July 28, 2009

Mr. Ivar Ridgeway  
Stormwater Permitting Unit  
Regional Water Quality Control Board – Los Angeles Region  
320 W. 4th Street, Suite 200  
Los Angeles, CA 90013

Subject: Request for input regarding incorporating the provisions of the Los Angeles River Trash TMDL into the Los Angeles County MS4 permit

Dear Mr. Ridgeway:

Thank you for this opportunity to provide input regarding incorporating the provisions of the Los Angeles River Trash TMDL into the Los Angeles County MS4 permit. We plan to attend the July 29 staff workshop on this topic as well.

As you know, a growing number of cities are coming together as a new organization – the Los Angeles Stormwater Quality Partnership (LASQP). The purpose of LASQP is to establish a new kind of continuing and sustained working relationship between the municipal stormwater permittees and the Regional Water Board – a relationship focused on improving stormwater quality through a constructive and collaborative effort.

LASQP supports and incorporates by reference the comments made by its member cities regarding using a different approach (i.e., the best management practices-based approach) than that used for the Santa Monica Bay Beaches Bacteria Dry Weather TMDL to incorporate conditions in the Los Angeles County MS4 permit consistent with the Los Angeles River Trash TMDL. The approach LASQP and its member cities are recommending is consistent with the approach already taken in implementing the Los Angeles River Trash TMDL and it is consistent with that used by other Regional Water Boards. It is also consistent with USEPA’s official guidance¹ (enclosed), and it would have the advantage of recognizing and building on the very significant level of best management practice implementation already conducted in response to the Los Angeles River Trash TMDL. Some of the reasons, and the benefits of designing the permit provisions using the best management practices approach are clearly articulated in our member cities’ letters. Another major reason and benefit is consistency with other Regional Water Boards.

¹ Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs; USEPA Memorandum from Robert H. Wayland III, Director – Office of Wetlands, Oceans and Watersheds and James A. Hanlon, Director – Office of Wastewater Management to Water Division Directors Regions 1-10; November 22, 2002.
LASQP comments on request for input regarding incorporating the provisions of the Los Angeles River Trash TMDL into the Los Angeles County MS4 permit

**Best management practices approach is consistent with other Regional Water Boards**

The San Francisco Bay Regional Water Board is using a BMP approach to incorporate the waste load allocations (WLAs) from three TMDLs (Mercury-San Francisco Bay; Pesticides-Bay Area Urban Creeks; and PCBs-San Francisco Bay) into the soon-to-be-adopted municipal regional permit (MRP), which is a Bay Area-wide permit covering all 77 Phase I MS4s in the San Francisco Bay Area. The MRP will be a 4th generation permit for a couple of the larger countywide stormwater programs (i.e., Santa Clara Valley, Alameda) and a 3rd generation permit for others. So the permit reflects a high level of experience among both the permittees and the Regional Water Board staff.

Being consistent is also very important in the Water Board system. The Water Quality Coordinating Committee (WQCC), a leadership body of the Water Boards, has discussed the consistency issue at some length. As part of that discussion, the WQCC established a clear policy statement:

*At their October 2006 meeting the Water Boards Water Quality Coordinating Committee (WQCC) adopted the following:*

- **On questions of law and overarching policy the State Board should provide guidance and build a basic policy framework from which the regions can appropriately tailor action.**

- **Water Boards are committed to developing procedures and policies to minimize inappropriate inconsistency.**

This commitment by the Water Boards to consistency across the regions and statewide was further strengthened in the Water Boards’ Strategic Plan adopted just last year.

“**Consistency**

Enhancing consistency across the Water Boards will ensure that our processes are effective, efficient, and predictable, and promote fair and equitable application of the laws, regulations, policies, and procedures.”

With the incorporation of provisions of the Los Angeles River Trash TMDL into the Los Angeles County MS4 permit, the Los Angeles Regional Water Board has an opportunity to significantly enhance consistency, not only across the Water Boards, but to remain internally consistent regarding implementation of the Los Angeles River Trash TMDL and consistent with USEPA policy by using the best management practices-based approach.

