



Los Angeles Regional Water Quality Control Board

NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT

DRAFT TMDL-SPECIFIC PERMIT REQUIREMENTS FOR THE STATE WATER RESOURCES CONTROL BOARD'S INDUSTRIAL GENERAL STORM WATER PERMIT (Ballona Creek and Marina del Rey Harbor Subwatersheds)

NOTICE IS HEREBY GIVEN that the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) invites public comments on draft Total Maximum Daily Load (TMDL)-specific permit requirements for the statewide *General Permit for Storm Water Discharges Associated with Industrial Activities, Order No. 2014-0057-DWQ, NPDES Permit No. CAS000001* (Industrial General Permit). The draft TMDL-specific permit requirements are for the following TMDLs in the Ballona Creek Subwatershed and the Marina del Rey Harbor (MDRH) Subwatershed:

- Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacterial Indicator Densities TMDL
- Ballona Creek Estuary TMDL for Toxic Pollutants
- Ballona Creek TMDL for Metals
- Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL
- Marina del Rey Harbor Toxic Pollutants TMDL

As explained below, after receiving public comment, the Los Angeles Water Board will 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 Los Angeles Water Board will take no formal action regarding the proposed TMDL-specific permit language.

BACKGROUND

On April 1, 2014, the State Water Board reissued the Industrial General Permit.¹ As required by findings 38 through 42 of the Industrial General Permit, the State Water Board and Los Angeles Water Board are jointly developing proposed TMDL-specific permit requirements for the TMDLs established by the Los Angeles Water Board or U.S. EPA Region IX in which wasteload allocations are assigned to industrial storm water dischargers, as listed in Attachment E of the Industrial General Permit. The Los Angeles Water Board is providing notice and a 30-day public comment period on the draft proposed TMDL-specific permit requirements before submitting the proposed TMDL-specific permit requirements to the State Water Board. The Los Angeles Water Board will take no formal action regarding the proposed TMDL-specific permit requirements. The Los Angeles Water Board all timely received written comments along with the proposed TMDL-specific permit requirements to the State Water Board for consideration during

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¹ The Industrial General Permit is available electronically at:

http://www.swrcb.ca.gov/water issues/programs/stormwater/industrial.shtml.

Ballona Creek and MDRH Subwatersheds - 2 -Draft TMDL-Specific Industrial General Permit Requirements

the State Water Board's proceedings to consider amendment of the Industrial General Permit. The State Water Board will provide a separate public comment period later this year regarding the reopening of the Industrial General Permit to amend Attachment E, the fact sheet, and other permit provisions as necessary for incorporation of the TMDL-specific permit requirements into the Industrial General Permit.

Interested persons are strongly encouraged to submit written comments to the Los Angeles Water Board during the comment period described below before the proposed TMDL-specific permit requirement language is submitted to the State Water Board. Until the State Water Board adopts an amendment to the Industrial General Permit incorporating the TMDL-specific permit requirements, dischargers enrolled in the Industrial General Permit are not required to take any additional actions beyond those already required in the Industrial General Permit.

DOCUMENT AVAILABILITY

The proposed TMDL-specific permit requirements and associated Fact Sheet language for each TMDL noted above is attached to this notice and is also available for review on the Los Angeles Water Board's website at:

http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/sw_index.shtml

SUBMISSION OF WRITTEN COMMENTS

All written comments pertaining to the Los Angeles Water Board's draft TMDL-specific Industrial General Permit requirements and associated Fact Sheet language must be *received* by the Los Angeles Water Board by **5:00 p.m. on Thursday, April 14, 2016**. Written comments must be sent to the Los Angeles Water Board by mail or by email at the following addresses:

By Mail: Los Angeles Regional Water Quality Control Board Attention: Pavlova Vitale 320 West 4th Street Suite 200 Los Angeles, CA 90013

By Email: losangeles@waterboards.ca.gov

Please indicate in the subject line of all written comments "Comments on Draft TMDL-Specific IGP Requirements – Ballona Creek and MDRH Subwatersheds." In the comments, please also specify which TMDL(s) the comments pertain to.

CONTACT FOR FURTHER INFORMATION

Please contact Pavlova Vitale, Sr. Environmental Scientist, at (213) 576-6751 or <u>Pavlova.Vitale@waterboards.ca.gov</u> with any questions regarding this notice or any of the proposed TMDL-specific permit requirements.

Proposed Addition to ATTACHMENT E, LIST OF TOTAL MAXIMUM DAILY LOADS (TMDLs) APPLICABLE TO INDUSTRIAL STORM WATER DISCHARGERS

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Resolution Nos.	2006-011; revised by R12-008
Effective Date	March 26, 2007 (2006-011); July 2, 2014 (R12-008)
Impaired Water	Ballona Creek, Ballona Estuary, Sepulveda Channel and
Body(ies)	respective tributaries
Pollutant(s)	Total coliform, Fecal coliform, Enterococcus, E. coli
Responsible	Industrial Storm Water General Permittees that discharge non-
Dischargers	storm water and/or storm water associated with industrial activities ¹ to the impaired waterbodies either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.
Required Actions	Comply with the conditions and requirements of the Industrial Storm Water General Permit (Order No. 2014-0057-DWQ). If indicator bacteria are not already addressed in the facility's current Storm Water Pollution Prevention Plan (SWPPP), including its Assessment of Potential Pollutant Sources per Section X.G.2.a.ix, then Responsible Dischargers, as defined above, shall assess all areas of industrial activity at the facility relative to their potential as a source of total coliform, fecal coliform, enterococcus, or E. coli in authorized Non-Storm Water Discharges (NSWDs) and storm water discharges. The facility's SWPPP, including but not limited to the Assessment of Potential Pollutant Sources (Section X.G.2) and, where necessary, Best Management Practices (Section X.H) and Monitoring Implementation Plan (Section X.I), shall be updated based on the results. The revised SWPPP shall be certified and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order. Responsible Dischargers that have identified industrial areas of their facility as a potential source of total coliform, fecal coliform, enterococcus, or E. coli in authorized NSWDs and storm water discharges shall comply with the TMDL Action Levels (TALs) ² , expressed as instantaneous maximum values, in the table(s) below. If sampling results indicate a TAL exceedance as set forth in Section XII.A, the Discharger shall commence the Exceedance

Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacterial Indicator Densities Total Maximum Daily Load (TMDL)

¹ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

² A TMDL Action Level (TAL) is treated in the same manner as a Numeric Action Level (NAL) for the purposes of permit requirements, including the Monitoring Implementation Plan (Section X.I), Monitoring (Section XI), and Exceedance Response Actions (Section XII).

Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL Page 2

Bal	Iona Estuary (Marine	Waters. REC-1)
Parameter	Applicability	Reporting Units	
Total Coliform	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	10,000
Total Coliform if the ratio of fecal- to-total coliform exceeds 0.1	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	1,000
Fecal Coliform	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	400
Enterococcus	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	104
Seni	Ilveda Channel (Fres	h Waters RFC-	1)
Parameter	Applicability	Reporting Units	
E. coli	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	235
Ballona	a Creek Reach 2 (Fre	sh Waters. LRE	C-1)
Parameter	Applicability	Reporting Units	TAL
E. coli	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	576
Ballon	a Creek Reach 1 (Fre	esh Waters, RE	C-2)
Parameter	Applicability	Reporting Units	TAL
Fecal	Storm Water Discharges/	MPN or CFU/100 mL	4,000

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	The State and/or Regional Water Board may require industrial storm water dischargers to implement additional actions to reduce bacteria in authorized NSWDs and/or storm water discharges based on, but not limited to, monitoring data and comparison to applicable TALs, visual observations, discharger reports, or site- specific inspections and/or investigations.
	Monitoring and Reporting Requirements
	 Where the facility's Assessment of Potential Pollutant Sources (described above) identifies industrial areas as a potential source of total coliform, fecal coliform, enterococcus, or E. coli in authorized NSWDs and/or storm water discharges, Responsible Dischargers shall update the facility Monitoring Implementation Plan (Section X.I) per Section XI.B.6.e-f to include: Sampling and analysis for total coliform, fecal coliform, enterococcus, and E. coli during Qualifying Storm Events if not already monitored per Section XI.B; Sampling and analysis of the facility's authorized NSWDs for total coliform, fecal coliform, enterococcus, and E. coli twice within a reporting year; and U.S. EPA approved analytical methods, with appropriate method detection and reporting limits relative to the TALs in the table(s) above.
	The updated Monitoring Implementation Plan shall be included in the revised SWPPP and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.
TMDL documents a	are available at:
http://www.waterbo	ards.ca.gov/losangeles/water_issues/programs/tmdl/tmdl_list.shtml

Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL Page 4

Fact Sheet for Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacterial Indicator Densities TMDL

On June 8, 2006, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) established the Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacterial Indicator Densities TMDL. The TMDL became effective on March 26, 2007. The Los Angeles Water Board revised the TMDL on June 7, 2012. The revised TMDL became effective on July 2, 2014.

Recreating in waters with elevated bacterial indicator densities has long been associated with adverse human health effects. Specifically, local and national epidemiological studies demonstrate that there is a causal relationship between adverse health effects and recreational water quality, as measured by bacterial indicator densities.

The Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacterial Indicator Densities TMDL addresses the impairment of the water contact recreation (REC-1) beneficial use designated for Ballona Estuary and Sepulveda Channel, limited water contact recreation (LREC-1) designated for Ballona Creek Reach 2, and non-contact water recreation (REC-2) beneficial uses of Ballona Creek Reach 1.

Numeric Targets

The numeric targets for Ballona Creek, Ballona Estuary, Sepulveda Channel, and respective tributaries are based on the water quality objectives for protection of water contact recreation (REC-1), limited water contact recreation (LREC-1), and non-contact water recreation (REC-2) in marine and fresh waters set forth in Chapter 3 of the Water Quality Control Plan for the Los Angeles Region (Los Angeles Basin Plan) for the four bacterial indicators listed below. These numeric targets include both geometric mean limits and single sample limits and apply during both dry and wet weather, since there is water contact recreation throughout the year.

	Marine Waters (REC-1)	Fresh Waters (REC-1)	Fresh Waters (LREC-1)	Fresh Waters (REC-2)
Single Sample Limits				
E. coli	N/A	235/100 ml	576/100 ml	N/A
Total coliform	10,000/100 ml	N/A	N/A	N/A
Fecal coliform	400/100 ml	N/A	N/A	4,000/100 ml
Enterococcus	104/100 ml	N/A	N/A	N/A
Total coliform density if	1,000/100 ml	N/A	N/A	N/A
the ratio of fecal-to-total				
coliform exceeds 0.1				
Geometric Mean Limits				
E. coli	N/A	126/100 ml	126/100 ml	N/A
Total coliform	1,000/100 ml	N/A	N/A	N/A

Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacteria TMDL Page 5

	Marine Waters (REC-1)	Fresh Waters (REC-1)	Fresh Waters (LREC-1)	Fresh Waters (REC-2)
Fecal coliform	200/100 ml	N/A	N/A	2,000/100 ml
Enterococcus	35/100 ml	N/A	N/A	N/A

Wasteload Allocations

The Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacterial Indicator Densities TMDL identifies storm water dischargers, including dischargers subject to the Industrial Storm Water General Permit, as responsible dischargers. Industrial storm water dischargers are generally not expected to be a significant source of bacteria. Therefore, the TMDL assigns industrial storm water dischargers a wasteload allocation (WLA) equal to the bacteriological water quality objectives for protection of water contact recreation (REC-1), limited water contact recreation (LREC-1), and non-contact water recreation (REC-2) in marine and fresh waters set forth in Chapter 3 of the Los Angeles Basin Plan for all three time periods.³

Required Actions

The required actions apply to Industrial Storm Water General Permittees that discharge non-storm water and/or storm water associated with industrial activities⁴ to Ballona Creek, Ballona Estuary, or Sepulveda Channel either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

Currently, the Industrial Storm Water General Permit only regulates discharges of nonstorm water and storm water that are directly related to manufacturing, processing or raw materials storage areas from industrial activities in ten major categories of industries (Attachment A to Order No. R4-2014-0057-DWQ). These discharges are currently not expected to be a significant source of indicator bacteria.

