
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 (Los Angeles River Watershed)

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 Los Angeles River Watershed:

- Los Angeles River and Tributaries Metals TMDL
- Los Angeles River TMDL for Nitrogen Compounds and Related Effects
- Long Beach City Beaches and Los Angeles River Estuary TMDL for Indicator Bacteria

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 will forward all timely received written comments along with the proposed TMDL-specific permit requirements to the State Water Board for consideration during 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.

¹ The Industrial General Permit is available electronically at:
http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml.

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, March 31, 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 – LA River Watershed.**" 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 Pavlova.Vitale@waterboards.ca.gov 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

Los Angeles River and Tributaries Metals Total Maximum Daily Load (TMDL)

Resolution No.	R07-014; revised by R10-003
Effective Date	October 29, 2008 (R07-014); November 3, 2011 (R10-003)
Impaired Water Body(ies)	Los Angeles River Reaches 1, 2, and 4, and tributaries, including Aliso Canyon Wash, Dry Canyon Creek, McCoy Canyon Creek, Monrovia Canyon Creek, Tujunga Wash, Burbank Western Channel, Rio Hondo Reach 1, and Compton Creek
Pollutant(s)	Cadmium (wet weather only), copper, lead, zinc, and selenium (dry weather only)
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 cadmium, copper, lead, zinc, or selenium 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	<p><i>Compliance with Wasteload Allocations</i></p> <p>Comply with the conditions and requirements of this Industrial Storm Water General Permit (Order No. 2014-0057-DWQ).</p> <p>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:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ For storm water discharges, a demonstration that sampling

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

² At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

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 monthly visual observations that there are no unauthorized NSWDs and that best management practices (BMPs) for any authorized NSWDs are included in the SWPPP and are being fully implemented as required by Section IV.B.3.⁴
- 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).^{5,6}

The Discharger shall 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, shall conduct an “Initial Level 1 ERA Evaluation” for cadmium, copper, lead, zinc, and selenium, and shall 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 shall 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 shall be certified and submitted via SMARTS no later than 6 months after the incorporation of these TMDL-specific requirements in this Order. The Discharger shall implement any additional BMPs identified in the Initial Level 1 ERA Evaluation and included in the revised SWPPP.

Responsible Dischargers shall comply with the TALs, expressed as instantaneous maximum values, in the tables below. If sampling results indicate a TAL exceedance, the Discharger shall commence the Level 2 Status ERAs process set forth in Section XII.D.

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

	Copper	Lead	Zinc	Selenium
Los Angeles River Reach 5	30	19	--	--

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).

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).

Bell Creek				
Los Angeles River Reach 6	30	19	--	5
Los Angeles River Reach 4	26	10	--	--
Los Angeles River Reach 3 above LA-Glendale Water Reclamation Plant (WRP) Verdugo Wash	23	12	--	--
Los Angeles River Reach 3 below LA-Glendale WRP	26	12	--	--
Burbank Western Channel above WRP	26	14	--	--
Burbank Western Channel below WRP	19	9.1	--	--
Los Angeles River Reach 2 Arroyo Seco	22	11	--	--
Los Angeles River Reach 1	23	12	--	--
Compton Creek	19	8.9	--	--
Rio Hondo Reach 1	13	5	131	--

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

Cadmium	Copper	Lead	Zinc
3.1	17	62	159

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

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

The State and/or Regional Water Board may require industrial stormwater dischargers to implement additional actions to reduce discharges of cadmium, copper, lead, zinc, and/or selenium in authorized NSWs 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 cadmium, 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, zinc, and selenium 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 Los Angeles River and Tributaries Metals TMDL

Metals in excessive quantities are toxic to aquatic life and adversely impact the beneficial uses of waterbodies. The beneficial uses of the Los Angeles River and its tributaries are impaired due to elevated concentrations of copper, cadmium, lead, zinc, and selenium.⁷ The Los Angeles Regional Water Quality Control Board (Los Angeles Board) adopted a TMDL to address these impairments in 2007 and revised the TMDL in 2010. 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. This determination was made based on a review of available sampling results from the monitoring programs conducted under the Industrial Storm Water General Permit and the number of industrial facilities within the watershed. At present, there are approximately 1,253 industrial facilities enrolled in the Industrial Storm Water General Permit within the Los Angeles River Watershed. Exceedances of the applicable water quality objectives have been frequently observed in sampling results. 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. The TMDL concludes in Table 4-2, Summary of Source Assessment, that industrial storm water dischargers have the potential to be significant contributors of metals to the Los Angeles River and its tributaries.

