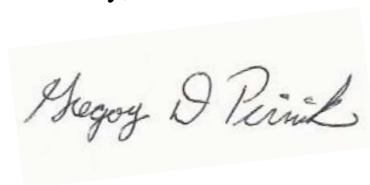
### **Background Pollutant Source Demonstrations**

SCADA has long been concerned that there is not a broader review of the various background sources that contribute to background pollutant sources that are often inappropriately attributed to individual dischargers. In this regard, SCADA urges the state and regional boards to consider supporting a regional approach to addressing issues related to non-industrial pollutant sources and background pollutant source demonstrations whereby regional permittees could collaborate to conduct an assessment of the various background sources in a particular region that may be inappropriately attributed to IGP permittees. This would be of great assistance to permittees who find themselves in Level 2 with the need to bear the burden and cost of demonstrating that an exceedance(s) of a Numeric Action Level (NAL) is related to the presence of non-industrial pollutant sources or the source is tied to natural background not disturbed by industrial activities.

SCADA would also urge consideration of the possibility that establishing numeric limits does not account for pollutant loading differences among permittees. One discharger might be responsible for significant pollutant loading into the waterway annually, while another may load a de minimis amount. Under the proposed TMDL scenarios, however, they are treated equally because the limits are concentration-based rather than a mass-based limit. This assessment does nothing to account for risk and the differences among permittees who are attempting to be in compliance versus those that choose to ignore regulatory requirements in their totality.

On behalf of SCADA, I appreciate the opportunity to provide these comments. If you have questions regarding the points raised in this letter, please contact Gavin McHugh with McHugh, Koepke & Associates at (916) 930-1993. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Gregory D Pirnik". The signature is written in black ink on a light-colored, slightly textured paper background.

Greg Pirnik



**Western States Petroleum Association**  
Credible Solutions • Responsive Service • Since 1907

Kevin Buchan  
Manager, Bay Area Region

**VIA ELECTRONIC MAIL**

March 31, 2016

San Francisco Bay Regional Water Quality Control Board  
Attention: Christine Boschen  
1515 Clay Street, Suite 1400  
Oakland, CA 94612.  
Via email: [Christine.boschen@waterboards.ca.gov](mailto:Christine.boschen@waterboards.ca.gov)

Los Angeles Regional Water Quality Control Board  
Attention: Pavlova Vitale  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013  
Via email: [losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov)

Santa Ana Regional Water Quality Control Board  
Attention: Barbara Barry  
3737 Main Street, Suite 500  
Riverside, CA 92501  
Via email: [barbara.barry@waterboards.ca.gov](mailto:barbara.barry@waterboards.ca.gov)

San Diego Regional Water Quality Control Board  
Attention: Erica Ryan  
2375 Northside Drive, Suite 100  
San Diego, CA 92108  
Via email: [sandiego@waterboards.ca.gov](mailto:sandiego@waterboards.ca.gov)

**Subject: WSPA Comments on Draft TMDL-Specific Industrial General Stormwater Permit Requirements**

Dear Ms. Boschen, Ms. Vitale, Ms. Barry, and Ms. Ryan:

On behalf of the Western States Petroleum Association (WSPA), I am pleased to provide comments in response to the recent notices regarding the incorporation of Total Maximum Daily Load (TMDL)-specific permit requirements for the State Water Resources Control Board's Industrial General Storm Water Permit (IGP).

WSPA is a non-profit trade association representing twenty-six companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas, and other energy supplies in California, Arizona, Nevada, Oregon, and Washington.

Given many of the requirements are proposed to be applied to implement TMDL provisions in other watersheds, we respectfully request that the comments outlined in this letter be considered for all TMDL implementation proposals noticed and the overarching reopener of the IGP later this year, including:

### **Region 2 – San Francisco Regional Water Quality Control Board**

- Sonoma Creek
- Napa River

### **Region 4 – Los Angeles Regional Water Quality Control Board**

- Los Angeles River
- Long Beach City Beaches & Los Angeles River Estuary
- San Gabriel River
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- Oxnard Drain #3
- Ventura River/Ventura Coastal
- Colorado Lagoon
- Santa Monica Bay
- Marina Del Rey
- Ballona Creek, Estuary & Sepulveda Channel
- Los Angeles & Long Beach Harbors, Machado Lake, Dominguez Channel
- Los Angeles Area Lakes

## **Region 8 – Santa Ana Regional Water Quality Control Board**

- San Diego Creek
- Newport Bay
- San Gabriel River and Impaired Tributaries

## **Region 9 – San Diego Regional Water Quality Control Board**

- Chollas Creek
- Los Penasquitos Lagoon
- Rainbow Creek
- Shelter Island Yacht Basin
- Baby Beach in Dana Point Harbor and Shelter Island Shoreline
- Twenty Beaches and Creeks in SD Region

The following key points are put forth as overarching comments and recommendations with specific examples of TMDL sector-specific permit requirements that speak to the core issues raised.