As described below, compliance with the conditions and requirements of the Industrial Storm Water General Permit is generally expected to achieve the WLAs assigned to industrial storm water dischargers in the Ballona Creek, Ballona Estuary, and Sepulveda Channel Bacterial Indicator Densities TMDL. Where necessary, this will be verified through sampling and analysis of authorized NSWDs and storm water discharges and comparison of results to TMDL Action Levels (TALs), as described below.

³ Summer dry weather (April 1 to October 31); winter dry weather (November 1 to March 31), and wetweather days (defined as days of 0.1 inch of rain or more plus three days following the rain event).

⁴ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

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Compliance with Wasteload Allocations

1. Compliance with Summer and Winter Dry-Weather WLAs

Compliance with existing conditions and requirements in the Industrial Storm Water General Permit is generally expected to ensure compliance with the summer and winter dry-weather WLAs applicable to industrial storm water dischargers. The Industrial Storm Water General Permit defines dry-weather discharges (Sections III and IV.A.) as either unauthorized NSWDs or authorized NSWDs. Unauthorized NSWDs are prohibited under Section III.B. Authorized NSWDs cannot be in violation of any Basin Plan, including TMDL WLAs contained in a Basin Plan, or statewide water quality control plan or policy (Sections IV.B and VI.A). The required Storm Water Pollution Prevention Plan (SWPPP) must include implementation of appropriate BMPs to ensure that authorized NSWDs do not contain quantities of pollutants that cause or contribute to an exceedance of a water quality standard (Section IV.B.3.c).

2. Compliance with Wet Weather WLAs

Compliance with the conditions and requirements in Section VI.A (Receiving Water Limitations) and Section X (Storm Water Pollution Prevention Plan), including subsection X.H (Best Management Practices) is generally expected to achieve the WLAs assigned to industrial storm water discharges during wet weather.

3. Conclusion

Considering the existing conditions and requirements in the Industrial Storm Water General Permit regarding unauthorized and authorized NSWDs and storm water discharges, if a Discharger complies with the Industrial Storm Water General Permit, the Discharger is not likely to discharge indicator bacteria above the WLAs from its industrial process and materials handling and storage areas, and is unlikely to contribute to an exceedance of a WLA. Therefore, no additional requirements beyond complying with the Industrial Storm Water General Permit are necessary to comply with the WLAs assigned to industrial storm water discharges at this time. However, if it is determined, based on, but not limited to, monitoring data and comparison to applicable TALs, visual observations of the site, discharger reports, and/or site-specific inspections and/or investigations, that a Discharger may be causing or contributing to an exceedance of a WLA, the State and/or Regional Water Board may require Dischargers to revise SWPPPs, BMPs, and/or monitoring programs, or direct a Discharger to obtain an individual National Pollutant Discharge Elimination System (NPDES) permit if deemed necessary.

The State and Regional Water Board recognize there may be instances in the future when discharges from an industrial category regulated by the Industrial Storm Water General Permit may be identified as a source of indicator bacteria. These instances may arise as the U.S. Environmental Protection Agency continues to expand the regulatory universe of facilities and facility areas regulated by storm water regulations or where monitoring data and comparison to applicable TALs, visual observations,

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discharger reports, or site-specific inspections and/or investigations, or other pertinent data or information reveal that a facility's discharge (storm water discharges or NSWDs) exceeds the WLAs and, therefore, is a significant source of indicator bacteria. In these instances, the State and/or Regional Water Board may impose additional conditions and requirements on industrial storm water dischargers, including but not limited to, BMP implementation and monitoring requirements that will address indicator bacteria in industrial storm water and NSWDs in order to comply with the WLAs in this TMDL.

Monitoring and Reporting Requirements

Dischargers covered under the Industrial Storm Water General Permit are required to execute visual observations of their site and sampling and analysis of qualifying storm events (IGP, Sections XI.A and XI.B). During the observation events, the Discharger is required to observe and report on the following: (1) the presence or indications of prior, current, or potential unauthorized NSWDs and their sources, (2) authorized NSWDs, sources, and associated BMPs to ensure compliance with the requirements as described in the above paragraph, and (3) outdoor industrial equipment and storage areas, outdoor industrial activities areas, BMPs, and all other potential sources of industrial pollutants (IGP, Section XI.A.1).

Industrial storm water dischargers enrolled in the Industrial Storm Water General Permit are required to complete an Assessment of Potential Pollutant Sources as an element of a facility's SWPPP to identify pollutants that are likely to be present in the facility's industrial storm water discharges and authorized NSWDs. Dischargers with an active Notice of Intent who have identified⁵ industrial sources of indicator bacteria with the potential to be present in the facility's industrial storm water discharges or authorized NSWDs are required to take effluent samples for indicator bacteria during each Qualifying Storm Event.

1. TMDL Action Levels (TALs)

Responsible Dischargers shall analyze effluent samples for indicator bacteria and compare sampling results to the TALs below. A TAL is treated in the same manner as a Numeric Action Level (NAL) for the purposes of permit requirements, including the Monitoring Implementation Plan (Section X.I), Monitoring (Section XI), and Exceedance Response Actions (Section XII). Therefore, Responsible Dischargers shall additionally comply with the TAL exceedance requirements established for this TMDL. A TAL exceedance will require the Responsible Discharger to follow the Exceedance Response Actions (ERAs) in Section XII.

⁵ Either in the facility's existing SWPPP, or through the update to the facility SWPPP and the Assessment of Potential Pollutant Sources, as described below.

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Parameter	Applicability	Reporting Units	TAL
Total Coliform	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	10,000
Total Coliform if the ratio of fecal-to-total coliform exceeds 0.1	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	1,000
Fecal Coliform	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	400
Enterococcus	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	104

Ballona Estuary (Marine Waters, REC-1)

Sepulveda Channel (Fresh Waters, REC-1)

Parameter	Applicability	Reporting Units	TAL
E. coli	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	235

Ballona Creek Reach 2 (Fresh Waters, LREC-1)

Parameter	Applicability	Reporting Units	TAL
E. coli	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	576

Ballona Creek Reach 1 (Fresh Waters, REC-2)

Parameter	Applicability	Reporting Units	TAL
Fecal coliform	Storm Water Discharges/	MPN or CFU/100	4 000
	Authorized NSWDs	mL	4,000

The TALs apply for all three time periods: summer dry weather (April 1 to October 31); winter dry weather (November 1 to March 31), and wet-weather days (defined as days of 0.1 inch of rain or more plus three days following the rain event).

An evaluation of compliance with the 30-day geometric mean WLAs for total coliform, fecal coliform, enterococcus, and E. coli established in the TMDL is currently beyond the scope of the Industrial Storm Water General Permit's sampling requirements. Given that industrial storm water dischargers are not expected to be a significant source of bacteria, TALs are only established for the single sample bacteria objectives.

2. Updating the Facility SWPPP: Assessment of Potential Pollutant Sources

If indicator bacteria are not already addressed in the facility's current SWPPP, upon incorporation of these TMDL-specific requirements into the General Permit, Responsible Dischargers will be required to assess all areas of industrial activity at the facility relative to their potential as a source of total coliform, fecal coliform, enterococcus, or E. coli in authorized NSWDs and storm water discharges. The facility's SWPPP, including but not limited to the Assessment of Potential Pollutant Sources

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(Section X.G.2) and, where necessary, Best Management Practices (Section X.H) and Monitoring Implementation Plan (Section X.I), shall be updated based on the results.

The revised SWPPP shall be certified and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.

3. Updating the Facility Monitoring Implementation Plan

<u>Authorized NSWDs Identified as a Potential Source</u>: Responsible Dischargers that identify industrial areas of their facility as a potential source of total coliform, fecal coliform, enterococcus, or E. coli in authorized NSWDs will be required to update the facility Monitoring Implementation Plan to include sampling and analysis of authorized NSWDs for total coliform, fecal coliform, enterococcus, and E. coli twice during each reporting year, unless the Discharger provides documentation in its SWPPP per Section X.G.1.e, and through its monthly visual observations and records per Section XI.A.1-3, that there are no authorized NSWDs or these authorized NSWDs are fully contained on site. Sampling results will be used to ensure that authorized NSWDs comply with the Industrial Storm Water General Permit and, in particular, Sections IV.B and VI.A, consistent with the WLAs.

The updated Monitoring Implementation Plan must be included with the revised SWPPP and submitted via SMARTS no later than 6 months after incorporation of these TMDLspecific requirements in this Order.

<u>Storm Water Discharges Identified as a Potential Source</u>: Responsible Dischargers that identify industrial areas of their facility as a potential source of total coliform, fecal coliform, enterococcus, or E. coli in storm water discharges shall verify BMP effectiveness by comparing sampling results with TALs in order to ensure that storm water discharges comply with the Industrial Storm Water General Permit and, in particular, Section VI.A. Industrial Storm Water General Permittees will be required to update the facility Monitoring Implementation Plan by to include sampling and analysis for total coliform, fecal coliform, enterococcus, and E. coli during Qualifying Storm Events, if these parameters are not already monitored per Section XI.B.

The updated Monitoring Implementation Plan must be included with the revised SWPPP and submitted via SMARTS no later than 6 months after incorporation of these TMDLspecific requirements in this Order.

<u>Analytical Methods</u>: To support the additional sampling and analysis required, Industrial Storm Water General Permittees will also be required to update the facility's Monitoring Implementation Plan to include U.S. EPA approved analytical methods, with appropriate method detection and reporting limits per Section XI.B.6.e, to determine the effectiveness of the BMPs for authorized NSWDs and storm water discharges at achieving the applicable TALs.

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The updated Monitoring Implementation Plan must be included with the revised SWPPP and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.

Regulatory Mechanisms

The regulatory mechanisms available to the State and/or Regional Water Board to require Industrial Storm Water General Permittees to implement additional actions and additional monitoring include: the Industrial Storm Water General Permit and the authority contained in sections 13263, 13267, and 13383 of the California Water Code. Under these regulatory mechanisms, the State and/or Regional Water Board may require an Industrial Storm Water General Permittee to collect samples of its storm water and NSWDs and analyze the discharges for indicator bacteria to determine compliance with the WLAs during each time period specified in the TMDL.