During dry weather, the potential contribution of metals from industrial storm water dischargers is lower. Under this Industrial General Storm Water Permit, non-storm water discharges are authorized only when they do not contain significant quantities 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.

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 cadmium, copper, lead, and zinc are concentration-based and are hardness dependent. Default conversion factors are used to convert between dissolved and total recoverable metals.

⁷ The TMDL also states that Reach 6 and its tributaries are impaired during dry weather conditions due to elevated levels of selenium; however, because the sources of selenium appear to be related to natural levels of selenium in the soils, no additional actions to control selenium were required by the TMDL (Los Angeles River Metals TMDL, pgs. 4, 7-8).

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, zinc, and selenium, which are equal to the dry-weather numeric targets. These WLAs are identified in the table below. The dry-weather WLAs vary depending on the location of the discharge in the watershed, given differences in hardness. Dry-weather WLAs apply to discharges when the maximum daily flow in the Los Angeles River at any location is less than 500 cubic feet per second.

WLAs for Authorized NSWDs ($\mu\text{g/L}$ total recoverable metals)

	Copper	Lead	Zinc	Selenium
Los Angeles River Reach 5 Bell Creek	30 x WER	19 x WER	--	--
Los Angeles River Reach 6	30 x WER	19 x WER	--	5
Los Angeles River Reach 4	26 x WER	10 x WER	--	--
Los Angeles River Reach 3 above LA-Glendale Water Reclamation Plant (WRP) Verdugo Wash	23 x WER	12 x WER	--	--
Los Angeles River Reach 3 below LA-Glendale WRP	26 x WER	12 x WER	--	--
Burbank Western Channel above WRP	26 x WER	14 x WER	--	--
Burbank Western Channel below WRP	19 x WER	9.1 x WER	--	--
Los Angeles River Reach 2 Arroyo Seco	22 x WER	11 x WER	--	--
Los Angeles River Reach 1	23 x WER	12 x WER	--	--
Compton Creek	19 x WER	8.9 x WER	--	--
Rio Hondo Reach 1	13 x WER	5 x WER	131 x WER	--

NOTE: A Water Effects Ratio (WER) has a default value of 1.0 unless site-specific WER(s) are approved. No site-specific values have been approved for industrial storm water discharges; therefore, the WER value of 1.0 applies in the table above.

Wet Weather WLAs

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

	Concentration (grams/day/acre total recoverable metals)*
Cadmium	$WER \times (7.6 \times 10^{-12}) \times \text{daily volume (L)} - (4.8 \times 10^{-6})$
Copper	$WER \times (4.2 \times 10^{-11}) \times \text{daily volume (L)} - (2.6 \times 10^{-5})$
Lead	$WER \times (1.5 \times 10^{-10}) \times \text{daily volume (L)} - (1.04 \times 10^{-5})$
Zinc	$WER \times (3.9 \times 10^{-10}) \times \text{daily volume (L)} - (2.2 \times 10^{-4})$

* 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

	Concentration ($\mu\text{g/L}$ total recoverable metals)
Cadmium	3.1 x WER
Copper	17 x WER
Lead	62 x WER
Zinc	159 x WER

As noted above for the WLAs for authorized NSWDLs, WER(s) have a default value of 1.0 unless site-specific WER(s) are approved. No site-specific values have been approved for industrial storm water discharges; therefore, the WER value of 1.0 applies in the tables above for the wet weather WLAs.

Required Actions

The required actions apply to Industrial Storm Water General Permittees whose non-storm water discharges and/or storm water discharges associated with industrial activities⁸ have the potential to contain cadmium, copper, lead, zinc, or selenium and

⁸ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities

that discharge to Los Angeles River Reaches 1, 2, and 4, and tributaries (including Aliso Canyon Wash, Dry Canyon Creek, McCoy Canyon Creek, Monrovia Canyon Creek, Tujunga Wash, Burbank Western Channel, Rio Hondo Reach 1, and Compton Creek) 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 the Los Angeles River and its tributaries, 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)⁹; 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)¹⁰, 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 the SWPPP and are being fully implemented as required by Section IV.B.3.¹¹
- 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).^{12,13}

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.

⁹ At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

¹⁰ 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).