Thank you for the opportunity to provide input regarding incorporating the provisions of the Los Angeles River Trash TMDL into the Los Angeles County MS4 permit. We look

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forward to continuing to work with you on these issues. Feel free to contact me with questions.

Sincerely,

[Signature]

Geoff Brosseau
Environmental Management / Technical Consultant - LASQP

encl: Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs, USEPA

cc: LASQP member cities

July 28, 2009
MEMORANDUM

SUBJECT: Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs

FROM: Robert H. Wayland, III, Director
Office of Wetlands, Oceans and Watersheds

James A. Hanlon, Director
Office of Wastewater Management

TO: Water Division Directors
Regions 1 - 10

This memorandum clarifies existing EPA regulatory requirements for, and provides guidance on, establishing wasteload allocations (WLAs) for storm water discharges in total maximum daily loads (TMDLs) approved or established by EPA. It also addresses the establishment of water quality-based effluent limits (WQBELs) and conditions in National Pollutant Discharge Elimination System (NPDES) permits based on the WLAs for storm water discharges in TMDLs. The key points presented in this memorandum are as follows:

NPDES-regulated storm water discharges must be addressed by the wasteload allocation component of a TMDL. See 40 C.F.R. § 130.2(h).

NPDES-regulated storm water discharges may not be addressed by the load allocation (LA) component of a TMDL. See 40 C.F.R. § 130.2 (g) & (h).

Storm water discharges from sources that are not currently subject to NPDES regulation may be addressed by the load allocation component of a TMDL. See 40 C.F.R. § 130.2(g).

It may be reasonable to express allocations for NPDES-regulated storm water 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. See 40 C.F.R. § 130.2(i). In cases where wasteload allocations
are developed for categories of discharges, these categories should be defined as narrowly as available information allows.

The WLAs and LAs are to be expressed in numeric form in the TMDL. See 40 C.F.R. § 130.2(h) & (i). EPA expects TMDL authorities to make separate allocations to NPDES-regulated storm water discharges (in the form of WLAs) and unregulated storm water (in the form of LAs). EPA recognizes that these allocations might be fairly rudimentary because of data limitations and variability in the system.

NPDES permit conditions must be consistent with the assumptions and requirements of available WLAs. See 40 C.F.R. § 122.44(d)(1)(vii)(B).

WQBELs for NPDES-regulated storm water discharges that implement WLAs in TMDLs may be expressed in the form of best management practices (BMPs) under specified circumstances. See 33 U.S.C. §1342(p)(3)(B)(iii); 40 C.F.R. §122.44(k)(2)&(3). If BMPs alone adequately implement the WLAs, then additional controls are not necessary.

EPA expects that most WQBELs for NPDES-regulated municipal and small construction storm water discharges will be in the form of BMPs, and that numeric limits will be used only in rare instances.

When a non-numeric water quality-based effluent limit is imposed, the permit’s administrative record, including the fact sheet when one is required, needs to support that the BMPs are expected to be sufficient to implement the WLA in the TMDL. See 40 C.F.R. §§ 124.8, 124.9 & 124.18.

The NPDES permit must also specify the monitoring necessary to determine compliance with effluent limitations. See 40 C.F.R. § 122.44(j). Where effluent limits are specified as BMPs, the permit should also specify the monitoring necessary to assess if the expected load reductions attributed to BMP implementation are achieved (e.g., BMP performance data).

The permit should also provide a mechanism to make adjustments to the required BMPs as necessary to ensure their adequate performance.