Proposed Addition to ATTACHMENT E, LIST OF TOTAL MAXIMUM DAILY LOADS (TMDLs) APPLICABLE TO INDUSTRIAL STORM WATER DISCHARGERS

Resolution No.	R05-008; revised by R13-010
Effective Date	January 11, 2006 (R05-008); October 25, 2015 (R13-010)
Impaired Water Body(ies)	Ballona Creek Estuary
Pollutant(s)	Cadmium, copper, lead, silver, zinc, chlordane, dichlorodiphenyltrichloroethane (DDT), and polychlorinated biphenyls (PCBs) in sediment
Responsible Dischargers	Industrial Storm Water Permittees that discharge storm water associated with industrial activities ¹ and/or non-storm water to the impaired waterbody either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.
Required Actions	Comply with the conditions and requirements of the Industrial Storm Water General Permit (Order No. 2014-0057-DWQ). If cadmium, copper, lead, silver, zinc, chlordane, DDT, and PCBs are not already addressed in the facility's current Storm Water Pollution Prevention Plan (SWPPP), including its Assessment of Potential Pollutant Sources per Section X.G.2.a.ix, then Responsible Dischargers, as defined above, shall assess all areas of industrial activity at the facility relative to their potential as a source of cadmium, copper, lead, silver, zinc, chlordane, DDT, and/or PCBs in storm water discharges associated with industrial activities and in authorized Non-Storm Water Discharges (NSWDs). The facility's SWPPP, including but not limited to the Assessment of Potential Pollutant Sources (Section X.G.2) and, where necessary, Best Management Practices (Section X.H) and Monitoring Implementation Plan (Section X.I), shall be updated based on the results. The revised SWPPP shall be certified and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.

Ballona Creek Estuary Total Maximum Daily Load (TMDL) for Toxic Pollutants

¹ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities. ² Either in the facility's existing SWPPP, or through the update to the facility SWPPP and the Assessment

of Potential Pollutant Sources, as described below.

	Parameter	Test Method
	SSC	ASTM D3877-97
	If sampling results indicate a TA XII.A, the Discharger shall con Actions (ERAs) process set forth	L exceedance as set forth in Section nmence the Exceedance Response in Section XII.
	The State and/or Regional Wate Water General Permittees to im these metals, pesticides, and associated with industrial activiti on, but not limited to, monitoring of visual observations, discharger and/or investigations.	r Board may require Industrial Storm plement additional actions to reduce PCBs in storm water discharges es and in authorized NSWDs based data and comparison to the SSC TAL, reports, or site-specific inspections
	Monitoring and Reporting Require	ements
	Where the facility's Assessme (described above) identifies the cadmium, copper, lead, silver, a storm water discharges associate authorized NSWDs, Responsible Monitoring Implementation Plan include:	ent of Potential Pollutant Sources e facility as a potential source of zinc, chlordane, DDT, and PCBs in ted with industrial activities and/or in Dischargers shall update the facility (Section X.I) per Section XI.B.6.e-f to
	 Sampling and analysis for (QSEs); Sampling and analysis of SSC twice within a reportir U.S. EPA approved an method detection and reported 	SSC during Qualifying Storm Events the facility's authorized NSWDs for ng year; and nalytical methods, with appropriate porting limits relative to the SCC TAL
	The updated Monitoring Impleme revised SWPPP and submitted after incorporation of these TMDL	entation Plan shall be included in the via SMARTS no later than 6 months specific requirements in this Order.
TMDL documents	are available at:	
http://www.waterbo	ards.ca.gov/losangeles/water iss	ues/programs/tmdl/tmdl_list.shtml

Fact Sheet for Ballona Creek Estuary Toxic Pollutants TMDL

Cadmium, copper, lead, silver, zinc, chlordane, DDT, PCBs, and toxicity in sediments are impairing beneficial uses of Ballona Creek estuary, including estuarine habitat (EST); wildlife habitat (WILD); and commercial and sport fishing (COMM); among others. The Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) adopted a TMDL to address these impairments in 2005 and revised the TMDL in 2013. The allocations set forth in the TMDL apply both to discharges to the impaired waterbodies as well as to upstream reaches and tributaries to them.

When the TMDL was developed, the Los Angeles Water Board determined that industrial facilities were a source of these pollutants to the impaired waterbodies. There are forty-one (41) dischargers enrolled under the Industrial Storm Water General Permit within the Ballona Creek watershed. The types of industrial facilities in the Ballona Creek watershed include sand and gravel, oil and natural gas, transportation, recycling and manufacturing facilities.

While chlordane, DDT, and PCBs have been banned in the United States for many years, the physiochemical properties of these pollutants cause them to persist in the environment, bioaccumulate through the food web, and pose risks to aquatic life, wildlife, and human health. The organic chemicals (chlordane, DDT, PCBs) and metals causing impairment of the estuary bind to soil particles making them easy to transport via suspended sediment in non-storm water and storm water discharges. McPherson et al. (2002) have documented that the majority of storm water metals loading in Ballona Creek is associated with the particle phase. Similar to metals, the majority of organic chemicals in storm water are associated with particulates, as would be expected given the hydrophobicity of these compounds. Suffet and Stenstrom (1997) measured concentrations of organochlorine compounds among other organic chemicals in Sepulveda Channel, Centinela Creek, and Ballona Creek and found that the majority of these compounds the suspended solids. Contaminated sediments then accumulate in the estuary and in aquatic organisms that are exposed to these toxic pollutants.

Numeric Targets

The numeric targets are based on the narrative objectives in the Los Angeles Region Basin Plan, the sediment quality objectives in the statewide Enclosed Bays and Estuaries Plan, and sediment quality guidelines.

Wasteload Allocations

The wasteload allocations (WLAs) assigned to Industrial Storm Water General Permittees are based on mass per acreage, and include WLAs for PCBs, chlordane, DDT, cadmium, copper, lead, silver, and zinc in suspended sediment.

Each Industrial Storm Water General Permittee is assigned a WLA based on mass per acre of their facilities. The WLAs are as follows:

Metals	Mass (g/yr/ac)
Cadmium	0.1
Copper	3
Lead	4
Silver	0.1
Zinc	13
Organic Chemicals	Mass (mg/yr/ac)
Chlordane	0.11
DDT	0.16
PCBs	0.28

WLAs for Industrial Storm Water General Permittees (annual pollutant mass per acre)

Required Actions

The required actions apply to Industrial Storm Water Permittees that discharge storm water associated with industrial activities³ and/or non-storm water to Ballona Creek estuary either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

If chlordane, DDT, PCBs, cadmium, copper, lead, silver, and zinc are not already addressed in the facility's current Storm Water Pollution Prevention Plan (SWPPP), including its Assessment of Potential Pollutant Sources per Section X.G.2.a.ix, then Responsible Dischargers, as defined above, will be required to assess all areas of industrial activity at the facility relative to their potential as a source of these parameters in authorized Non-Storm Water Discharges (NSWDs) and storm water discharges. The facility's SWPPP, including but not limited to the Assessment of Potential Pollutant Sources (Section X.G.2) and, where necessary, Best Management Practices (Section X.H) and Monitoring Implementation Plan (Section X.I), must be updated based on the results, pursuant to Section X.B.1-2. The revised SWPPP must be certified and submitted via SMARTS no later than 6 months after the incorporation of these TMDL-specific requirements into this Order.

Compliance with Wasteload Allocations

Responsible Dischargers subject to the Ballona Creek Estuary Toxic Pollutants TMDL will be required to implement BMPs identified in their updated SWPPP and conduct sampling and analysis of authorized NSWDs and storm water discharges for Suspended Sediment Concentration (SSC) to assess BMP effectiveness in order to ensure their authorized NSWDs and storm water discharges comply with the WLAs listed above.

Regarding NSWDs, the Industrial Storm Water General Permit identifies these as either unauthorized NSWDs or authorized NSWDs (Sections III and IV.A.). Unauthorized

³ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

NSWDs are prohibited under Section III.B. Authorized NSWDs cannot be in violation of any Basin Plan, including TMDL WLAs contained in a Basin Plan, or statewide water quality control plan or policy (Section IV.B). The required Storm Water Pollution Prevention Plan (SWPPP) must include implementation of appropriate BMPs to ensure that authorized NSWDs do not contain quantities of pollutants that cause or contribute to an exceedance of a water quality standard (Section IV.B.3.c). Further, Section VI.A stipulates that Dischargers shall ensure that industrial storm water and authorized NSWDs do not cause or contribute to an exceedance of any applicable water quality standards in any affected receiving water.

Regarding storm water discharges, reducing the discharge of chlordane, DDT, PCBs, cadmium, copper, lead, silver, and zinc in suspended sediment can be achieved by utilizing Best Management Practices (BMPs). The pollutants addressed by the TMDL preferentially bind to sediment; therefore, BMP that prevent erosion and sedimentation can be particularly effective. Additionally, BMPs that eliminate exposure of storm water discharges and NSWDs to pollutant sources, retain storm water onsite, and/or treat storm water prior to discharge from the industrial facility can be used.

Therefore, compliance with the existing conditions and requirements in the Industrial Storm Water General Permit, including but not limited to, updating the SWPPP to address TMDL pollutants and suspended sediment in the facility's discharges; implementing BMPs as set forth in Section X.H, including, in particular, Erosion and Sediment Controls (Section X.H.1.e) and Advanced BMPs (Sections X.H.2 and X.H.6); along with BMP effectiveness monitoring (Section XI) and the Exceedance Response Actions process (Section XII), is generally expected to ensure compliance with the WLAs assigned to industrial storm water dischargers in the Ballona Creek Estuary Toxic Pollutants TMDL.

Responsible Dischargers that have identified⁴ their facility as a potential source of chlordane, DDT, PCBs, cadmium, copper, lead, silver, and/or zinc in storm water discharges associated with industrial activities and/or in authorized NSWDs shall comply with a TMDL Action Level (TAL)⁵ for Suspended Sediment Concentration (SSC) of 1 mg/L, expressed as an instantaneous maximum value.⁶ Responsible Dischargers will be required to demonstrate through sampling and analysis that the facility's authorized NSWDs and its storm water discharges associated with industrial activities

⁴ Either in the facility's existing SWPPP, or through the update to the facility SWPPP and the Assessment of Potential Pollutant Sources, as described below.

⁵ A TMDL Action Level (TAL) is treated in the same manner as a Numeric Action Level (NAL) for the purposes of permit requirements, including the Monitoring Implementation Plan (Section X.I), Monitoring (Section XI), and Exceedance Response Actions (Section XII).

⁶ As stated above, the pollutants preferentially bind to sediments; therefore, the main source of these organic substances in storm water and non-storm water discharges from industrial facilities is sediment that runs off the site. While the Industrial Storm Water General Permit includes numeric action levels (NALs) for total suspended solids (TSS) of 400 mg/L as an instantaneous maximum threshold and 100 mg/L as an annual average threshold, compliance with these NALs for TSS is not sufficient to comply with the WLAs for chlordane, DDT, PCBs, cadmium, copper, lead, silver, and zinc. Suspended sediment concentration (SSC) is a better measure of the total amount of sediment transported in storm water runoff. Preventing the discharge of sediments would ensure that the pollutants are not mobilized in storm water runoff.

do not exceed the SSC TAL. If sampling results indicate a TAL exceedance as set forth in Section XII.A, the Discharger shall commence the Exceedance Response Actions (ERAs) process set forth in Section XII.

In conclusion, considering the existing conditions and requirements in the Industrial Storm Water General Permit regarding unauthorized and authorized NSWDs and storm water discharges, if a Discharger complies with the Industrial Storm Water General Permit, including updating the SWPPP and implementing Erosion and Sediment Control BMPs and other Advanced BMPs where necessary, the Discharger is not likely to discharge chlordane, DDT, PCBs, cadmium, copper, lead, silver, and/or zinc above the applicable WLAs from its industrial areas. Therefore, no additional requirements beyond complying with the Industrial Storm Water General Permit, including updating and implementing the SWPPP, and implementing ERAs for exceedances of the SSC TAL are necessary to comply with the WLAs assigned to industrial storm water dischargers at this time.

