

I. OVERVIEW

On September 17, 2015, American Rivers, the Natural Resources Defense Council (NRDC), and the Los Angeles Waterkeeper (hereinafter, collectively the Petitioners) petitioned the Regional Administrator of EPA Region 9 to make “a determination that currently unpermitted stormwater discharges from privately-owned commercial, industrial, and institutional [CII] sites are contributing to violations of water quality standards in the Dominguez Channel and the Los Angeles/Long Beach Inner Harbor, and therefore require National Pollutant Discharge Elimination System (NPDES) permits pursuant to section 402(p) of the Clean Water Act (CWA).”¹

On July 10, 2013, the Conservation Law Foundation, NRDC, American Rivers, and the California Coastkeeper Alliance petitioned the Regional Administrator of EPA Region 9 to make a similar determination that CII sites are contributing to violations of water quality standards in impaired waters throughout Region 9, and therefore require NPDES permits. Region 9 declined to begin the designation process for stormwater discharges from CII sites throughout the Region, concluding that there was insufficient information on which to base a categorical residual designation of currently unregulated stormwater discharges from such sites.² Region 9 concluded that it needed additional information on a watershed or localized basis to designate discharges from CII sites individually or categorically. Additionally, Region 9 concluded that existing water quality protection programs were in place to address discharges from the majority of CII facilities in the Region.

The current Petition seeks designation for permitting of all non-NPDES-permitted stormwater discharges from CII sites. The Petition defines “non-NPDES-permitted stormwater discharges” as any stormwater discharge from a private property, or from a portion of property, that is not subject to post-construction stormwater requirements under an NPDES permit, and includes stormwater discharges from properties (or portions thereof) that are within the geographic boundaries of regulated municipal separate storm sewer systems (MS4s). As described in the Petition, the Petitioners recognize that stormwater discharges associated with industrial activity, as defined by 40 C.F.R. § 122.26(b)(14), are already regulated. For these categories of industrial facilities, the Petitioners request permitting of those portions of a facility not already regulated.

On December 16, 2015, Region 9 provided an interim response to the Petitioners indicating additional review time would be necessary and that a final determination on the Petition was anticipated by early summer. This document constitutes the Acting Deputy Regional Administrator’s final response to the Petition.³

II. STATUTORY AND REGULATORY BACKGROUND

In 1987, Congress amended Section 402 of the CWA and established a phased approach to regulating discharges “composed entirely of stormwater,” requiring some, but not all, point source

¹ At the same time, the Petitioners submitted a second Petition to the Region 9 Regional Administrator to designate the same sources in the Alamitos Bay/Los Cerritos Channel watershed. That Petition is addressed in a separate response. Additionally, the Petitioners also petitioned the Regional Administrator in Region 3 to designate the same categories of sources discharging into certain watersheds in that Region.

² Region 9’s response is available at: <https://www3.epa.gov/region9/water/npdes/stormwater.html>

³ The Acting Regional Administrator is recused and has delegated the authority to respond to the Petitions to the Acting Deputy Regional Administrator.

discharges of stormwater to be regulated. Water Quality Act § 405, codified as CWA § 402(p). In the first phase, Congress required NPDES permits for discharges from municipal separate storm sewer systems (MS4s) serving a population greater than 100,000, and stormwater discharges associated with industrial activity. CWA § 402(p)(1), (2), 33 U.S.C. § 1342(p)(1), (2). Additionally, the Act provides for NPDES permits for any stormwater discharge determined by EPA or an authorized state to contribute to a violation of water quality standards (WQS) or to be a significant contributor of pollutants to waters of the United States.⁴ CWA § 402(p)(2)(E), 33 U.S.C. § 1342(p)(2)(E).⁵ In 1990, EPA promulgated permit application regulations for these discharges pursuant to § 402(p)(4), 33 U.S.C. § 1342(p)(4). 55 Fed. Reg. 47990 (Nov. 16, 1990) (“Phase I rule”). The Phase I rule included a provision allowing any person to petition the EPA to require an NPDES permit for a stormwater discharge that contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. 40 C.F.R. § 122.26(f)(2).

In the second phase, Congress required the EPA, after conducting studies and reporting on the results to Congress, to issue regulations designating additional stormwater discharges to be regulated “to protect water quality.” CWA § 402(p)(5), (6), 33 U.S.C. § 1342(p)(5), (6). Stormwater discharges designated for regulation under § 402(p)(6) were not necessarily required to be regulated through NPDES permits. Rather, Congress required that the EPA “establish a comprehensive program to regulate such designated sources.” *Id.* In 1995, the EPA completed studies and submitted a report to Congress describing additional stormwater discharges under consideration for regulation. Based on this report, the EPA promulgated regulations in 1999 (“Phase II rule”) designating two additional categories of stormwater discharges for regulation, certain small MS4s⁶ and small construction sites (1-5 acres), and requiring NPDES permit coverage for these discharges. 64 Fed. Reg. 68722 (Dec. 8, 1999).

The Phase II rule also added to the regulatory authority for designating additional stormwater discharges for NPDES permit coverage (“residual designation authority” or “RDA”) to allow designation of a category of discharges within a geographic area if determined to contribute to a violation of a water quality standard or to significantly contribute pollutants to waters of the United States. 64 Fed. Reg. at 68781; 40 C.F.R. § 122.26(a)(9)(i)(D).⁷ These residual designation provisions are based on the authority of both §§ 402(p)(2)(E) and 402(p)(6), recognizing the permitting authority’s potential need to regulate individual unregulated stormwater discharges on a case-by-case basis, as well as the potential need to regulate stormwater discharges on a geographic categorical basis to address local concerns or to make progress in complying with water quality standards. *See* 64 Fed. Reg. at 68781. Any discharge or category of discharges designated under the RDA regulation is subject to NPDES permitting. 40 C.F.R. § 122.26(a)(9)(ii), (iii).

⁴ Relevant to this Petition, the state of California has been authorized by the EPA to administer the NPDES permit program, including the issuance of NPDES stormwater permits, except on Indian Country lands.