### **Dischargers should be assigned Baseline Status for new constituents.**

The Los Angeles Regional Water Quality Control Board (Los Angeles Regional Board) proposes to incorporate each TMDL waste load allocation (WLA) as a numeric “TMDL Action Level (TAL),” which would be treated in the same manner as a Numeric Action Level (NAL) in the IGP.

The Los Angeles Regional Board also proposes that Responsible Dischargers would be assigned Level 1 compliance status four months after the TMDL-specific requirements are incorporated into the IGP. However, as indicated in the IGP at p. 49, “At the beginning of a Discharger’s NOI Coverage, all Dischargers have baseline status for all parameters.” A Discharger’s Baseline status for any given parameter “shall change Level 1 status if sampling results indicate an NAL exceedance.”

Because these TMDL-derived monitoring requirements will be new to IGP Responsible Dischargers, the Responsible Dischargers would have no data upon which to determine if discharges from their facility are likely to exceed TALs, or if additional BMPs (and which BMPs) might be required to prevent TAL exceedances.

For example, dischargers within the Los Angeles River watershed will be subject to requirements for metals (cadmium, copper, lead, zinc, selenium), nitrogen compounds (ammonia; applicable to specific SIC codes), and indicator bacteria. IGP permittees have



typically not measured concentrations of these constituents in discharges from their facilities, and thus have no basis for assessing whether control measures would be needed for these constituents. In addition, the choice of control measures may vary depending upon which constituents require control, and the potential source(s) of those constituents at each facility.

Placing Responsible Dischargers in Level 1 status immediately imposes requirements to complete an Exceedance Response Action (ERA) Evaluation, which would be inappropriate, and which imposes a potentially unnecessary burden, if an exceedance has not occurred. For this reason, WSPA requests that all dischargers be assigned Baseline Status for any new constituent for which monitoring data do not exist.

**Metals TMDLs for the Los Angeles River should be implemented in the IGP in consideration of the WER for copper and the recalculated criteria for lead.**

On April 9, 2015, the Los Angeles Regional Board adopted site-specific objectives (SSOs) for copper and lead (Order No. R15-004). The SSO for copper was based upon an extensive water effect ratio (WER) study, for which extensive sample collection and toxicity testing was conducted. The WER study found that copper was less toxic in ambient water in the Los Angeles River and its tributaries than in the laboratory water used to establish the default water quality criteria of the California Toxics Rule (CTR).

The WER study also found that dry weather was the critical condition (i.e., that wet weather conditions had lower potential to cause toxicity than dry weather conditions). The SSO for lead was based upon a study that incorporated updated toxicity data for lead, and that considered the species present in the Los Angeles River watershed.

Both SSOs indicated that the default water quality criteria of the CTR, which had been used to develop the original Metals TMDLs for the Los Angeles River, were conservative, and that higher copper and lead concentrations could be present in waters and provide an equivalent level of protection of aquatic species.

Although it appears that the SSOs for lead and copper have not yet been approved by the State Water Resources Control Board, the Office of Administrative Law, or USEPA, the proposed IGP amendments do not reference these SSOs. In fact, the proposed IGP amendments state that, "...WER(s) have a default value of 1.0 unless site-specific WER(s) are approved. No site-specific values have been approved for industrial storm water discharges" (proposed amendments for Los Angeles River and Tributaries Metals TMDL at p. 7).

This language leaves the impression that WER(s) must be approved for individual discharges or types of discharges. However, the Los Angeles Regional Board's adopting resolution for these SSOs indicated that the SSO study "was to determine WERs for copper that would apply to all sources in Reaches 1, 2, 3, and 4 of the LA River, as well as select tributaries: Compton Creek, Rio Hondo, Arroyo Seco, Verdugo Wash, Burbank Western Channel and Tujunga Wash" (Resolution No. R15-004 at p. 2; emphasis added). Because

the SSOs developed by the WER and recalculation studies apply to receiving waters for both wet and dry weather conditions, the IGP TMDL requirements should be written to acknowledge these studies and to facilitate the incorporation of the applicable SSOs for copper and lead into the TALs proposed for the IGP, at such time as the SSOs become fully approved.

**Requirements from metals TMDLs should implement TALs using the dissolved fraction of the metal, and should provide several ways of demonstrating compliance.**

Because the dissolved phase of a metal is the bioavailable fraction, and because water quality criteria for metals (e.g., CTR criteria) are expressed as dissolved metals, the proposals should be modified to implement the TALs for metals in the form of dissolved metals.