However, if it is determined, based on, but not limited to, monitoring data and comparison of results to the SSC TAL, observations of the site, discharger reports, and/or site-specific inspections and/or investigations, that a Discharger may be causing or contributing to an exceedance of a WLA, the State and/or Regional Water Board retains the authority to require Dischargers to further revise SWPPPs, BMPs, and/or monitoring programs, or direct a Discharger to obtain an individual National Pollutant Discharge Elimination System (NPDES) permit, if deemed necessary.

Monitoring and Reporting Requirements

To ensure that storm water discharges comply with the Industrial Storm Water General Permit and, in particular, Section VI.A and the SSC TAL, as necessary to achieve the WLAs, the State Water Board finds that sampling and analysis of a facility's storm water discharges for SSC is necessary. Industrial Storm Water General Permittees identified as Responsible Dischargers, above, will be required, per Section XI.B.6.e-f, to update the facility Monitoring Implementation Plan (Section X.I) no later than 6 months after the incorporation of these TMDL-specific requirements into this Order to include sampling and analysis for SSC during Qualifying Storm Events.

To ensure that authorized NSWDs comply with the Industrial Storm Water General Permit and, in particular, Sections IV.B and VI.A and the SSC TAL, as necessary to achieve the WLAs, the State Water Board finds that sampling and analysis of a facility's authorized NSWDs for SSC is also necessary. Industrial Storm Water General Permittees will be required, per Section XI.B.6.e-f, to update the facility Monitoring Implementation Plan (Section X.I) no later than 6 months after the incorporation of these TMDL-specific requirements into this Order to include sampling and analysis of the facility's authorized NSWDs for SSC twice during each reporting year, unless the Discharger provides documentation in its SWPPP per Section X.G.1.e, and through its monthly visual observations and records per Section XI.A.1-3, that there are no authorized NSWDs or these authorized NSWDs are fully contained on site.

To support the additional sampling and analysis required, Industrial Storm Water General Permittees will also be required to update the facility's Monitoring Implementation Plan to include U.S. EPA approved analytical methods, with appropriate method detection and reporting limits per Section XI.B.6.e, to determine the effectiveness of the BMPs for authorized NSWDs and storm water discharges at achieving the applicable TAL for SSC.

The following analytical test method is appropriate.

Parameter	Test Method
SSC	ASTM D3877-97

Regulatory Mechanisms

The regulatory mechanisms available to the State and/or Regional Water Board to require Industrial Storm Water General Permittees to implement additional actions and additional monitoring include: the Industrial Storm Water General Permit and the authority contained in sections 13263, 13267, and 13383 of the California Water Code. Under these regulatory mechanisms, the State and/or Regional Water Board may require an Industrial Storm Water General Permittee to collect samples of its storm water and NSWDs and analyze the discharges for SSC and cadmium, copper, lead, silver, zinc, chlordane, DDTs, and PCBs in suspended sediment to determine compliance with the applicable WLAs specified in the TMDL.

Proposed Addition to ATTACHMENT E, LIST OF TOTAL MAXIMUM DAILY LOADS (TMDLs) APPLICABLE TO INDUSTRIAL STORM WATER DISCHARGERS

Ballona Creek Total Maximum Daily Load (TMDL) for Metals

Resolution No.	R07-015; revised by R13-010
Effective Date	October 29, 2008 (R07-015); October 26, 2015 (R13-010)
Impaired Water Body(ies)	Ballona Creek and Sepulveda Canyon Channel
Pollutant(s)	Copper, lead, zinc
Responsible Discharger(s)	Industrial Storm Water General Permittees whose non-storm water discharges and/or storm water discharges associated with industrial activities ¹ have the potential to contain copper, lead, or zinc and that discharge to the impaired waterbodies either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.
Required Actions	Compliance with Wasteload Allocations
	 Comply with the conditions and requirements of this Industrial Storm Water General Permit (Order No. 2014-0057-DWQ). Four months after incorporation of these TMDL-specific requirements, Responsible Dischargers, as defined above, are assigned Level 1 Status for the TMDL pollutants unless one of the following conditions is met for each TMDL pollutant: The Discharger is already in Level 1 or Level 2 Status pursuant to Section XII.C or Section XII.D for the TMDL pollutant(s); or The Discharger re-evaluates, with the assistance of a QISP, its Assessment of Potential Pollutant Sources (Section X.G.2.a.ix) in its current Storm Water Pollution Prevention Plan (SWPPP), relative to TMDL pollutants and finds that its non-storm water
	discharges and its storm water discharges associated with industrial activities do not have the potential to contain the TMDL pollutant(s) ² ; or
	 The Discharger provides the following:
	 For storm water discharges, a demonstration that sampling results from the last 4 Qualifying Storm Events (QSEs) did not exceed the TMDL Action Levels (TALs)³, set forth in the tables below, and For NSWDs, a demonstration. based on the last 6

Including storm water not associated with industrial activities that is commingled with storm water 1 associated with industrial activities

² At which point, the Discharger remains in baseline status for the TMDL pollutant(s). ³ A TMDL Action Level (TAL) is treated in the same manner as a Numeric Action Level (NAL) for the purposes of permit requirements, including the Monitoring Implementation Plan (Section X.I), Monitoring (Section XI), and Exceedance Response Actions (Section XII).

month unaut practi includ as red • The Dischar retain all NS the 85 th perc The Discharger sha Water Board within of these TMDL-spe A Discharger that Sections V.C, VII.A ERA Evaluation" f submit via SMART months after the in this Order. The Dis the basis of the management pract set forth in the tab discharges associ updated SWPPP sl than 6 months a requirements in th additional BMPs ic included in the revis Responsible Disch instantaneous mat results indicate a the Level 2 Status I	hy visual observations that horized NSWDs and that ces (BMPs) for any autho led in the SWPPP and are bein quired by Section IV.B.3. ⁴ ger indicates it has installed Ac SWDs and the storm water volu- centile, 24-hour event (Section X all submit these demonstrations 4 months of the State Water E cific requirements in this Order. is newly assigned Level 1 , X.B, and XII.C.1-2, shall condu- for copper, lead, and zinc, an 'S an "Initial Level 1 ERA Rep corporation of these TMDL-spe scharger shall also revise their Initial Level 1 ERA Rep corporation of these TMDL-spe scharger shall also revise their Initial Level 1 ERA Evaluati ices (BMPs) to prevent excee- bles below, in authorized NSW ated with the facility's indus hall be certified and submitted v after the incorporation of the sed SWPPP. argers shall comply with the kimum values, in the tables TAL exceedance, the Discharger ERAs process set forth in Section	at there are no best management rized NSWDs are ng fully implemented lvanced BMP(s) that ume associated with X.H.2). ^{5,6} s to the Los Angeles Board's incorporation Status, pursuant to uct an "Initial Level 1 nd shall certify and bort" no later than 6 cific requirements in facility's SWPPP on on to include best dances of TALs, as Ds and storm water trial activities. The via SMARTS no later hese TMDL-specific hall implement any ERA Evaluation and TALs, expressed as below. If sampling ger shall commence on XII.D.
TALs for Authoriz	ed NSWDs (µg/L total recover Applicability	able metals)
Conner	Authorized NSWD	35.56
Lead	Authorized NSWD	19.65
Zinc	Authorized NSWD	446.55

 ⁴ At which point, the Discharger remains in baseline status for the TMDL pollutant(s).
 ⁵ The Discharger is not required to resubmit its SWPPP if the Advanced BMP(s) are already documented in the facility's SWPPP (e.g., BMP Summary Table).
 ⁶ At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

TALs for Storm Water Discharges (µg/L total recoverable metals)		
Parameter	Applicability	TAL
Copper	Storm Water	13.70
Lead	Storm Water	76.75
Zinc	Storm Water	104.77

The following sampling test methods shall be used for both NSWD and storm water discharge TALs:

Parameter	Test Method
Copper	EPA 200.8
Lead	EPA 200.8
Zinc	EPA 200.8

The State and/or Regional Water Board may require industrial stormwater dischargers to implement additional actions to reduce discharges of copper, lead, and/or zinc in authorized NSWDs and/or storm water discharges based on, but not limited to, monitoring data and comparison to applicable TALs, visual observations, discharger reports, or site-specific inspections and/or investigations.

Monitoring and Reporting Requirements

No later than 6 months after incorporation of these TMDL-specific requirements in this Order, per Section XI.B.6.e-f, update the facility Monitoring Implementation Plan (Section X.I) to include:

- Sampling and analysis of the facility's storm water discharges for copper, lead, and zinc during QSEs, if these parameters are not already monitored per Section XI.B;
- Sampling and analysis of the facility's authorized NSWDs for copper, lead, and zinc twice during each reporting year, unless the Discharger provides documentation in its SWPPP per Section X.G.1.e, and through its monthly visual observations and records per Section XI.A.1-3, that there are no authorized NSWDs or these authorized NSWDs are fully contained on site; and
- U.S. EPA approved analytical methods, with appropriate method detection and reporting limits relative to the TALs.

Dischargers shall implement their updated monitoring program and report the analytical results along with the rest of the non-TMDL parameters required by the Industrial Storm Water General Permit in the Storm Water Multiple Application and Report Tracking System (SMARTS). TMDL documents are available at: http://www.waterboards.ca.gov/losangeles/water issues/programs/tmdl/tmdl list.shtml

Fact Sheet for Ballona Creek Metals TMDL

Metals in excessive quantities are toxic to aquatic life and adversely impact the beneficial uses of waterbodies. The beneficial uses of Ballona Creek and Sepulveda Channel are impaired due to elevated concentrations of copper, lead, and zinc. The Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) adopted a TMDL to address these impairments in 2007 and revised the TMDL in 2013. The allocations set forth in the TMDL apply both to discharges to the impaired waterbodies as well as to upstream reaches and tributaries to them.

When the TMDL was developed, the Los Angeles Water Board determined that industrial facilities were a significant source of metals to the impaired waterbodies. There are forty-one (41) dischargers enrolled under the Industrial Storm Water General Permit within the Ballona Creek watershed. During wet weather, storm water runoff from industrial sites has the potential to be a significant contributor of metals loadings to the creek. This finding is supported by a study conducted by Stenstrom et al. (2005) on the industrial storm water monitoring program, which found that while the data collected by the industrial storm water dischargers were highly variable, the mean values for copper, lead and zinc were 1,010, 2,960, and 4,960 µg/L, respectively. During dry weather, the potential contribution of metals from industrial storm water dischargers is relatively low. Under this Industrial General Storm Water Permit, non-storm water discharges are authorized only when they do not contain significant guantities of pollutants, BMPs are in place to minimize contact with significant materials and reduce discharge volume, and a Discharger is in compliance with Regional Water Board and local agency requirements, including the Los Angeles Region's Basin Plan. The TMDL concludes in Table 4-2, Summary of permits in Ballona Creek Watershed, that industrial storm water dischargers have a high potential to be significant contributors of metals to Ballona Creek and Sepulveda Channel.