⁵ This case-by-case authority to designate stormwater discharges for NPDES permits was codified at 40 C.F.R. § 122.26(a)(1)(v). 54 Fed. Reg. 255 (Jan. 4, 1989). *See also* 55 Fed. Reg. 47990, 47993 (Nov. 16, 1990).

⁶ Regulated small MS4s are primarily separate storm sewer systems serving municipal populations within “urbanized areas” as defined by the Census Bureau based on the latest census. 40 C.F.R. §122.32(a). This term also includes other publicly owned separate storm sewer systems similar to MS4s (e.g., military bases, large hospital or prison complexes, highways) and small MS4s outside urbanized areas based on criteria developed by the State; at minimum, municipal entities outside urbanized areas with a population greater than 10,000 must be considered for permitting. 40 C.F.R. §§ 122.26(b)(16); 40 C.F.R. § 123.35(b).

⁷ The Phase II rule also allows for designating stormwater discharges for NPDES permit coverage if stormwater controls are needed for such discharges based on wasteload allocations in a TMDL. 40 C.F.R. § 122.26(a)(9)(i)(C). This basis for designating stormwater discharges was not raised in the Petition.

III. SUMMARY OF PETITION AND REGION 9 DETERMINATION

In the Petition, the Petitioners assert the following: (1) portions of the Dominguez Channel, its tributaries, and the Los Angeles/Long Beach Inner Harbor are impaired by metal (specifically, copper and zinc) pollution, (2) stormwater discharges from CII sites contain copper and zinc, contributing to water quality impairments in the Dominguez Channel watershed, including the Los Angeles/Long Beach Inner Harbor and (3) existing programs are not adequately addressing the contributions from CII sites to impairments in the watershed.

In support, the Petitioners cite EPA guidance and reports in which the EPA has concluded that urban stormwater discharges are sources of pollutants. Petitioners also point to various reports and studies, including the National Stormwater Quality Database (NSQD), to illustrate typical pollutant loads from different land uses, including CII sites. Finally, the Petitioners cite to a Total Maximum Daily Load (TMDL) established by California and the EPA to illustrate the specific sources of pollutants leading to impairments in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor.

Region 9 has reviewed the Petition requesting designation of CII sites in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor watersheds and, for the reasons explained below, declines to grant the Petition at this time.

IV. PETITION REVIEW CRITERIA

As discussed in the 2013 Petition response, the EPA has identified a number of factors to consider in exercising its individual and categorical designation authority. For a case-by-case determination, under section 402(p)(2)(E), the EPA has described as relevant factors the available water quality and sampling data as well as “the location of the discharge with respect to waters of the United States; the size of the discharge, the quantity and nature of the pollutants reaching waters of the United States; and any other relevant factors.” 55 Fed. Reg. 47990, 47993 (Nov. 16, 1990). As noted in early guidance with respect to designations under CWA § 402(p)(2)(E), State reports generated under CWA section 305(b) are critical sources of information for making designation determinations.⁸

In the development of the Phase II rule, the EPA considered designation of additional categories of stormwater sources for regulation under the NPDES permit program, based on three factors. 64 Fed. Reg. 68722, 68780 (December 8, 1999). The EPA considered: 1) the likelihood for exposure of pollutants to precipitation at sources included in that category, 2) whether sufficient data were available on which to make a determination of potential adverse water quality impacts for the category of sources, and 3) whether such sources were adequately addressed by other environmental programs. *Id.* The likelihood of exposure of pollutants to precipitation at industrial sources was also a factor in defining the

⁸ *Designation of Stormwater Discharges for Immediate Permitting*, August 8, 1990, available at <http://www.epa.gov/npdes/pubs/owm0220.pdf> at 12.

scope of “stormwater discharges associated with industrial activity” in the Phase I rule. *See* 55 Fed. Reg. at 48008.⁹ These basic factors are also relevant in evaluating the Petition.¹⁰

In a letter from the EPA Assistant Administrator for Water to the Vermont Agency of Natural Resources (Mehan Letter), the EPA elaborated on these factors.¹¹ The EPA noted that “[n]either the CWA nor implementing regulations impose a non-discretionary duty to designate sources” and that a decision to “exercise its discretion to designate (or not) sources should be based on available information and relevant considerations.” Mehan Letter at 1. Noting that sufficient information to determine causes of impairment or to identify stormwater sources of the impairment may not be available in some circumstances, the EPA further stated that while it has not defined a threshold level of pollutant contribution that would trigger a finding that a source is contributing to a violation of a WQS or is a significant contributor of pollutants to waters of the U.S., “it would be reasonable to require permits for discharges that contribute more than *de minimis* amounts of pollutants identified as the cause of impairment to a water body.” Mehan Letter at 2. However, the EPA also noted that “other water quality protections that are already in place” are relevant to consider with respect to whether to designate a source or when to make such designation or permit application requirement effective. “Vigorously implemented controls that otherwise might be ‘voluntary’ may provide a reasonable basis to defer designation of a particular source.” Mehan Letter at 3.

Region 9 has evaluated the Petition and the data submitted with the Petition in light of the factors discussed above. The Region also reviewed additional reports and data to aid in its evaluation of the Petition. The Region consulted both the California State Water Resources Control Board and the Los Angeles Regional Water Quality Control Board, since California is authorized to implement the NPDES program. In sum, the factors considered by the Region in evaluating the Petition are:

1. Likelihood of exposure of pollutants to precipitation at sites in the categories identified in the Petition;
2. Sufficiency of available data to evaluate the contribution of stormwater discharges to water quality impairment from the targeted categories of sites;
 - a. Data with respect to determining causes of impairment in receiving water quality
 - b. Data available from establishment of Total Maximum Daily Loads; and
3. Whether other federal, state, or local programs adequately address the known stormwater discharge contribution to a violation of a water quality standard.

⁹ The Phase I rule provision, excluding from the definition certain industrial stormwater discharges based on the assumption that there is little or no exposure of materials or activities to precipitation, was remanded. *NRDC v. EPA*, 966 F.2d 1292, 1305 (9th Cir. 1992). However, the underlying rationale that exposure of industrial pollutants to precipitation is a relevant factor was not questioned. Rather, the EPA’s exclusion was remanded for lack of record support. To cure this defect, in the Phase II rule the EPA promulgated a conditional exclusion for owners/operators of industrial activities to certify that the facility meets the “no exposure” requirements of the rule. 64 Fed. Reg. at 68782-87; 40 C.F.R. § 122.26(g).