This memorandum is organized as follows:

(I). Regulatory basis for including NPDES-regulated storm water discharges in WLAs in TMDLs;

(II). Options for addressing storm water in TMDLs; and
(III). Determining effluent limits in NPDES permits for storm water discharges consistent with the WLA

(I). **Regulatory Basis for Including NPDES-regulated Storm Water Discharges in WLAs in TMDLs**

As part of the 1987 amendments to the CWA, Congress added Section 402(p) to the Act to cover discharges composed entirely of storm water. Section 402(p)(2) of the Act requires permit coverage for discharges associated with industrial activity and discharges from large and medium municipal separate storm sewer systems (MS4s), i.e., systems serving a population over 250,000 or systems serving a population between 100,000 and 250,000, respectively. These discharges are referred to as Phase I MS4 discharges.

In addition, the Administrator was directed to study and issue regulations that designate additional storm water discharges, other than those regulated under Phase I, to be regulated in order to protect water quality. EPA issued regulations on December 8, 1999 (64 FR 68722), expanding the NPDES storm water program to include discharges from smaller MS4s (including all systems within “urbanized areas” and other systems serving populations less than 100,000) and storm water discharges from construction sites that disturb one to five acres, with opportunities for area-specific exclusions. This program expansion is referred to as Phase II.

Section 402(p) also specifies the levels of control to be incorporated into NPDES storm water permits depending on the source (industrial versus municipal storm water). Permits for storm water discharges associated with industrial activity are to require compliance with all applicable provisions of Sections 301 and 402 of the CWA, i.e., all technology-based and water quality-based requirements. See 33 U.S.C. §1342(p)(3)(A). Permits for discharges from MS4s, however, “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.” See 33 U.S.C. §1342(p)(3)(B)(iii).

Storm water discharges that are regulated under Phase I or Phase II of the NPDES storm water program are point sources that must be included in the WLA portion of a TMDL. See 40 C.F.R. § 130.2(h). Storm water discharges that are not currently subject to Phase I or Phase II of the NPDES storm water program are not required to obtain NPDES permits. 33 U.S.C. §1342(p)(1) & (p)(6). Therefore, for regulatory purposes, they are analogous to nonpoint sources and may be included in the LA portion of a TMDL. See 40 C.F.R. § 130.2(g).

(II). **Options for Addressing Storm Water in TMDLs**

Decisions about allocations of pollutant loads within a TMDL are driven by the quantity and quality of existing and readily available water quality data. The amount of storm water data available for a TMDL varies from location to location. Nevertheless, EPA expects TMDL authorities will make separate aggregate allocations to NPDES-regulated storm water discharges
(in the form of WLAs) and unregulated storm water (in the form of LAs). It may be reasonable to quantify the allocations through estimates or extrapolations, based either on knowledge of land use patterns and associated literature values for pollutant loadings or on actual, albeit limited, loading information. EPA recognizes that these allocations might be fairly rudimentary because of data limitations.

EPA also recognizes that the available data and information usually are not detailed enough to determine waste load allocations for NPDES-regulated storm water discharges on an outfall-specific basis. In this situation, EPA recommends expressing the wasteload allocation in the TMDL as either a single number for all NPDES-regulated storm water discharges, or when information allows, as different WLAs for different identifiable categories, e.g., municipal storm water as distinguished from storm water discharges from construction sites or municipal storm water discharges from City A as distinguished from City B. These 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 storm water sources or dischargers).

(III). Determining Effluent Limits in NPDES Permits for Storm Water Discharges Consistent with the WLA

Where a TMDL has been approved, NPDES permits must contain effluent limits and conditions consistent with the requirements and assumptions of the wasteload allocations in the TMDL. See 40 CFR § 122.44(d)(1)(vii)(B). Effluent limitations to control the discharge of pollutants generally are expressed in numerical form. However, in light of 33 U.S.C. §1342(p)(3)(B)(iii), EPA recommends that for NPDES-regulated municipal and small construction storm water discharges effluent limits should be expressed as best management practices (BMPs) or other similar requirements, rather than as numeric effluent limits. See Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits, 61 FR 43761 (Aug. 26, 1996). The Interim Permitting Approach Policy recognizes the need for an iterative approach to control pollutants in storm water discharges. Specifically, the policy anticipates that a suite of BMPs will be used in the initial rounds of permits and that these BMPs will be tailored in subsequent rounds.