Numeric Targets

The numeric targets for the TMDL are based on the federally promulgated water quality objectives established by the California Toxics Rule for the protection of aquatic life (40 C.F.R. § 131.38). The water quality objectives for copper, lead, and zinc are concentration-based and are hardness dependent. Because hardness varies noticeably between dry weather and wet weather conditions, separate targets are established for dry weather and wet weather. The targets for copper, lead, and zinc are also dependent on a water effects ratio (WER). A WER has a default value of 1.0 unless a site-specific WER has been approved. No site-specific WERs have been approved in the Ballona Creek watershed. Conversion factors are used to convert between dissolved and total recoverable metals. These are based on the 90th percentile ratio of the dissolved metal concentration to total recoverable metal concentration, calculated separately for dry weather and wet weather, as measured in samples collected at Sawtelle Boulevard.

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Wasteload Allocations

The TMDL identifies permitted storm water dischargers, including dischargers subject to the Industrial Storm Water Permit, as responsible dischargers. The TMDL assigns to industrial storm water dischargers separate WLAs for non-storm water and storm water discharges.

Dry Weather Wasteload Allocations (WLAs)

Unauthorized non-storm water discharges (NSWDs) are assigned WLAs of zero for each parameter, since these discharges are prohibited under Section III.B.

Authorized NSWDs are assigned concentration-based dry weather WLAs for copper, lead, and zinc, which are equal to the dry-weather numeric targets. These WLAs are identified in the table below. Dry-weather WLAs apply to discharges when the maximum daily flow in Ballona Creek is less than 64 cubic feet per second at Sawtelle Boulevard.

WLAs for Authorized Non-Storm Water Discharges $(NSWDs)^{*}$ (µg/L total recoverable metals)

Copper		Lead	Zinc	
35.56		19.65	446.55	

Unauthorized NSWDs are assigned WLAs of zero for each parameter, since these discharges are prohibited under Section III.B.

Wet Weather Wasteload Allocations

The TMDL includes mass-based wet-weather WLAs for storm water discharges. The storm water WLAs are apportioned between storm water permittees using an areal weighting approach. Industrial storm water discharges are assigned the following WLA per acre.

Mass-based WLAs for Storm Water Discharges (grams/day/acre total recoverable metals)^{*}

Copper	Lead	Zinc
$1.673 \times 10^{-10} \times \text{daily storm}$	9.369 x 10^{-10} x daily storm	$1.279 \times 10^{-9} \times \text{daily storm}$
volume (L)	volume (L)	volume (L)

Multiplied by the acreage of the industrial facility

The mass-based wet-weather WLAs are derived from concentration-based numeric targets. In the case of Industrial Storm Water General Permittees, demonstrating compliance with concentration-based values rather than mass-based values is more practical given the nature of monitoring requirements in this permit. Therefore, for the purposes of implementation of this TMDL in this permit, concentration-based WLA equivalents are provided below, which are based on the concentration-based numeric targets. These concentration-based WLA equivalents are consistent with the assumptions and requirements of the mass-based WLAs assigned to storm water discharges.

Concentration-based WLA Equivalents for Storm Water Discharges (μ g/L total recoverable metals)

Copper	Lead	Zinc
13.70	76.75	104.77

Required Actions

The required actions apply to Industrial Storm Water General Permittees whose nonstorm water discharges and/or storm water discharges associated with industrial activities⁷ have the potential to contain copper, lead, or zinc, and that discharge to Ballona Creek or Sepulveda Channel either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

Compliance with Wasteload Allocations

Section VII.A requires that Dischargers comply with TMDL-specific requirements. Because industrial storm water dischargers have been found to be a significant source of metals loading to Ballona Creek and Sepulveda Channel, Responsible Dischargers (as defined above) will be assigned Level 1 Status for the TMDL pollutants as of four months after incorporation of these TMDL-specific requirements in this Order unless one of the following conditions is met for each TMDL pollutant:

- The Discharger is already in Level 1 or Level 2 Status pursuant to Section XII.C or Section XII.D for the TMDL pollutant(s); or
- The Discharger re-evaluates, with the assistance of a QISP, its Assessment of Potential Pollutant Sources (Section X.G.2.a.ix) in its current Storm Water Pollution Prevention Plan (SWPPP), relative to TMDL pollutants and finds that its non-storm water discharges and its storm water discharges associated with industrial activities do not have the potential to contain the TMDL pollutant(s)⁸; or
- The Discharger provides the following:
 - For storm water discharges, a demonstration that sampling results from the last 4 Qualifying Storm Events (QSEs) did not exceed the TMDL Action Levels (TALs)⁹, set forth in the tables below, and
 - For NSWDs, a demonstration, based on the last 6 monthly visual observations that there are no unauthorized NSWDs and that best management practices (BMPs) for any authorized NSWDs are included in

⁷ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities

⁸ At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

⁹ A TMDL Action Level (TAL) is treated in the same manner as a Numeric Action Level (NAL) for the purposes of permit requirements, including the Monitoring Implementation Plan (Section X.I), Monitoring (Section XI), and Exceedance Response Actions (Section XII).

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> the SWPPP and are being fully implemented as required by Section IV.B.3.¹⁰

The Discharger indicates it has installed Advanced BMP(s) that retain all NSWDs and the storm water volume associated with the 85th percentile, 24-hour event (Section X.H.2).^{11,12}

The Discharger must submit these demonstrations to the Los Angeles Water Board within 4 months of the State Water Board's incorporation of these TMDL-specific requirements in this Order.

A Discharger that is newly assigned Level 1 Status, pursuant to Sections V.C, VII.A, X.B. and XII.C.1-2, must conduct an "Initial Level 1 ERA Evaluation" for copper, lead, and zinc, and must certify and submit via SMARTS an "Initial Level 1 ERA Report" no later than 6 months after the incorporation of these TMDL-specific requirements in this Order. The Discharger must also revise their facility's SWPPP on the basis of the Initial Level 1 ERA Evaluation to include best management practices (BMPs) to prevent exceedances of TALs, as set forth in the tables below, in authorized NSWDs and storm water discharges associated with the facility's industrial activities. The updated SWPPP must be certified and submitted via SMARTS no later than 6 months after the incorporation of these TMDL-specific requirements. The Discharger must implement any additional BMPs identified in the Initial Level 1 ERA Evaluation and included in the revised SWPPP.

This is generally consistent with the TMDL, which states that if permittees provide a demonstration that control measures and BMPs will achieve wasteload allocations, then compliance may be demonstrated by implementation of those control measures and BMPs.

Dischargers will be required to demonstrate, through implementation of BMPs, that their facility's authorized NSWDs and its storm water discharges associated with industrial activities comply with the TALs applicable to authorized NSWDs and storm water discharges, respectively.

If sampling results indicate a TAL exceedance, the Discharger shall commence the Level 2 Status Exceedance Response Actions (ERAs) process set forth in Section XII.D.

1. Compliance with Dry-Weather WLAs

Industrial storm water dischargers subject to the dry-weather WLAs will be required to demonstrate through sampling and analysis that the facility's authorized NSWDs associated with industrial activities do not exceed the applicable TALs, expressed as instantaneous maximum values, in the table below. These TALs are based on the

¹⁰ At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

¹¹ The Discharger is not required to resubmit its SWPPP if the Advanced BMP(s) are already documented in the facility's SWPPP (e.g., BMP Summary Table). ¹² At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

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concentration-based dry weather WLAs. The TAL for lead is more stringent than the NAL in Table 2. Compliance with these TALs is necessary to achieve the dry-weather WLAs. If there is an exceedance of a TAL, the Discharger will be required to follow the ERAs process described in Section XII.

TALs for Authorized NSWDs (µg/L total recoverable metals)

Copper	Lead	Zinc
35.56	19.65	446.55

Compliance with existing conditions and requirements in the Industrial Storm Water General Permit is generally expected to ensure compliance with the applicable dryweather WLAs assigned to industrial storm water dischargers in this TMDL. The Industrial Storm Water General Permit defines dry-weather discharges (Sections III and IV.A.) as either unauthorized Non-Storm Water Discharges or authorized Non-Storm Water Discharges (NSWDs). Unauthorized NSWDs are prohibited under Section III.B. Authorized NSWDs cannot be in violation of any Basin Plan, including TMDL wasteload allocations contained in a Basin Plan, or statewide water quality control plan or policy (Section IV.B). The required Storm Water Pollution Prevention Plan (SWPPP) must include implementation of appropriate BMPs to ensure that authorized NSWDs do not contain quantities of pollutants that cause or contribute to an exceedance of a water quality standard (Section IV.B.3.c). Further, Section VI.A states that Dischargers shall ensure that industrial storm water and authorized NSWDs do not cause or contribute to an exceedance of any applicable water quality standards in any affected receiving water.

The State Water Board finds that the Industrial Storm Water General Permit contains the requirements necessary, with the modifications described above related Level 1 Status, for Dischargers to achieve the dry-weather wasteload allocations assigned to industrial storm water dischargers in the Ballona Creek Metals TMDL. As such, complying with the Industrial Storm Water General Permit, including submitting an Initial Level 1 ERA Report and updated SWPPP pursuant to Sections X.B.1-2 and XII.C.1-2, no later than 6 months after incorporation of these TMDL-specific requirements in this Order, is generally expected to ensure compliance with the dry-weather WLAs assigned to industrial storm water dischargers.

2. Compliance with Wet Weather WLAs

Industrial storm water dischargers subject to the wet-weather WLAs will be required to demonstrate through sampling and analysis that the facility's storm water discharges associated with industrial activities do not exceed the applicable TALs, expressed as instantaneous maximum values, in the table below. These TALs are based on the concentration-based WLA equivalents for wet weather, discussed above. The State Water Board has determined that demonstrating compliance with concentration-based values rather than mass-based values is more practical given the nature of monitoring requirements in this Order, which do not require a measurement of flow. These TALs are more stringent than the NALs in Table 2. Compliance with these TALs, which are more stringent than the NALs, is necessary to achieve the TMDL

WLAs. If there is an exceedance of a TAL, the Discharger will be required to follow the ERAs process described in Section XII.

Copper	Lead	Zinc
13.70	76.75	104.77

TALs for Storm Water Discharges (µg/L total recoverable metals)

Reducing the discharge of metals can be achieved by utilizing Best Management Practices (BMPs) that eliminate exposure of storm water discharges and NSWDs to pollutant sources, retain storm water onsite, and/or treat storm water prior to discharge from the industrial facility. Compliance with the existing conditions and requirements in the Industrial Storm Water General Permit, including but not limited to, conducting an Initial Level 1 ERA Evaluation for TMDL pollutants; implementing BMPs as set forth in Section X.H, including Advanced BMPs (Sections X.H.2 and X.H.6); along with BMP effectiveness monitoring (Section XI) and the Exceedance Response Actions process (Section XII), is generally expected to ensure compliance with the wet-weather WLAs assigned to industrial storm water discharges in this TMDL.

3. Conclusion

Considering the existing conditions and requirements in the Industrial Storm Water General Permit regarding unauthorized and authorized NSWDs and storm water discharges, if a Discharger complies with the Industrial Storm Water General Permit, including the ERAs process, and implementation of Advanced BMPs where necessary, the Discharger is not likely to discharge copper, lead, and/or zinc above the applicable dry-weather and wet-weather WLAs from its industrial areas. Therefore, no additional requirements beyond complying with the Industrial Storm Water General Permit, including, where required, conducting an Initial Level 1 ERA Evaluation and updating the SWPPP accordingly; implementing BMPs in the updated SWPPP; and undertaking ERAs for TALs in the same way as is required for NALs, are necessary to comply with the WLAs assigned to industrial storm water dischargers at this time.