¹⁰ The EPA’s use of these factors in deciding not to designate additional stormwater sources in the Phase II rule was upheld. *See Environmental Defense Center v. EPA*, 344 F.3d 832, 861 (9th Cir. 2003).

¹¹ Letter from G. Tracy Mehan, III to Elizabeth McLain, with attachment “Answers to Questions Raised,” dated Sept. 16, 2003.

V. ANALYSIS

A. *Likelihood of Exposure of Pollutant Sources at CII Sites*

As the data submitted with this Petition are similar and, in many instances, identical to data submitted with the 2013 Petition, Region 9 adopts its previous assessment of such data. Therefore, for the purposes of this Petition, Region 9 accepts that CII sites have significant amounts of impervious surfaces that are exposed to a variety of pollutants, including metals such as copper and zinc that can discharge during rain events.

B. *Sufficiency of Available Data on Which to Make a Determination that CII Sites Contribute to Water Quality Standards Exceedances*

As discussed in detail below, the Region finds that data submitted by Petitioners along with analyses conducted by EPA and California demonstrate that, as a category, CII sources contribute to water quality impairments for copper and zinc in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor.

1. Information Submitted by Petitioners

The Petitioners provided GIS maps and zoning information indicating that CII sources occupy approximately 37 percent of the watershed. This is supported by information developed by the EPA and California in developing a TMDL for the watershed (discussed below). The Petition also provides estimates of the proximity of CII land use to impaired waters, finding that over 71 percent of CII land use is located within one-half mile of Dominguez Channel, the Los Angeles/Long Beach Inner Harbor, or a tributary to those waterbodies. The Petitioners provide loading estimates using data from the NSQD, which is supported by relevant literature, demonstrating high pollutant loads from certain categories such as commercial sources, and comparatively lower loads from institutional sources.¹²

2. Total Maximum Daily Load Source Assessments

In many cases TMDL analyses are likely the most relevant and readily available sources of data to assess whether CII sites are contributing to particular WQS exceedances in a particular watershed. CWA section 303(d) requires that states identify waters not meeting WQSs. States must develop TMDLs for all such waters in accordance with a prioritized schedule developed by the state. In developing a TMDL, a quantitative assessment is made of the relative pollutant contributions from point sources, nonpoint sources, and natural background, and the degree to which reductions in pollutant discharges are needed to meet applicable WQS. TMDLs are the sum of wasteload allocations (WLAs) for point sources, load allocations for non-point sources and natural background along with a margin of safety sufficient to ensure compliance with WQS. Once a TMDL is approved by the EPA, any NPDES

¹² For examples, see Stein, E.; Tiefenthaler, L.; and Schiff, K. 2007. *Sources, Patterns and Mechanisms of Stormwater Pollutant Loading from Watersheds and Land Uses of the Greater Los Angeles Area*, Southern California Coastal Water Research Project Technical Report No. 510; Tiefenthaler, L., Schiff, K., and Bay, S. 2001. *Characteristics of Parking Lot Runoff Produced by Simulated Rainfall*. Southern California Coastal Water Research Project Technical Report No. 340; Robert Pitt et.al, *The National Stormwater Quality Database, version 4.02*, January 2015 <http://www.bmpdatabase.org/nsqd.html> last accessed July 12, 2016.

permit authorizing discharges to the waterbody must include requirements consistent with the TMDL. 40 C.F.R. § 122.44(d)(1)(vii)(B). If a TMDL's load allocations and WLAs are met, the waterbody should meet WQSs and beneficial uses will be protected. The only approved TMDL that addresses the metals (zinc and copper) in the area covered by the Petition is the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL (Dominguez Channel Toxics TMDL).¹³

The Dominguez Channel Toxics TMDL was approved by the EPA on March 23, 2012. It analyzes the various sources of metals entering the receiving waters, including stormwater sources, and also sets WLAs and load allocations for the various sources. For stormwater sources, WLAs are established for the MS4s in the watershed including Caltrans, and also for currently regulated industrial and construction sources. The entire watershed is contained within the jurisdictional boundaries of regulated MS4s. The supporting documentation for the TMDL estimates that a substantial loading reduction for both copper and zinc (over 70 percent for the upper fresh water portion of the watershed) is required in order for the waterbody to meet WQSs.

The Dominguez Channel Toxics TMDL source analysis recognizes that CII sources are an important land use in the watershed, finding that retail/commercial and industrial land uses are estimated to make up 14 and 17 percent of the watershed, respectively. The supporting documentation for the TMDL also notes that runoff from these sources may be contributing significant loadings of pollutants, including metals, into the receiving waters. However, specific loadings from these land uses were not established in the TMDL but were instead incorporated into the overall loadings attributed to MS4 sources. The supporting documentation for the TMDL contemplates that the necessary reductions in the discharges of metals from MS4s should be achieved by 2032.

3. Paradigm Environmental Study of Southern California Watersheds

The Region committed to further study the relative significance of runoff from different land uses in its response to the 2013 Petition. In 2014 the Region funded a study to conduct a source analysis in two urban watersheds in southern California.¹⁴ The two watersheds selected were the Chollas Creek watershed in San Diego and the upper, freshwater portion of the Dominguez Channel watershed, which is within the area covered by the Petition.

The study, conducted by Paradigm Environmental, generated estimates of the total pollutant loading of various pollutants (including zinc and copper) in runoff from different land uses (including CII sources) in both watersheds. The study also estimated the relative importance of the various land use categories in contributing pollutants on a per acre basis. In general, the study found that among CII sources in the Dominguez Channel watershed, the commercial category contributes a high total load of copper and zinc, and an above average load per acre when compared to other land uses in the watershed. The total load from the industrial category is also significant and above average on a per acre basis, compared to other land uses. Given the relatively small fraction of land falling into the institutional category, its total loading was relatively small and below average on a per acre basis, compared to other land uses.