The Los Angeles Regional Board has previously taken this approach in the Ballona Creek Metals TMDL, which provides as follows: “Alternatively, permittees may be deemed in compliance with WQBELs if they demonstrate compliance with dissolved numeric targets in dry and wet-weather in the applicable receiving water.” (Attachment A to Resolution R13-010 at pp. 10-11) Thus, WSPA requests that the IGP revisions allow metals concentrations to be measured in the dissolved form.

**The SWRCB should consider a regional approach to addressing issues related to non-industrial pollutant source demonstrations and natural background pollutant source demonstrations.**

Currently, the IGP allows Level 2 dischargers (i.e., those dischargers that have entered Level 2 status due to the exceedance of NALs) to make findings that “the exceedance of the NAL is attributable solely to the presence of non-industrial pollutant sources” or that “the NAL exceedance is attributable solely to the presence of the pollutant in the natural background that has not been disturbed by industrial activities.”

However, the Los Angeles Regional Board has found that “industrial sources are generally not expected to be significant sources of bacteria,” (see proposed amendments for Long Beach City Beaches and Los Angeles River Estuary TMDL for Indicator Bacteria at p. 5); it is also well established that wildlife, including birds, are significant sources of bacteria.

Similarly, atmospheric deposition is a documented source of metals to storm water.

Thus, if exceedances of these constituents occur, it cannot be assumed that the source is the industrial facility—but the burden of conducting studies to establish a non-industrial or background pollutant source demonstration may be significant. For this reason, we encourage the Los Angeles Regional Board and the State Water Board to consider allowing IGP Responsible Dischargers to team with each other, or with other permittees within the Region (e.g., MS4 permittees), to conduct these studies and make these demonstrations if they are needed.

**The IGP should be amended to provide several ways of demonstrating compliance with TMDL requirements.**

Recent permit requirements adopted by the Los Angeles Regional Board recognize that water quality based effluent limitations (WQBELs) derived from TMDLs for metals can be met in one of three ways: (i) Final metals WQBELs are met; or (ii) CTR total metals criteria are met instream; or (iii) CTR total metals criteria are met in the discharge (see, e.g., p. N-8 of the 2012 Los Angeles MS4 permit, Order No. R4-2012-0175, describing the incorporation of the metals requirements of the Harbor Toxics TMDL into MS4 permit).

If the receiving water body is in attainment of TMDL requirements and water quality objectives, IGP permittees should also be considered to be in compliance with TMDL requirements. For this reason, WSPA requests that similar language be incorporated into the TMDL requirements added to the IGP, such that IGP Responsible Dischargers will be determined to be in compliance with TMDL requirements, for all constituents, if the receiving water is in compliance with TMDL requirements.

**TALs for indicator bacteria should be applied only to discharges that drain directly to the receiving waters covered by the TMDL; water quality criteria for marine waters should not be applied to discharges to freshwater bodies.**

The proposed amendments indicate that the IGP amendments for bacteria would apply to “Responsible dischargers...that are within the direct drainages to the Long Beach City Beaches, as does the Los Angeles River Estuary direct drainage, as well as those dischargers within adjacent and upstream drainages, since discharges from those adjacent and upstream drainages are ultimately conveyed to the Long Beach City Beaches and the Los Angeles River Estuary.”

The proposed amendments further indicate that “the San Gabriel River, Los Angeles River, and Alamitos Bay watersheds (collectively termed “adjacent drainages”) discharge not directly to, but in close proximity to” the water bodies to which the TMDLs apply.

Thus, it appears that the Los Angeles Regional Board is proposing that monitoring requirements and TALs for total coliform, fecal coliform, and enterococcus would apply to all IGP Responsible Dischargers within the watersheds of the Los Angeles River, San Gabriel River, and Alamitos Bay. However, most dischargers within these watersheds discharge to freshwater receiving water bodies (e.g., the Los Angeles and San Gabriel River), in many cases dozens of miles upstream from the TMDL water bodies, where freshwater water quality objectives for bacteria are expressed in the form of *E. coli*.

To our knowledge, such an approach has not been previously applied. For example, the Los Angeles MS4 permit applies the requirements of the same Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDLs to only those MS4 permittees who discharge directly to those water bodies; the 2012 MS4 permit does not apply marine bacteria objectives to MS4 permittees whose discharges flow to freshwater water bodies (see Table K-5 at p. K-5 of the 2012 Los Angeles MS4 permit, Order No. R4-2012-0175).

It is inappropriate to require the analysis of total coliform, fecal coliform, and enterococcus for freshwater discharges, and inappropriate to apply TALs for marine water quality requirements upstream of discharges to marine water bodies. WSPA requests that the proposal be modified to clarify that TALs for marine water quality objectives only apply to direct discharges to the TMDL-specified water bodies.

We thank you for the opportunity to provide these comments. If you have any questions, please contact me at my office information below. Thank you.

Sincerely,

*Kevin Buchan*