However, if it is determined, based on, but not limited to, monitoring data and comparison of results to TALs, visual observations of the site, discharger reports, and/or site-specific inspections and/or investigations, that a Discharger may be causing or contributing to an exceedance of a WLA, the State and/or Regional Water Board retains the authority to require Dischargers to further revise SWPPPs, BMPs, and/or monitoring programs, or direct a Discharger to obtain an individual National Pollutant Discharge Elimination System (NPDES) permit, if deemed necessary.

Monitoring and Reporting Requirements

To ensure that storm water discharges comply with the Industrial Storm Water General Permit and, in particular, Section VI.A and the TALs, as necessary to achieve the wetweather WLAs, the State Water Board finds that sampling and analysis of a facility's storm water discharges for copper, lead, and zinc is necessary. Industrial Storm Water General Permittees will be required, per Section XI.B.6.e-f, to update the facility Ballona Creek Metals TMDL Page 10

Monitoring Implementation Plan (Section X.I) no later than 6 months after the incorporation of these TMDL-specific requirements in this Order to include sampling and analysis for these pollutants during QSEs, if these parameters are not already monitored per Section XI.B.

To ensure that authorized NSWDs comply with the Industrial Storm Water General Permit and, in particular, Sections IV.B and VI.A and the TALs, as necessary to achieve the dry-weather WLAs, the State Water Board finds that sampling and analysis of a facility's authorized NSWDs for copper, lead, and zinc is also necessary. Industrial Storm Water General Permittees will be required, per Section XI.B.6.e-f, to update the facility Monitoring Implementation Plan (Section X.I) no later than 6 months after incorporation of these TMDL-specific requirements in this Order to include sampling and analysis of the facility's authorized NSWDs for these pollutants twice during each reporting year, during dry weather conditions (days without measurable precipitation and at least three days after a precipitation event), unless the Discharger provides documentation in its SWPPP per Section X.G.1.e, and through its monthly visual observations and records per Section XI.A.1-3, that there are no authorized NSWDs or these authorized NSWDs are fully contained on site.

To support the additional sampling and analysis required, Industrial Storm Water General Permittees will also be required to update the facility's Monitoring Implementation Plan to include U.S. EPA approved analytical methods, with appropriate method detection and reporting limits per Section XI.B.6.e, to determine the effectiveness of the BMPs for authorized NSWDs and storm water discharges at achieving the applicable TALs. The following sampling test methods shall be used for both NSWD and storm water TALs:

Parameter	Test Method
Copper	EPA 200.8
Lead	EPA 200.8
Zinc	EPA 200.8

Responsible Dischargers shall compare sampling results with the TALs. As described above, an exceedance of a TAL will require the Discharger to follow the NAL Exceedance Response Actions (ERAs) requirements established in Section XII.

Regulatory Mechanisms

The regulatory mechanisms available to the State and/or Regional Water Board to require Industrial Storm Water General Permittees to implement additional actions and additional monitoring include: the Industrial Storm Water General Permit and the authority contained in sections 13263, 13267, and 13383 of the California Water Code. Under these regulatory mechanisms, the State and/or Regional Water Board may require an Industrial Storm Water General Permittee to collect samples of its storm water and NSWDs and analyze the discharges for copper, lead, and zinc to determine compliance with the applicable WLAs specified in the TMDL.

Proposed Addition to ATTACHMENT E, LIST OF TOTAL MAXIMUM DAILY LOADS (TMDLs) APPLICABLE TO INDUSTRIAL STORM WATER DISCHARGERS

Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria Total Maximum Daily Load (TMDL)

Resolution Nos.	2003-012; revised by R12-007
Effective Date	March 18, 2004 (2003-012); July 2, 2014 (R12-007)
Impaired Water	Marina del Rey Harbor Mothers' Beach and back basins (Basins D,
Body(ies)	E, and F)
Pollutant(s)	Total coliform, Fecal coliform, Enterococcus
Responsible	Industrial Storm Water General Permittees that discharge non-
Dischargers	storm water and/or storm water associated with industrial activities ¹
	to the impaired waterbodies either directly or via a municipal
	separate storm sewer system (MS4) or an upstream reach or
	tributary.
Required Actions	Comply with the conditions and requirements of the Industrial Storm Water General Permit (Order No. 2014-0057-DWQ). If indicator bacteria are not already addressed in the facility's current Storm Water Pollution Prevention Plan (SWPPP), including its Assessment of Potential Pollutant Sources per Section X.G.2.a.ix, then Responsible Dischargers, as defined above, shall assess all areas of industrial activity at the facility relative to their potential as a source of total coliform, fecal coliform, or enterococcus in authorized Non-Storm Water Discharges (NSWDs) and storm water discharges. The facility's SWPPP, including but not limited to the Assessment of Potential Pollutant Sources (Section X.G.2) and, where necessary, Best Management Practices (Section X.H) and Monitoring Implementation Plan (Section X.I), shall be updated based on the results. The revised SWPPP shall be certified and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.
	Responsible Dischargers that have identified industrial areas of their facility as a potential source of total coliform, fecal coliform, or enterococcus in authorized NSWDs and storm water discharges shall comply with the TMDL Action Levels (TALs) ² , expressed as instantaneous maximum values, in the table(s) below. If sampling results indicate a TAL exceedance as set forth in Section XII.A. the

¹ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

² A TMDL Action Level (TAL) is treated in the same manner as a Numeric Action Level (NAL) for the purposes of permit requirements, including the Monitoring Implementation Plan (Section X.I), Monitoring (Section XI), and Exceedance Response Actions (Section XII).

Discharger shall commence the Exceedance Response Actions (ERAs) process set forth in Section XII.

Parameter	Applicability	Reporting Units	TAL
Total Coliform	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	10,000
Total Coliform if the ratio of fecal- to-total coliform exceeds 0.1	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	1,000
Fecal Coliform	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	400
Enterococcus	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	104

The TALs apply for all three time periods: Summer dry-weather (April 1 to October 31); winter dry-weather (November 1 to March 31), and wet-weather days (defined as days of 0.1 inch of rain or more plus three days following the rain event).

The State and/or Regional Water Board may require industrial storm water dischargers to implement additional actions to reduce bacteria in authorized NSWDs and/or storm water discharges based on, but not limited to, monitoring data and comparison to applicable TALs, visual observations, discharger reports, or site-specific inspections and/or investigations.

Monitoring and Reporting Requirements

Where the facility's Assessment of Potential Pollutant Sources (described above) identifies industrial areas as a potential source of total coliform, fecal coliform, or enterococcus in authorized NSWDs and/or storm water discharges, Responsible Dischargers shall update the facility Monitoring Implementation Plan (Section X.I) per Section XI.B.6.e-f to include:

 Sampling and analysis for total coliform, fecal coliform, and enterococcus during Qualifying Storm Events if not already monitored per Section XI.B;

	 Sampling and analysis of the facility's authorized NSWDs for total coliform, fecal coliform, and enterococcus twice within a reporting year; and U.S. EPA approved analytical methods, with appropriate method detection and reporting limits relative to the TALs in the table(s) above.
	The updated Monitoring Implementation Plan shall be included in the revised SWPPP and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.
TMDL documents are	available at:
http://www.waterboard	ds.ca.gov/losangeles/water_issues/programs/tmdl/tmdl_list.shtml

Fact Sheet for Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL

One August 7, 2003, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) established the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL. The TMDL became effective on March 18, 2004. The Los Angeles Water Board revised the TMDL on June 7, 2012. The revised TMDL became effective on July 2, 2014.

Swimming in marine waters with elevated bacterial indicator densities has long been associated with adverse human health effects. Specifically, local and national epidemiological studies demonstrate that there is a causal relationship between adverse health effects and recreational water quality, as measured by bacterial indicator densities.

The Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL addresses the impairment of the water contact recreation (REC-1) beneficial use at Marina del Rey Harbor Mothers' Beach and back basins (Basins D, E, and F).

Numeric Targets

The numeric targets for Marina del Rey Harbor Mothers' Beach and back basins are based on the water quality objectives for protection of water contact recreation (REC-1) in marine waters set forth in Chapter 3 of the Water Quality Control Plan for the Los Angeles Region (Los Angeles Basin Plan) for the three bacterial indicators listed below. These numeric targets include both geometric mean limits and single sample limits and apply during both dry and wet weather, since there is water contact recreation throughout the year.

	Marine Waters (REC-1)
Geometric Mean Limits Total coliform Fecal coliform Enterococcus	1,000/100 ml 200/100 ml 35/100 ml
Single Sample Limits	
Total coliform	10,000/100 ml
Fecal coliform	400/100 ml
Enterococcus	104/100 ml
Total coliform density if	1,000/100 ml
the ratio of fecal-to-total	
coliform exceeds 0.1	

Wasteload Allocations

The Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL identifies storm water dischargers, including dischargers subject to the Industrial Storm Water

General Permit, as responsible dischargers. Industrial storm water dischargers are generally not expected to be a significant source of bacteria. Therefore, the TMDL assigns industrial storm water dischargers a wasteload allocation (WLA) equal to the bacteriological water quality objectives for protection of water contact recreation (REC-1) in marine waters set forth in Chapter 3 of the Los Angeles Basin Plan for all three time periods.³

Required Actions

The required actions apply to Industrial Storm Water General Permittees that discharge non-storm water and/or storm water associated with industrial activities⁴ to Marina del Rey Harbor Mothers' Beach and back basins either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

Currently, the Industrial Storm Water General Permit only regulates discharges of storm water that are directly related to manufacturing, processing or raw materials storage areas from industrial activities in ten major categories of industries (Attachment A to Order No. R4-2014-0057-DWQ). The bacteria loads associated with these discharges are largely unknown, since most have not monitored for bacteria. However, these discharges are currently not generally expected to be a significant source of indicator bacteria.

As described below, compliance with the conditions and requirements of the Industrial Storm Water General Permit is generally expected to achieve the WLAs assigned to industrial storm water discharges in the Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL. Where necessary, this will be verified through sampling and analysis of authorized NSWDs and storm water discharges and comparison of results to TMDL Action Levels (TALs), as described below.

Compliance with Wasteload Allocations

1. Compliance with Summer and Winter Dry-Weather WLAs

Compliance with existing conditions and requirements in the Industrial Storm Water General Permit is generally expected to ensure compliance with the summer and winter dry-weather WLAs applicable to industrial storm water dischargers. The Industrial Storm Water General Permit defines dry-weather discharges (Sections III and IV.A.) as either unauthorized NSWDs or authorized NSWDs. Unauthorized NSWDs are prohibited under Section III.B. Authorized NSWDs cannot be in violation of any Basin Plan, including TMDL WLAs contained in a Basin Plan, or statewide water quality control plan or policy (Sections IV.B and VI.A). The required Storm Water Pollution Prevention Plan (SWPPP) must include implementation of appropriate BMPs to ensure that authorized NSWDs do not contain quantities of pollutants that cause or contribute to an exceedance of a water quality standard (Section IV.B.3.c).

³ Summer dry weather (April 1 to October 31); winter dry weather (November 1 to March 31), and wetweather days (defined as days of 0.1 inch of rain or more plus three days following the rain event).

⁴ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

2. Compliance with Wet Weather WLAs

Compliance with the conditions and requirements in Section VI.A (Receiving Water Limitations) and Section X (Storm Water Pollution Prevention Plan), including subsection X.H (Best Management Practices) is generally expected to achieve the WLAs assigned to industrial storm water discharges during wet weather.