¹³ Available at: http://63.199.216.6/bpa/docs/R11-008_RB_BPA.pdf.

¹⁴ Paradigm Environmental, Analytical Support for Stormwater Source Analysis, April 24, 2015.

The study also estimated the pollutant load reductions that would be necessary for the different land use categories to address the existing water quality impairments, assuming controls were placed on all land use categories. Although the required reductions vary among the categories, the study showed that all CII categories in the Dominguez Channel watershed would require some reduction, leading to the conclusion that all CII categories are contributing to the existing impairments.

While the conclusions of the study apply only to the upper, freshwater portion of the Dominguez Channel, land use data provided by the Petitioners and discussed in the Dominguez Channel Toxics TMDL indicate that the larger watershed is similar to the area covered by the study. It is therefore reasonable to extend the conclusions of this study to the larger area covered by the Petition.

C. How Discharges from CII Sites are Addressed by Existing Programs

As noted above, one of the factors used by the EPA in evaluating whether to designate certain sources for NPDES permitting under the Phase II regulations was the degree to which such sources were already being addressed. As detailed below, the Region believes compliance with the existing NPDES permits controlling discharges from MS4s in the watershed will result in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor meeting WQSSs such that beneficial uses will be protected.¹⁵ Therefore, the Region concludes that existing programs are already in place to address the pollutants of concern in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor watersheds.

In California, the geographical boundaries of permitting authorities (also known as Regional Boards) are generally based on watershed boundaries. This provides opportunities to efficiently address water quality impairments, including TMDL implementation, on a watershed basis.¹⁶ In Region 9, MS4 permit writers and permittees have developed extensive experience with MS4 programs and, relevant to this Petition, the permits issued by the Los Angeles Regional Water Quality Control Board (Regional Board) have been updated multiple times since they were originally issued.¹⁷ The Regional Board has gained expertise in dealing with discharges to impaired waters, and as described below, is implementing TMDLs through MS4 permits, often in innovative ways.

1. NPDES MS4 Permits for Los Angeles County and the City of Long Beach

The Regional Board has issued MS4 permits that cover municipal stormwater discharges in the Dominguez Channel and the Los Angeles/Long Beach Inner Harbor watersheds. The current Los Angeles County MS4 Permit was adopted on November 8, 2012 and covers discharges from 86 permittees within Los Angeles County; the current City of Long Beach MS4 permit was adopted on February 6, 2014 and covers discharges from the City of Long Beach. The Los Angeles County and

¹⁵ On August 29, 2016 the California Supreme Court found that specific provisions in the 2001 LA MS4 Permit, which required municipalities to conduct inspections of commercial and industrial sites, were state mandates which may be subject to reimbursement from the state legislature. Permittees have filed a similar claim regarding the current MS4 Permit. However, the court decision did not modify the permit and regardless of the entity paying for the inspections, those provisions are enforceable NPDES permit requirements.

¹⁶ The EPA formally endorsed watershed-based permitting in a memorandum dated January 7, 2003 from G. Tracy Mehan III, Assistant Administrator for Water, to the EPA Regions.

¹⁷ The EPA recognized that stormwater programs would “evolve and mature over time.” 55 Fed. Reg. 47990, 48052 November 16, 1990.

Long Beach MS4 Permits have very similar requirements and, unless otherwise noted, are hereinafter referred to as the MS4 Permits.

The MS4 Permits include requirements that discharges from the MS4 comply with the technology and water quality provisions of the CWA, including those associated with TMDLs.¹⁸ The MS4 Permits contain receiving water limitations and minimum control measures (MCMs). A receiving water limitation is any applicable numeric or narrative WQS, or limitation to implement the applicable WQS, for the receiving water. The MS4 Permits contain receiving water limitations prohibiting discharges that cause or contribute to the violation of a WQS. MCMs are program elements the permittee is required to develop and implement, such as the Planning and Land Development Program and the Industrial and Commercial Facilities Program.

Relevant to this Petition, the Industrial and Commercial Facilities Program contained in the MS4 Permits requires permittees to develop a program to, among other things, track, educate, inspect, and ensure that commercial and industrial facilities comply with municipal ordinances and implement specific source control practices to reduce the discharge of pollutants.

Also relevant to this Petition, the Planning and Land Development Program requires permittees to implement a program to reduce the impact of development and redevelopment on water quality. Subject to certain limitations, permittees are required to ensure that all new development and redevelopment projects minimize impervious surfaces and control runoff through infiltration, bioretention, and/or rainfall harvest and use. As noted by Petitioners, however, the watershed has already been heavily developed. The water quality benefits from this MCM thus depend on the rate of redevelopment of the watershed. Redevelopment rates for the City of Los Angeles show annual redevelopment rates for residential, commercial and industrial areas of 0.18 percent, 0.15 percent and 0.34 percent, respectively.¹⁹ Assuming these rates are reasonably representative for Los Angeles County overall, at least modest water quality benefits would accumulate over a number of years from the implementation of this MCM in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor watersheds.

The MS4 Permits describe two ways in which a permittee can demonstrate compliance with the water quality and technology related provisions of the MS4 Permits, including receiving water limits. Under the first option, permittees can choose to develop watershed management programs (WMPs), which consist of customized strategies and control measures designed to ensure compliance with the provisions of the permits for a particular watershed. The WMPs provide a framework by which permittees can prioritize implementation of various requirements of the relevant MS4 Permit. If permittees do not choose to develop a WMP, they are subject to the baseline requirements of the MS4 Permit, including receiving water limitations and MCMs.

¹⁸ CWA § 402(p)(3) provides that MS4 permits must require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), a technology based level of control, in addition to “such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” Additionally, 40 C.F.R. § 122.44.(d)(1)(vii)(B) requires that NPDES permits contain limits that “are consistent with the assumptions and requirements of any available [TMDL] for the discharge...”

¹⁹ Dominguez Channel Watershed Management Area Group. 2016. Enhanced Watershed Management Program for the Dominguez Channel Watershed Management Area Group, Final. February 2016.