¹¹ At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

¹² 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).

¹³ At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

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 cadmium, copper, lead, zinc, and selenium, 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 storm water discharges and NSWDs associated with industrial activities comply with the TALs applicable to NSWDs and storm water discharges.

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 concentration-based dry weather WLAs. The TALs for copper, lead, and zinc are more stringent than the NALs in Table 2.¹⁴ Compliance with these TALs is necessary to achieve the dry-weather WLAs. Since no site-specific Water Effects Ratio has been approved for industrial storm water discharges, the WER value of 1.0 has been applied to the TALs. 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	Selenium
Los Angeles River Reach 5 Bell Creek	30	19	--	--
Los Angeles River Reach 6	30	19	--	5
Los Angeles River Reach 4	26	10	--	--

¹⁴ The TAL for selenium is equal to the NAL for selenium in Table 2.

Los Angeles River Reach 3 above LA-Glendale Water Reclamation Plant (WRP) Verdugo Wash	23	12	--	--
Los Angeles River Reach 3 below LA-Glendale WRP	26	12	--	--
Burbank Western Channel above WRP	26	14	--	--
Burbank Western Channel below WRP	19	9.1	--	--
Los Angeles River Reach 2 Arroyo Seco	22	11	--	--
Los Angeles River Reach 1	23	12	--	--
Compton Creek	19	8.9	--	--
Rio Hondo Reach 1	13	5	131	--

Compliance with existing conditions and requirements in the Industrial Storm Water General Permit is generally expected to ensure compliance with the applicable dry-weather 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 Los Angeles River and Tributaries 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. Since no site-specific WER has been approved for industrial storm water discharges, the WER value of 1.0 has been applied to the TALs. 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.

TALs for Storm Water Discharges ($\mu\text{g/L}$ total recoverable metals)

Cadmium	Copper	Lead	Zinc
3.1	17	62	159

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 cadmium, copper, lead, zinc, and/or selenium 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 would be done 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 wet-weather WLAs, the State Water Board finds that sampling and analysis of a facility's storm water discharges for cadmium, 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 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, zinc, and selenium 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 NSWDS and storm water TALs:

Parameter	Test Method
Cadmium	EPA 200.8
Copper	EPA 200.8
Lead	EPA 200.8
Zinc	EPA 200.8
Selenium	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 cadmium, copper, lead, zinc, and selenium to determine compliance with the applicable WLAs specified in the TMDL.

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

Los Angeles River Total Maximum Daily Load (TMDL) for Nitrogen Compounds and Related Effects

Resolution No.	R03-009; revised by R03-016 and R12-010
Effective Date	March 23, 2004 (R03-009); September 27, 2004 (R03-016); August 7, 2014 (R12-010)
Impaired Water Body(ies)	Los Angeles River Reaches 1-6, Tujunga Wash, Burbank Western Channel, Verdugo Wash, Arroyo Seco, Rio Hondo, Compton Creek
Pollutant(s) and Related Effect(s)	Nitrogen Compounds (Total Ammonia as Nitrogen, Nitrate as Nitrogen, and Nitrite as Nitrogen), Scum/Foam, Odor, pH
Responsible Dischargers	<p>Industrial Storm Water General Permittees whose facilities fall within Standard Industrial Classification (SIC) codes associated with the TMDL pollutants as set forth in Table 1 (102X, 144X, 207X, 281X, 284X, 287X, 34XX, 3479, 45XX and 4953) and that discharge non-storm water and/or storm water associated with industrial activities¹ to the impaired waterbodies either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.</p> <p>The State and/or Regional Water Board may identify other Responsible Dischargers in addition to those within the SIC codes listed above based on site-specific inspections and/or investigations.</p>
Required Actions	<p>Comply with the conditions and requirements of the Industrial Storm Water General Permit (Order No. 2014-0057-DWQ).</p> <p>If nitrogen compounds and related effects, including pH, odor, and scum/foam, 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 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), 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.</p>

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

Responsible Dischargers shall comply with the existing NALs for pH, ammonia-N, and nitrate+nitrite-N in Table 2. Additionally, these Responsible Dischargers shall comply with the TMDL Action Levels (TALs)² for ammonia-N, expressed as instantaneous maximum values, in the table below. If sampling results indicate a NAL/TAL exceedance as set forth in Section XII.A, the Discharger shall commence the Exceedance Response Actions (ERAs) process set forth in Section XII.