3. Conclusion

Considering the existing conditions and requirements in the Industrial Storm Water General Permit regarding unauthorized and authorized NSWDs and storm water discharges, if a Discharger complies with the Industrial Storm Water General Permit, the Discharger is not likely to discharge indicator bacteria above the WLAs from its industrial process and materials handling and storage areas, and is unlikely to contribute to an exceedance of a WLA. Therefore, no additional requirements beyond complying with the Industrial Storm Water General Permit are necessary to comply with the WLAs assigned to industrial storm water discharges at this time. However, if it is determined, based on, but not limited to, monitoring data and comparison to applicable TALs, visual observations of the site, discharger reports, and/or site-specific inspections and/or investigations, that a Discharger may be causing or contributing to an exceedance of a WLA, the State and/or Regional Water Board may require Dischargers to revise SWPPPs, BMPs, and/or monitoring programs, or direct a Discharger to obtain an individual National Pollutant Discharge Elimination System (NPDES) permit if deemed necessary.

The State and Regional Water Board recognize there may be instances in the future when discharges from an industrial category regulated by the Industrial Storm Water General Permit may be identified as a source of indicator bacteria. These instances may arise as the U.S. Environmental Protection Agency continues to expand the regulatory universe of facilities and facility areas regulated by storm water regulations or where monitoring data and comparison to applicable TALs, visual observations, discharger reports, or site-specific inspections and/or investigations, or other pertinent data or information reveal that a facility's discharge (storm water discharges or NSWDs) exceeds the WLAs and, therefore, is a significant source of indicator bacteria. In these instances, the State and/or Regional Water Board may impose additional conditions and requirements on industrial storm water dischargers, including but not limited to, BMP implementation and monitoring requirements that will address indicator bacteria in industrial storm water and NSWDs in order to comply with the WLAs in this TMDL.

Monitoring and Reporting Requirements

Dischargers covered under the Industrial Storm Water General Permit are required to execute visual observations of their site and sampling and analysis of qualifying storm events (IGP, Sections XI.A and XI.B). During the observation events, the Discharger is required to observe and report on the following: (1) the presence or indications of prior, current, or potential unauthorized NSWDs and their sources, (2) authorized NSWDs,

sources, and associated BMPs to ensure compliance with the requirements as described in the above paragraph, and (3) outdoor industrial equipment and storage areas, outdoor industrial activities areas, BMPs, and all other potential sources of industrial pollutants (IGP, Section XI.A.1).

Industrial storm water dischargers enrolled in the Industrial Storm Water General Permit are required to complete an Assessment of Potential Pollutant Sources as an element of a facility's SWPPP to identify pollutants that are likely to be present in the facility's industrial storm water discharges and authorized NSWDs. Dischargers with an active Notice of Intent who have identified⁵ industrial sources of indicator bacteria with the potential to be present in the facility's industrial storm water discharges or authorized NSWDs are required to take effluent samples for indicator bacteria during each Qualifying Storm Event.

1. TMDL Action Levels (TALs)

Responsible Dischargers shall analyze effluent samples for indicator bacteria and compare sampling results to the TALs below. A TAL is treated in the same manner as a Numeric Action Level (NAL) for the purposes of permit requirements, including the Monitoring Implementation Plan (Section X.I), Monitoring (Section XI), and Exceedance Response Actions (Section XII). Therefore, Responsible Dischargers shall additionally comply with the TAL exceedance requirements established for this TMDL. A TAL exceedance will require the Responsible Discharger to follow the Exceedance Response Actions (ERAs) in Section XII.

Parameter	Applicability	Reporting Units	TAL
Total Coliform	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	10,000
Total Coliform if the ratio of fecal- to-total coliform exceeds 0.1	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	1,000
Fecal Coliform	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	400
Enterococcus	Storm Water Discharges/ Authorized NSWDs	MPN or CFU/100 mL	104

Marina del Rey Harbor Mothers' Beach and back basins (Marine Waters, REC-1)

The TALs apply for all three time periods: Summer dry-weather (April 1 to October 31); winter dry-weather (November 1 to March 31), and wet-weather days (defined as days of 0.1 inch of rain or more plus three days following the rain event).

An evaluation of compliance with the 30-day geometric mean WLAs for total coliform, fecal coliform, and enterococcus established in the TMDL is currently beyond the scope

⁵ Either in the facility's existing SWPPP, or through the update to the facility SWPPP and the Assessment of Potential Pollutant Sources, as described below.

of the Industrial Storm Water General Permit's sampling requirements. Given that industrial storm water dischargers are not expected to be a significant source of bacteria, TALs are only established for the single sample bacteria objectives.

2. Updating the Facility SWPPP: Assessment of Potential Pollutant Sources

If indicator bacteria are not already addressed in the facility's current SWPPP, upon incorporation of these TMDL-specific requirements into the General Permit, Responsible Dischargers will be required to assess all areas of industrial activity at the facility relative to their potential as a source of total coliform, fecal coliform, or enterococcus in authorized NSWDs and storm water discharges. The facility's SWPPP, including but not limited to the Assessment of Potential Pollutant Sources (Section X.G.2) and, where necessary, Best Management Practices (Section X.H) and Monitoring Implementation Plan (Section X.I), shall be updated based on the results.

The revised SWPPP shall be certified and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.

3. Updating the Facility Monitoring Implementation Plan

<u>Authorized NSWDs Identified as a Potential Source</u>: Responsible Dischargers that identify industrial areas of their facility as a potential source of total coliform, fecal coliform, or enterococcus in authorized NSWDs will be required to update the facility Monitoring Implementation Plan to include sampling and analysis of authorized NSWDs for total coliform, fecal coliform, and/or enterococcus twice during each reporting year, unless the Discharger provides documentation in its SWPPP per Section X.G.1.e, and through its monthly visual observations and records per Section XI.A.1-3, that there are no authorized NSWDs or these authorized NSWDs are fully contained on site. Sampling results will be used to ensure that authorized NSWDs comply with the Industrial Storm Water General Permit and, in particular, Sections IV.B and VI.A, consistent with the WLAs.

The updated Monitoring Implementation Plan must be included with the revised SWPPP and submitted via SMARTS no later than 6 months after incorporation of these TMDLspecific requirements in this Order.

<u>Storm Water Discharges Identified as a Potential Source</u>: Responsible Dischargers that identify industrial areas of their facility as a potential source of total coliform, fecal coliform, or enterococcus in storm water discharges shall verify BMP effectiveness by comparing sampling results with TALs in order to ensure that storm water discharges comply with the Industrial Storm Water General Permit and, in particular, Section VI.A. Industrial Storm Water General Permittees will be required to update the facility Monitoring Implementation Plan by to include sampling and analysis for total coliform, fecal coliform, and/or enterococcus during Qualifying Storm Events, if these parameters are not already monitored per Section XI.B.

The updated Monitoring Implementation Plan must be included with the revised SWPPP and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.

<u>Analytical Methods</u>: To support the additional sampling and analysis required, Industrial Storm Water General Permittees will also be required to update the facility's Monitoring Implementation Plan to include U.S. EPA approved analytical methods, with appropriate method detection and reporting limits per Section XI.B.6.e, to determine the effectiveness of the BMPs for authorized NSWDs and storm water discharges at achieving the applicable TALs.

The updated Monitoring Implementation Plan must be included with the revised SWPPP and submitted via SMARTS no later than 6 months after incorporation of these TMDLspecific requirements in this Order.

Regulatory Mechanisms

The regulatory mechanisms available to the State and/or Regional Water Board to require Industrial Storm Water General Permittees to implement additional actions and additional monitoring include: the Industrial Storm Water General Permit and the authority contained in sections 13263, 13267, and 13383 of the California Water Code. Under these regulatory mechanisms, the State and/or Regional Water Board may require an Industrial Storm Water General Permittee to collect samples of its storm water and NSWDs and analyze the discharges for indicator bacteria to determine compliance with the WLAs during each time period specified in the TMDL.

Proposed Addition to ATTACHMENT E, LIST OF TOTAL MAXIMUM DAILY LOADS (TMDLs) APPLICABLE TO INDUSTRIAL STORM WATER DISCHARGERS

Resolution No.	R05-012; revised by R14-004
Effective Date	March 22, 2006 (R05-012); October 16, 2015 (R14-004)
Impaired Water	Marina Del Rey Harbor
Body(ies)	
Pollutant(s)	Copper, lead, zinc, chlordane, total DDT, p,p'-DDE, and total PCBs
Responsible Dischargers	Industrial Storm Water Permittees that discharge storm water associated with industrial activities ¹ and/or non-storm water to the impaired waterbody either directly or via a municipal separate storm sewer system (MS4) or an upstream waterbody.
Required Actions	Comply with the conditions and requirements of the Industrial Storm Water General Permit (Order No. 2014-0057-DWQ).
	If copper, lead, zinc, chlordane, total DDT, p,p'-DDE, and total PCBs are not already addressed in the facility's current Storm Water Pollution Prevention Plan (SWPPP), including its Assessment of Potential Pollutant Sources per Section X.G.2.a.ix, then Responsible Dischargers, as defined above, shall assess all areas of industrial activity at the facility relative to their potential as a source of copper, lead, zinc, chlordane, total DDT, p,p'-DDE, and total PCBs in storm water discharges associated with industrial activities and in authorized Non-Storm Water Discharges (NSWDs). The facility's SWPPP, including but not limited to the Assessment of Potential Pollutant Sources (Section X.G.2) and, where necessary, Best Management Practices (Section X.H) and Monitoring Implementation Plan (Section X.I), shall be updated based on the results. The revised SWPPP shall be certified and submitted via SMARTS no later than 6 months after incorporation of these TMDL-specific requirements in this Order.
	Responsible Dischargers that have identified ² their facility as a potential source of copper, lead, zinc, chlordane, total DDT, p,p'-DDE, and total PCBs in storm water discharges associated with industrial activities and/or in authorized NSWDs shall comply with a TMDL Action Level (TAL) for Suspended Sediment Concentration (SSC) of 1 mg/L. The following analytical test method shall be used.

Marina Del Rey Harbor Total Maximum Daily Load (TMDL) for Toxic Pollutants

¹ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities. ² Either in the facility's existing SWPPP, or through the update to the facility SWPPP and the Assessment

of Potential Pollutant Sources, as described below.

	Parameter	Test Method
	SSC	ASTM D3877-97
	If sampling results indicate a Section XII.A, the Discharger Response Actions (ERAs) proc	TAL exceedance as set forth in shall commence the Exceedance ess set forth in Section XII.
	The State and/or Regional W Storm Water General Permitte to reduce copper, lead, zinc, c total PCBs in storm water dis activities and in authorized NS monitoring data and compa observations, discharger rep and/or investigations.	Ater Board may require Industrial ees to implement additional actions hlordane, total DDT, p,p'-DDE, and scharges associated with industrial SWDs based on, but not limited to, arison to the SSC TAL, visual ports, or site-specific inspections
	Monitoring and Reporting Requirements	
	Where the facility's Assessme (described above) identifies the copper, lead, zinc, chlordane, the in storm water discharges a and/or in authorized NSWD update the facility Monitoring per Section XI.B.6.e-f to include	ent of Potential Pollutant Sources ne facility as a potential source of otal DDT, p,p'-DDE, and total PCBs associated with industrial activities s, Responsible Dischargers shall Implementation Plan (Section X.I) e:
	 Sampling and analysis Events (QSEs); 	for SSC during Qualifying Storm
	 Sampling and analysis 	of the facility's authorized NSWDs
	 U.S. EPA approved an method detection and r TAL. 	porting year; and alytical methods, with appropriate reporting limits relative to the SCC
	The updated Monitoring Implei the revised SWPPP and subm months after incorporation of the this Order.	mentation Plan shall be included in nitted via SMARTS no later than 6 nese TMDL-specific requirements in
TMDL documents are a	available at:	
http://www.waterboards	s.ca.gov/losangeles/water issue	s/programs/tmdl/tmdl_list.shtml

Fact Sheet for Marina Del Rey Harbor Toxic Pollutants TMDL

Copper, lead, zinc, chlordane, DDT, p,p'-DDE, and PCBs and sediment toxicity are impairing the beneficial uses of Marina Del Rey Harbor, including marine habitat, wildlife habitat, commercial and sport fishing, among others. The Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) adopted a TMDL to address these impairments in 2005 and revised the TMDL in 2014. The allocations set forth in the TMDL apply to dischargers within the Marina del Rey Harbor subwatershed.