The Regional Board describes the reason for the optional WMPs in the fact sheets for the Los Angeles and Long Beach MS4 Permits:

“[a]n emphasis on watersheds is appropriate at this stage in the region’s MS4 program to shift the focus of the Permittees from rote program development and implementation to more targeted, water quality driven planning and implementation. Addressing MS4 discharges on a watershed scale focuses on water quality results by emphasizing the receiving waters within the watershed. The conditions of the receiving waters drive management actions, which in turn focus on the measures to address pollutant contributions from MS4 discharges.”

Los Angeles MS4 Permit, Fact Sheet at F-42.

The MS4 Permits require permittees who choose to develop WMPs to use the Regional Board’s Watershed Management Areas (WMAs) as boundaries, either in collaboration with other permittees in the same WMA, or individually.²⁰ Permittees, as part of a WMP, must conduct a source assessment to identify pollutant sources in discharges to and from the MS4 to receiving waters. In conducting this source assessment, permittees are required to review a variety of potential sources of information, including TMDL source assessments as well as findings from the permittee’s Industrial and Commercial Facilities Program. Based on the source assessment, the WMPs must identify the water quality priorities within each WMA to be addressed by the program, noting which are highest priority, high priority and medium priority. The MS4 Permits require that permittees make compliance with effluent limits established pursuant to TMDL WLAs the highest priority. At a minimum, the ranking must include achieving applicable water quality based on TMDL requirements included in the MS4 Permits and control pollutants for which the receiving water is impaired when the source assessments indicate that the target pollutant is discharged from the MS4.

The MS4 Permits also require a monitoring program designed to meet the program objectives set forth in Attachment E of the MS4 Permits. These objectives include assessing the impacts of MS4 discharges on the receiving waters and determining compliance with the water quality-based effluent limits of the permits, including requirements consistent with TMDL WLAs. Outfall and receiving water monitoring is required in assessing compliance. As an alternative to baseline monitoring requirements found in Attachment E, the MS4 Permits provide permittees the option to develop and implement customized monitoring programs on an individual basis (referred to as integrated monitoring programs or IMPs), or in conjunction with other permittees in a particular watershed (referred to as coordinated integrated monitoring programs or CIMPs).

As an alternative to WMPs, the MS4 Permits allow permittees to develop an enhanced watershed management program (EWMP). Pursuant to the MS4 Permits, in addition to the WMP requirements described above, EWMPs comprehensively evaluate opportunities within the permittees’ jurisdictional areas for multi-benefit regional projects that, where feasible, retain all stormwater runoff from the 85th percentile, 24-hour storm event. Additional benefits include flood control and water supply. Where such retention is not feasible, the permittee must demonstrate that other watershed control measures will ensure that permittees’ discharges will comply with applicable water quality limitations. The EWMP must also ensure that a financial strategy is in place to implement the program. The permits provide an additional year to develop EWMPs given the more complex planning.

²⁰ See http://www.swrcb.ca.gov/losangeles/water_issues/programs/regional_program/watershed/index.shtml for a list of watershed management areas in the Los Angeles Region.

The permittees are also required to include a reasonable assurance analysis (RAA) for each water body/pollutant combination addressed by the WMP or EWMP. The RAA is a quantitative analysis that must be based on a peer-reviewed model and demonstrate that implementation of the WMP or EWMP will ensure the permittee's discharges comply with applicable water quality limitations and will not cause or contribute to exceedances of WQs in receiving waters. Finally, the MS4 Permits require that permittees implement an adaptive management process. Every two years, from the date of program approval, the permittees must adapt the WMP or EWMP to make it more effective, based on a consideration of, among other things, (1) progress toward meeting water quality goals, (2) new water quality data, and (3) public input.

The MS4 Permits require that WMPs, EWMPs, and C/IMPs be submitted to the Regional Board for approval. All documents submitted to the Regional Board for approval are made available to the public for review and comment as required by the MS4 Permits. The permittees must begin implementing the WMP, EWMP and C/IMP upon approval from the Regional Board. The relevant WMA for this Petition is the Dominguez Channel and Los Angeles/Long Beach Harbors WMA.²¹ There are eighteen Phase I MS4s in the Dominguez Channel Los Angeles/Long Beach Inner Harbor watershed, including Caltrans. All permittees, other than Caltrans, are covered under either the Long Beach or Los Angeles MS4 Permit.²²

Permittees have formed several WMP and EWMP groups within the watershed, including the Dominguez Channel Watershed Management Group, the Palos Verdes Peninsula EWMP Agencies, and the Beach Cities Watershed Management Group. Three permittees (Compton, Gardena, and Rolling Hills) are subject to the baseline technology and water quality-based requirements of the permits.²³ As all of the WMPs and EWMPs described below are newly approved, permittees have not yet had the opportunity to measure the effectiveness of their programs. The Region will continue to evaluate how each permittee is implementing the WMP or EWMP.²⁴

a. WMP/EWMPs and C/IMPs in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor Watershed

Relevant to this Petition, three EWMPs and one WMP were developed and submitted by MS4 permittees in the Dominguez Channel Los Angeles/Long Beach Inner Harbor watershed. Drafts of the EWMPs were submitted to the Regional Board in June 2015. A draft of the City of Long Beach Nearshore Watersheds WMP was submitted in March 2015. The Regional Board invited public comments on each of the draft EWMPs and WMP after it was received. The Regional Board provided

²¹http://www.waterboards.ca.gov/losangeles/water_issues/programs/regional_program/Water_Quality_and_Watersheds/dominguez_channel/summary.shtml

²² Stormwater discharges from less than 3% of the watershed are regulated by the MS4 permit issued to Caltrans. Dominguez Channel Toxics TMDL at 48.

²³ The baseline requirements of the MS4 permit include the receiving water limitations and TMDL requirements of Parts V.A and VI.E respectively, the requirements for non-stormwater discharges in Part III.A and the minimum control measure (MCM) requirements for the stormwater management program of Parts VI.D.4 through 10.