EPA’s policy recognizes that because storm water discharges are due to storm events that are highly variable in frequency and duration and are not easily characterized, only in rare cases will it be feasible or appropriate to establish numeric limits for municipal and small construction storm water discharges. The variability in the system and minimal data generally available make it difficult to determine with precision or certainty actual and projected loadings for individual dischargers or groups of dischargers. Therefore, EPA believes that in these situations, permit limits typically can be expressed as BMPs, and that numeric limits will be used only in rare instances.
Under certain circumstances, BMPs are an appropriate form of effluent limits to control pollutants in storm water. See 40 CFR § 122.44(k)(2) & (3). If it is determined that a BMP approach (including an iterative BMP approach) is appropriate to meet the storm water component of the TMDL, EPA recommends that the TMDL reflect this.

EPA expects that the NPDES permitting authority will review the information provided by the TMDL, see 40 C.F.R. § 122.44(d)(1)(vii)(B), and determine whether the effluent limit is appropriately expressed using a BMP approach (including an iterative BMP approach) or a numeric limit. Where BMPs are used, EPA recommends that the permit provide a mechanism to require use of expanded or better-tailored BMPs when monitoring demonstrates they are necessary to implement the WLA and protect water quality.

Where the NPDES permitting authority allows for a choice of BMPs, a discussion of the BMP selection and assumptions needs to be included in the permit’s administrative record, including the fact sheet when one is required. 40 C.F.R. §§ 124.8, 124.9 & 124.18. For general permits, this may be included in the storm water pollution prevention plan required by the permit. See 40 C.F.R. § 122.28. Permitting authorities may require the permittee to provide supporting information, such as how the permittee designed its management plan to address the WLA(s). See 40 C.F.R. § 122.28. The NPDES permit must require the monitoring necessary to assure compliance with permit limitations, although the permitting authority has the discretion under EPA’s regulations to decide the frequency of such monitoring. See 40 CFR § 122.44(i). EPA recommends that such permits require collecting data on the actual performance of the BMPs. These additional data may provide a basis for revised management measures. The monitoring data are likely to have other uses as well. For example, the monitoring data might indicate if it is necessary to adjust the BMPs. Any monitoring for storm water required as part of the permit should be consistent with the state’s overall assessment and monitoring strategy.

The policy outlined in this memorandum affirms the appropriateness of an iterative, adaptive management BMP approach, whereby permits include effluent limits (e.g., a combination of structural and non-structural BMPs) that address storm water discharges, implement mechanisms to evaluate the performance of such controls, and make adjustments (i.e., more stringent controls or specific BMPs) as necessary to protect water quality. This approach is further supported by the recent report from the National Research Council (NRC), Assessing the TMDL Approach to Water Quality Management (National Academy Press, 2001). The NRC report recommends an approach that includes “adaptive implementation,” i.e., “a cyclical process in which TMDL plans are periodically assessed for their achievement of water quality standards” . . . and adjustments made as necessary. NRC Report at ES-5.

This memorandum discusses existing requirements of the Clean Water Act (CWA) and codified in the TMDL and NPDES implementing regulations. Those CWA provisions and regulations contain legally binding requirements. This document describes these requirements; it does not substitute for those provisions or regulations. The recommendations in this memorandum are not binding; indeed, there may be other approaches that would be appropriate
in particular situations. When EPA makes a TMDL or permitting decision, it will make each
decision on a case-by-case basis and will be guided by the applicable requirements of the CWA
and implementing regulations, taking into account comments and information presented at that
time by interested persons regarding the appropriateness of applying these recommendations to
the particular situation. EPA may change this guidance in the future.

If you have any questions please feel free to contact us or Linda Boornazian, Director of
the Water Permits Division or Charles Sutfin, Director of the Assessment and Watershed
Protection Division.

cc:
Water Quality Branch Chiefs
Regions 1 - 10

Permit Branch Chiefs
Regions 1 - 10