When the TMDL was developed, the Los Angeles Water Board determined that urban runoff, including discharges from industrial facilities, was a substantial source of metals and organic pollutants to Marina del Rey Harbor. While chlordane, DDT, and PCBs have been banned in the United States for many years, the physiochemical properties of these pollutants cause them to persist in the environment, bioaccumulate through the food web, and pose risks to aquatic life, wildlife, and human health. The organic chemicals (chlordane, DDT, p,p'-DDE, PCBs) and metals causing impairment of the harbor bind to soil particles making them easy to transport via suspended sediment in non-storm water and storm water discharges. Contaminated sediments accumulate in the harbor and aquatic organisms are exposed to these toxic pollutants.

Numeric Targets

The numeric targets are based on the narrative objectives in the Los Angeles Region Basin Plan, the sediment quality objectives in the statewide Enclosed Bays and Estuaries Plan, and sediment quality guidelines, as well as federally promulgated criteria for copper (40 C.F.R. § 131.38).

Wasteload Allocations

The wasteload allocations (WLAs) assigned to Industrial Storm Water General Permittees are based on mass per acreage, and include WLAs for copper, lead, zinc, chlordane, total DDT, p,p'-DDE, and total PCBs in suspended sediment. The WLAs are as follows:

Metals	Mass (g/yr/ac)
Copper	1.9
Lead	2.6
Zinc	8.5
Organic Chemicals	Mass (mg/yr/ac)
Chlordane	0.03
DDT	0.09
p,p'-DDE	0.12
PCBs	1.3

WLAs for Industrial Storm Water General Permittees (annual pollutant mass per acre)

Required Actions

The required actions apply to Industrial Storm Water Permittees that discharge storm water associated with industrial activities³ and/or non-storm water to Marina del Rey Harbor either directly or via a municipal separate storm sewer system (MS4) or an upstream waterbody.

If copper, lead, zinc, chlordane, DDT, p,p'-DDE, and PCBs are not already addressed in the facility's current Storm Water Pollution Prevention Plan (SWPPP), including its Assessment of Potential Pollutant Sources per Section X.G.2.a.ix, then Responsible Dischargers, as defined above, will be required to assess all areas of industrial activity at the facility relative to their potential as a source of these parameters in authorized Non-Storm Water Discharges (NSWDs) and storm water discharges. The facility's SWPPP, including but not limited to the Assessment of Potential Pollutant Sources (Section X.G.2) and, where necessary, Best Management Practices (Section X.H) and Monitoring Implementation Plan (Section X.I), must be updated based on the results, pursuant to Section X.B.1-2. The revised SWPPP must be certified and submitted via SMARTS no later than 6 months after the incorporation of these TMDL-specific requirements into this Order.

Compliance with Wasteload Allocations

Responsible Dischargers subject to the Marina del Rey Harbor Toxic Pollutants TMDL will be required to implement BMPs identified in their updated SWPPP and conduct sampling and analysis of authorized NSWDs and storm water discharges for Suspended Sediment Concentration (SSC) to assess BMP effectiveness in order to ensure their authorized NSWDs and storm water discharges comply with the WLAs listed above.

Regarding NSWDs, the Industrial Storm Water General Permit identifies these as either unauthorized NSWDs or authorized NSWDs (Sections III and IV.A.). Unauthorized NSWDs are prohibited under Section III.B. Authorized NSWDs cannot be in violation of any Basin Plan, including TMDL WLAs contained in a Basin Plan, or statewide water quality control plan or policy (Section IV.B). The required Storm Water Pollution Prevention Plan (SWPPP) must include implementation of appropriate BMPs to ensure that authorized NSWDs do not contain quantities of pollutants that cause or contribute to an exceedance of a water quality standard (Section IV.B.3.c). Further, Section VI.A stipulates that Dischargers shall ensure that industrial storm water and authorized NSWDs do not cause or contribute to an exceedance of any applicable water quality standards in any affected receiving water.

Regarding storm water discharges, reducing the discharge of copper, lead, zinc, chlordane, DDT, p,p'-DDE, and PCBs in suspended sediment can be achieved by utilizing Best Management Practices (BMPs). The pollutants addressed by the TMDL preferentially bind to sediment; therefore, BMP that prevent erosion and sedimentation

³ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

can be particularly effective. Additionally, BMPs that eliminate exposure of storm water discharges and NSWDs to pollutant sources, retain storm water onsite, and/or treat storm water prior to discharge from the industrial facility can be used.

Therefore, compliance with the existing conditions and requirements in the Industrial Storm Water General Permit, including but not limited to, updating the SWPPP to address TMDL pollutants and suspended sediment in the facility's discharges; implementing BMPs as set forth in Section X.H, including, in particular, Erosion and Sediment Controls (Section X.H.1.e) and Advanced BMPs (Sections X.H.2 and X.H.6); along with BMP effectiveness monitoring (Section XI) and the Exceedance Response Actions process (Section XII), is generally expected to ensure compliance with the WLAs assigned to industrial storm water dischargers in the Marina del Rey Harbor Toxic Pollutants TMDL.

Responsible Dischargers that have identified⁴ their facility as a potential source of copper, lead, zinc, chlordane, DDT, p,p'-DDE, and/or PCBs in storm water discharges associated with industrial activities and/or in authorized NSWDs shall comply with a TMDL Action Level (TAL)⁵ for Suspended Sediment Concentration (SSC) of 1 mg/L, expressed as an instantaneous maximum value.⁶ Responsible Dischargers will be required to demonstrate through sampling and analysis that the facility's authorized NSWDs and its storm water discharges associated with industrial activities do not exceed the SSC TAL. If sampling results indicate a TAL exceedance as set forth in Section XII.A, the Discharger shall commence the Exceedance Response Actions (ERAs) process set forth in Section XII.

In conclusion, considering the existing conditions and requirements in the Industrial Storm Water General Permit regarding unauthorized and authorized NSWDs and storm water discharges, if a Discharger complies with the Industrial Storm Water General Permit, including updating the SWPPP and implementing Erosion and Sediment Control BMPs and other Advanced BMPs where necessary, the Discharger is not likely to discharge copper, lead, zinc, chlordane, DDT, p,p'-DDE, and/or PCBs above the applicable WLAs from its industrial areas. Therefore, no additional requirements beyond complying with the Industrial Storm Water General Permit, including updating and implementing ERAs for exceedances of the SSC TAL

⁴ Either in the facility's existing SWPPP, or through the update to the facility SWPPP and the Assessment of Potential Pollutant Sources, as described below.

⁵ A TMDL Action Level (TAL) is treated in the same manner as a Numeric Action Level (NAL) for the purposes of permit requirements, including the Monitoring Implementation Plan (Section X.I), Monitoring (Section XI), and Exceedance Response Actions (Section XII).

⁶ As stated above, the pollutants preferentially bind to sediments; therefore, the main source of these organic substances in storm water and non-storm water discharges from industrial facilities is sediment that runs off the site. While the Industrial Storm Water General Permit includes numeric action levels (NALs) for total suspended solids (TSS) of 400 mg/L as an instantaneous maximum threshold and 100 mg/L as an annual average threshold, compliance with these NALs for TSS is not sufficient to comply with the WLAs for copper, lead, zinc, chlordane, DDT, p,p'-DDE, and PCBs. Suspended sediment concentration (SSC) is a better measure of the total amount of sediment transported in storm water runoff. Preventing the discharge of sediments would ensure that the pollutants are not mobilized in storm water runoff.

are necessary to comply with the WLAs assigned to industrial storm water dischargers at this time.

However, if it is determined, based on, but not limited to, monitoring data and comparison of results to the SSC TAL, observations of the site, discharger reports, and/or site-specific inspections and/or investigations, that a Discharger may be causing or contributing to an exceedance of a WLA, the State and/or Regional Water Board retains the authority to require Dischargers to further revise SWPPPs, BMPs, and/or monitoring programs, or direct a Discharger to obtain an individual National Pollutant Discharge Elimination System (NPDES) permit, if deemed necessary.

Monitoring and Reporting Requirements

To ensure that storm water discharges comply with the Industrial Storm Water General Permit and, in particular, Section VI.A and the SSC TAL, as necessary to achieve the WLAs, the State Water Board finds that sampling and analysis of a facility's storm water discharges for SSC is necessary. Industrial Storm Water General Permittees identified as Responsible Dischargers, above, will be required, per Section XI.B.6.e-f, to update the facility Monitoring Implementation Plan (Section X.I) no later than 6 months after the incorporation of these TMDL-specific requirements into this Order to include sampling and analysis for SSC during Qualifying Storm Events.

To ensure that authorized NSWDs comply with the Industrial Storm Water General Permit and, in particular, Sections IV.B and VI.A and the SSC TAL, as necessary to achieve the WLAs, the State Water Board finds that sampling and analysis of a facility's authorized NSWDs for SSC is also necessary. Industrial Storm Water General Permittees will be required, per Section XI.B.6.e-f, to update the facility Monitoring Implementation Plan (Section X.I) no later than 6 months after the incorporation of these TMDL-specific requirements into this Order to include sampling and analysis of the facility's authorized NSWDs for SSC twice during each reporting year, unless the Discharger provides documentation in its SWPPP per Section X.G.1.e, and through its monthly visual observations and records per Section XI.A.1-3, that there are no authorized NSWDs or these authorized NSWDs are fully contained on site.

To support the additional sampling and analysis required, Industrial Storm Water General Permittees will also be required to update the facility's Monitoring Implementation Plan to include U.S. EPA approved analytical methods, with appropriate method detection and reporting limits per Section XI.B.6.e, to determine the effectiveness of the BMPs for authorized NSWDs and storm water discharges at achieving the applicable TAL for SSC.

The following analytical test method is appropriate.

Parameter	Test Method
SSC	ASTM D3877-97

Regulatory Mechanisms

The regulatory mechanisms available to the State and/or Regional Water Board to require Industrial Storm Water General Permittees to implement additional actions and additional monitoring include: the Industrial Storm Water General Permit and the authority contained in sections 13263, 13267, and 13383 of the California Water Code. Under these regulatory mechanisms, the State and/or Regional Water Board may require an Industrial Storm Water General Permittee to collect samples of its storm water and NSWDs and analyze the discharges for SSC and copper, lead, zinc, chlordane, DDT, p,p'-DDE, and PCBs in suspended sediment to determine compliance with the applicable WLAs specified in the TMDL.