²⁴ Implementation of portions of the WMPs and EWMPs are written to be contingent on the ability of the permittees to secure adequate funding. The Regional Board has stated that lack of adequate funding will not be accepted as an excuse for not meeting required loading reductions.

comments to the permittees on the draft EWMPs and WMP, the drafts were revised, and then they were ultimately approved by the Regional Board in April 2016. The Long Beach Nearshore WMP was approved by the Regional Board in January 2016. The cities of Gardena, Compton, and Rolling Hills, not party to an EWMP or WMP, are subject to the baseline requirements of the Los Angeles County MS4 Permit.²⁵

All permittees in the area covered by the Petition have developed and submitted IMPs or jointly developed and submitted CIMPs to the Regional Board. The Regional Board approved a final CIMP for the Beach Cities Watershed Management Group on November 12, 2015 and for the Palos Verdes Peninsula Watershed Management Group on February 4, 2016. A revised CIMP was approved by the Regional Board for the Dominguez Channel Watershed Management Group on June 1, 2016. An IMP for the City of Gardena was given a conditional approval on January 22, 2016. An IMP for the City of Long Beach is currently under review by the Regional Board. An IMP for the City of Compton was disapproved on August 5, 2016; and thus the City of Compton is subject to the baseline monitoring requirements of the MS4 Permit. These monitoring programs will allow the effectiveness of the control measures to be measured and a determination made whether the pollutant loading reductions necessary to address the water quality impairments that are of concern in the Petition, are being achieved.

(1) Dominguez Channel Watershed Management Group EWMP

According to the Dominguez Channel Watershed Management Group, its EWMP (DC EWMP), covers approximately 42 percent of the Dominguez Channel watershed.²⁶ Relevant to this Petition, the DC EWMP is intended to address impairments from metals in the subwatersheds covered by the EWMP, and identifies copper and zinc impairments in the Dominguez Channel, Torrence Lateral, Dominguez Channel Estuary, and the Inner Harbor as category 1 or the “highest priority” pollutant/waterbody combinations. In order to prioritize best management practice (BMP) implementation, the permittees conducted a source assessment based on pollutant loads associated with various land uses as well as modeling. Zinc was identified as a limiting pollutant based on the assumption that if the pollutants that require the largest treatment capacity to meet water quality goals are managed, all other constituents will also be addressed. As described in the DC EWMP, the permittees will evaluate monitoring data to determine whether additional pollutants should be considered limiting pollutants.²⁷

Through the reasonable assurance analysis, the DC EWMP estimates that approximately 10 percent reduction in pollutant loading will come from compliance with the baseline requirements of the MS4 Permit. Ninety percent will result from the implementation of regional or distributed green infrastructure projects. The regional projects will infiltrate stormwater from the 85th percentile, 24-hour storm event. The DC EWMP also includes an adaptive management process to modify the controls as necessary if the assumptions prove inaccurate. In addition, the DC EWMP includes an implementation schedule that provides for final compliance with the WLAs for copper and zinc by 2032 (consistent with

²⁵ The City of Torrance is also subject to the baseline requirements for the Machado Lake subwatershed because the EWMP for the Machado Lake subwatershed within the city of Torrance was disapproved by the Regional Board in April 2016.

²⁶ The DC WMG consists of Los Angeles Flood Control District, Los Angeles County, and the cities of Los Angeles, Hawthorne, Inglewood, El Segundo, Lomita, Carson, and Lawndale.

²⁷ All the WMPs/EWMPs assume that copper loadings will be substantially reduced over time due to implementation of SB 346 which requires vehicle brake pads sold in California to contain less than 5 percent copper by weight by 2021 and less than 0.5 percent by 2025.

the TMDL), with interim compliance milestones in 2026 (50 percent of target pollutant reduction) and 2029 (75 percent of target pollutant reductions).

(2) Beach Cities Watershed Management Group EWMP

The northeastern portion of the Beach Cities EWMP area contains 7,380 acres in the Dominguez Channel watershed, approximately 8.7 percent of the watershed.²⁸ Relevant to this Petition, the Beach Cities EWMP is intended to address impairments from metals, including copper and zinc, in the Dominguez Channel and the Dominguez Channel estuary, identifying those waterbody/pollutant combinations as the “highest priority.”

The Beach Cities EWMP estimates that implementation of the EWMP will lead to a reduction of 79 percent of the zinc load and 85 percent of the copper load. The majority of the load reductions will come from the implementation of regional or distributed green infrastructure.²⁹ According to the Beach Cities EWMP RAA, the permittees will be able to comply with the TMDL WLA through implementation of two large infiltration projects in Redondo Beach, a combination of green street BMPs treating runoff from 14 percent of commercial and residential areas, catch basin retrofits in Torrance, and compliance with the MCMs described in the Los Angeles MS4 Permit. As required by the MS4 Permits, the Beach Cities EWMP includes an adaptive management process to modify the controls as necessary if the assumptions prove inaccurate. And like the DC EWMP, the Beach Cities EWMP includes an implementation schedule that provides for final compliance with the WLAs for copper and zinc by 2032 (consistent with the TMDL).

(3) Palos Verdes Peninsula Watershed Management Group

The Palos Verdes Peninsula Watershed Management Group EWMP (Peninsula EWMP), covers approximately 3.4 sq miles in the Dominguez Channel watershed, approximately 2.5 percent of the watershed.³⁰ Relevant to this Petition, the Peninsula EWMP is intended to address impairments from metals, including copper and zinc, in the Inner Harbor, identifying those waterbody/pollutant combinations as the “highest priority.” Copper was found to be the limiting pollutant in this portion of the watershed, with a total load reduction of almost 80 percent needed to comply with the TMDL WLA.

Through non-structural controls such as enhanced street sweeping and increased catch basin cleanout, the Peninsula EWMP reasonable assurance analysis estimates it will reduce copper loadings approximately 2.5 percent. Existing or planned BMPs along with one proposed regional BMP will result in a 33.5 percent reduction in copper loading. Coupled with the copper reductions from SB 346, the Peninsula reasonable assurance analysis estimates that it will comply with the Dominguez Channel Toxics TMDL WLA by 2032, consistent with what is contemplated by the TMDL.

(4) City of Long Beach Nearshore Watersheds WMP

²⁸ The Beach Cities WMG consists of the Los Angeles County Flood Control District and the Cities of Redondo Beach, Hermosa Beach, Manhattan Beach, and Torrance. The portion of the Machado Lake subwatershed within the City of Torrance is not included in the area covered by the EWMP. This EWMP also covers the Santa Monica Bay watershed.

²⁹ This includes a reduction resulting from the implementation of SB346. See FN 21.

³⁰ Relevant to this Petition, the Palos Verdes Peninsula WMG consists of the Los Angeles County Flood Control District, Los Angeles County, and the Cities of Rancho Palos Verdes and Rolling Hills Estates. The City of Rolling Hills is not a participant in the Peninsula EWMP, but is a participant in the CIMP.

Relevant to this Petition, the City of Long Beach’s Nearshore Watersheds WMP (Nearshore WMP) is intended to address impairments from metals, including copper and zinc in the Dominguez Channel, Dominguez Channel estuary, and the Inner and Outer Long Beach Harbor, identifying those waterbody/pollutant combinations as the “highest priority.” Zinc was identified as the limiting pollutant.

The Nearshore WMP states that in implementing the MCMs in the permit, Long Beach will prioritize inspection frequency and take into account the pollutants of concern. Specifically, Long Beach will modify its Industrial and Commercial Facilities Program to prioritize critical industrial and commercial facilities based on the level of materials or activities that generate pollutants of concern and discharge to impaired waters. Facilities that are ranked high will be inspected twice per year, which is more frequent than required by the MS4 Permits (two times per five-year permit term for all critical facilities). Low priority facilities are inspected once per year. As stated above, MCMs such as this will reduce pollutant discharges from existing CII sources by ensuring more effective BMP implementation at these facilities.

Through the reasonable assurance analysis, Long Beach estimates that it will achieve 90 percent of the pollutant loading reductions to comply with the Dominguez Channel toxics TMDL WLA through new structural controls; new non-structural MCMs such as the modified Industrial and Commercial Facilities Program noted above will provide the remaining 10 percent. The structural controls will consist of a combination of retrofits on public parcels, green street retrofits and regional projects. The WMP also identifies potential locations for retrofits (such as Admiral Park) having the necessary capacity to comply with the TMDL. Finally, the WMP provides an implementation schedule leading to compliance with the WLAs by 2032, along with interim compliance milestones in 2019 and 2024.

The Nearshore WMP also briefly describes practices the Port of Long Beach is implementing through the Water Resources Action Plan (WRAP) developed by the Ports of Long Beach and Los Angeles. The WRAP is a voluntary effort, established in 2009, focusing on source control, guidance manuals, and development of standard practices.³¹

b. Permittees Covered by the Baseline Requirements of the Los Angeles County MS4 Permit

The cities of Gardena and Compton submitted individual WMPs to the Regional Board in June 2014. However, in October 2014, the Board notified these cities that their submittals were deficient, and that they would be subject to the baseline requirements of the Los Angeles County MS4 Permit. The city of Rolling Hills did not submit a WMP or an EWMP and is likewise subject to the baseline requirements. As a result, these permittees must implement a program within the five-year permit term that will meet the requirements of the permit and, in so doing, will address the water quality impairments that are of concern in the Petition.

³¹ Relevant to the metals impairments discussed in this Petition, the Port of Long Beach is continuing to implement various pollution prevention programs described in the WRAP, but has not committed to any new BMPs or programs, as described in its most recent WRAP annual report, dated 2013, <http://www.polb.com/civica/filebank/blobdload.asp?BlobID=11682>, accessed July 11, 2016.

c. Caltrans MS4 Permit and Statewide General Permits for Industrial Facilities and Small MS4s

Stormwater discharges from Caltrans roadways are regulated statewide in California by NPDES permit No. CAS000003 issued by the State Board in September 2012. Stormwater discharges from certain industrial facilities in California are also regulated by a statewide general permit (NPDES permit No. CAS000001), issued by the State Board in April 2014. In addition, stormwater discharges from small MS4s are regulated by a statewide general permit (NPDES permit No. CAS000004) issued by the State Board in February 2013. The EWMPs and WMP discussed above assume that the requirements of these other permits will ensure that stormwater discharges from Caltrans roadways, regulated industrial facilities and small MS4s in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor watersheds will be controlled as necessary to achieve the water quality goals of the watersheds. As discussed below, this is a reasonable assumption.

(1) The Caltrans MS4 Permit

Caltrans is subject to numerous (84) TMDLs statewide, and the Caltrans MS4 permit requires that Caltrans prioritize the list of impaired reaches for which Caltrans is assigned a WLA and for which Caltrans will implement additional control measures. Caltrans submitted a draft list to the State Board in October 2014. After soliciting public comment on the draft list, the State Board approved a final list in September 2015. The Caltrans permit requires that Caltrans address all applicable TMDLs over a 20-year period through additional control measures such as stand-alone BMP retrofits, cooperative BMP implementation with other responsible parties or other pollutant reduction practices.

Although the Caltrans permit does not require a RAA like the MS4 Permits issued by the Los Angeles Regional Board, the Caltrans permit does require that control measures proposed to comply with applicable TMDLs be submitted to the State Board each year for review and approval. Caltrans structural BMPs are also subject to the same numeric sizing criteria as those found in the Los Angeles County MS4 Permit, and this will ensure comparable effectiveness. Finally, the Caltrans permit requires a monitoring program to demonstrate compliance with the applicable TMDLs and an adaptive management program to modify the control measures as necessary depending on the monitoring results.

Of roughly 300 impaired reaches on the TMDL prioritization list, the Dominguez Channel is number 86 on the list. As a result, the impairment of concern in the Petition will be addressed toward the beginning of the 20-year compliance period provided by the permit. The October 2015 TMDL status report submitted by Caltrans summarizes the projects (such as bioswales) and the construction schedule for the projects that are planned for the watershed in upcoming years to address the pollutants covered by the TMDL.³²

(2) The Statewide Industrial General Permit

When issued in 2014, the industrial general permit included a list of TMDLs with requirements applicable to regulated industrial facilities, but did not include any specific implementation requirements. As noted in the Findings for the general permit, the intent of the State Board was that the development of specific requirements for TMDL WLA implementation would be coordinated with the

³² California Department of Transportation, Total Maximum Daily Load Status Review Report, October 2015.

Regional Boards subsequent to permit issuance. In early 2016, the Regional Boards publicly noticed a series of draft proposals for incorporation of applicable TMDL WLA requirements into the industrial permit. For the Dominguez Channel Toxics TMDL, the Los Angeles Regional Board publicly noticed a proposal on March 25, 2016. EPA Region 9 provided comments on the Dominguez Channel proposal and numerous other proposals for incorporation of TMDLs as well.³³

The State Board is currently reviewing the comments received on the proposals in preparation for proposal of an overall modification of the general permit to incorporate TMDL WLA requirements statewide. Although the State Board has not yet proposed the permit modification, Region 9 will closely review the proposal and provide comments as appropriate. Region 9 believes that the industrial permit is an appropriate vehicle to establish controls on discharges from industrial facilities in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor watersheds to address the impairments that are of concern in the Petition.

(3) The Statewide Small MS4 General Permit

The specific MS4s that are subject to the Small MS4 General Permit in California are listed in Attachments A and B to the permit. Within the jurisdiction of the Los Angeles Regional Board, the only permitted MS4s are non-traditional MS4s listed in Attachment B. Attachment G to the general permit also includes many of the TMDL-related requirements applicable to the MS4s. As noted in the fact sheet, however, when the general permit was issued in 2013 the State Board recognized that some of the requirements of Attachment G may need refinement, or in the case of the Los Angeles Regional Board, TMDL WLA requirements were omitted entirely from Attachment G and need to be added. The State Board indicated that one year would be provided for the development by the Regional Boards of appropriate revisions/additions to Attachment G, which would then be incorporated into the general permit after a public comment period.

Attachment B to the general permit lists only three small MS4s in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor watersheds that are covered by the permit; these are the Federal Correctional Institution Terminal Island, the adjacent Community Corrections Management Long Beach, and California State University Dominguez Hills. Region 9 expects that revisions to the Small MS4 General Permit to incorporate WLAs will be publicly noticed later this year. The small MS4s are already subject to the MCM requirements of the permit and will also be subject to applicable TMDL WLA requirements after permit modification. As in the case of the industrial permit, Region 9 believes that the Small MS4 General Permit is an appropriate vehicle to establish controls on institutional sources to address the impairments that are of concern in the Petition.

D. NPDES Authorized State Views

While the reasons above are alone sufficient for denying the Petition, Region 9 also solicited and considered the views of State regulators concerning the Petition and the implications for State programs. The California State Water Board and the Regional Board both expressed concern that permitting CII sources would have significant resource implications for the State NPDES permit program in order to create a new permit process for CII sources and would divert scarce resources away from other

³³ See, April 20, 2016 Letter from David Smith, EPA Region 9, to the Los Angeles Regional Water Board.

important programs.³⁴ These views are consistent with the national policy stated in the CWA: “to the maximum extent possible the procedures utilized for implementing this chapter shall encourage the drastic minimization of paperwork and interagency decision procedures, and the best use of available manpower and funds, so as to prevent needless duplication and unnecessary delays at all levels of government.” CWA § 101(f); 33 U.S.C. 1251(f).

VI. CONCLUSION

Region 9 has reviewed the Petition requesting designation of CII sources in the Dominguez Channel and the Los Angeles/Long Beach Inner Harbor watershed in light of the three principal factors described above for evaluating sources proposed for designation. Region 9 concludes that the pollutants of concern are exposed to stormwater at CII sources and that there are sufficient data available to demonstrate that stormwater discharges are contributing to water quality impairments in the Dominguez Channel and the Los Angeles/Long Beach Inner Harbor watershed.

The Region also concludes that existing programs are underway to adequately address the impairments. These programs rely primarily on new green infrastructure retrofit projects to obtain the reductions in pollutant discharges needed to achieve the water quality goals of the watershed. The MS4 Permits also require a rigorous analysis showing that the water quality goals will be met once the new projects are completed. Water quality monitoring programs are in place to measure progress and verify attainment of the goals. Finally, the WMPs/EWMPs required by the MS4 Permits include an adaptive management program to modify the mix of controls (or add additional controls) if necessary depending on the monitoring results or other pertinent new information.

Region 9 and California will continue to monitor the watershed and assess opportunities where additional pollutant reductions may be warranted; this could include the use of RDA as noted earlier. The Regional Board has indicated that for the next reissuance of its MS4 Permits, it will consider issuance of separate MS4 permits for the Ports of Los Angeles and Long Beach; such permits could more effectively control pollutant discharges from the Ports since the permit requirements could be tailored to this specific type of facility. The State Water Board has also indicated that when the Small MS4 General Permit is reissued, provisions for more effective stormwater management and pollutant control by public education institutions such as school districts will be considered.³⁵

The focus and direction of the existing programs in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor watershed are also consistent with the approach taken by the State Water Resources Control Board in its review of the Los Angeles County MS4 Permit where the State Board recommended a balanced approach between immediate, but often incomplete, solutions and allowing enough time and leeway to invest in infrastructure that will provide for a more reliable trajectory away from storm water-caused pollution and degradation.³⁶ Region 9 is also mindful of the resource implications that a designation of CII sources could have on the State NPDES program. As

³⁴ See Record of Communication, dated August 2, 2016, between David Smith, Manager, NPDES Permits Section, EPA Region 9 and Jonathan Bishop, Chief Deputy Director, State Water Resources Control Board.

³⁵ September 6, 2016 Memo from Karen Larsen, Deputy Director, Division of Water Quality, State Water Resources Control Board to David Smith, Water Division, EPA Region 9.

³⁶ State Water Resources Control Board, Order WQ 2015-0075 at 80.

noted above, the State expressed concerns regarding the potential resource consequences of designating CII sources.

In conclusion, after evaluating all the above factors and considering the views of the NDPES authorized State, Region 9 denies the Petition to designate CII sources in the Dominguez Channel and Los Angeles/Long Beach Inner Harbor watershed for NPDES permits.