Ammonia-N TALs for Storm Water Discharges and NSWDS from Industrial Storm Water Dischargers (instantaneous maximum, mg/L)

LA River above LA-Glendale WRP	LA River below LA-Glendale WRP	LA River Tributaries
4.7	8.7	10.1

The State and/or Regional Water Board may require industrial storm water dischargers to implement additional actions to address nitrogen compounds and related effects, including odor, scum/foam and pH levels outside the acceptable range of 6.0 to 9.0 pH units, in authorized NSWDS and/or storm water discharges based on, but not limited to, monitoring data and comparison to applicable NALs/TALs, visual/olfactory 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 nitrogen compounds and related effects, including odor, scum/foam, or pH levels outside the acceptable range, 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 nitrogen compounds during Qualifying Storm Events (QSEs) if not already monitored per Section XI.B;³
- Sampling and analysis of the facility’s authorized NSWDS for

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).

³ Sampling and analysis for pH during QSEs is already required by Section XI.B.6.b. Responsible Dischargers for this TMDL shall continue to follow the requirements of Sections XI.B.6.b and XI.C.2 for pH, and shall compare results to the NAL for pH in Table 2. Sampling event visual observations are also already required by Section XI.A.2, including a requirement to observe and record the presence or absence of floating and suspended materials, such as scum/foam, and odors. Responsible Dischargers for this TMDL shall continue to follow the requirements of Sections XI.A.2, including subparagraph XI.A.2.c.

	<p>nitrogen compounds and pH, and observations for related effects, including scum/foam and odor, twice within a reporting year; and</p> <ul style="list-style-type: none">• U.S. EPA approved analytical methods, with appropriate method detection and reporting limits relative to the TALs in the table above. <p>The updated Monitoring Implementation Plan shall be included in the revised SWPPP and submitted via SMARTS no later than 6 months after the incorporation of these TMDL-specific requirements in this Order.</p> <p>Dischargers shall implement their updated SWPPP and 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 SMARTS.</p>
<p>TMDL documents are available at: http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/tmdl_list.shtml</p>	

Fact Sheet for the Los Angeles River Nitrogen Compounds and Related Effects TMDL

The Los Angeles River TMDL for Nitrogen Compounds and Related Effects addresses nitrate, nitrite, and ammonia and related effects of elevated concentrations of nitrogen compounds, including pH levels outside the acceptable range, algae, odor, and scum/foam. While nitrogen helps support the growth of algae and aquatic plants, which provide food and habitat for fish and smaller organisms that live in water, excessive nitrogen in the water causes algae to grow faster than ecosystems can handle (known as eutrophication). Significant increases in algae harm water quality, food resources and habitats, and decrease the oxygen that fish and other aquatic life need to survive. Algal blooms can severely reduce or eliminate oxygen in the water, leading to physical stress and the death of aquatic life.

Nitrogen compounds are biostimulatory substances that are causing or contributing to eutrophic effects such as low dissolved oxygen and algal blooms (organic enrichment) in the Los Angeles River and its tributaries.

The beneficial uses of the Los Angeles River include municipal and domestic supply, ground water recharge, contact and non-contact water recreation, and habitat for warm water aquatic life, wildlife, threatened and endangered species, and wetland species. The Water Quality Control Plan for the Los Angeles Region (Los Angeles Basin Plan) contains the water quality objectives necessary to protect these beneficial uses. The water quality objectives in some cases are numeric and in other cases are in narrative form. The Los Angeles Basin Plan contains narrative objectives for biostimulatory substances, odor, and floating materials (including scum/foam) as well as specific numeric objectives for nitrogen compounds and pH.

Ammonia, nitrite, and nitrate concentrations in the Los Angeles River and some of its tributaries exceed the water quality objectives listed in the Los Angeles Basin Plan. All three of these nitrogen compounds may stimulate the production of algae that can impair aquatic life, water supply, and recreational beneficial uses. Excessive ammonia can cause aquatic life toxicity in surface water bodies.

The Los Angeles River and several of its tributaries are on the Clean Water Act Section 303(d) List as impaired due to ammonia and other nitrogen compounds, and effects related to excessive levels of nitrogen compounds such as odor, scum/foam, pH, and algae. To address these impairments, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) adopted a TMDL in 2003 and revised the TMDL later in 2003 and in 2014. The wasteload allocations set forth in the TMDL apply both to discharges to the impaired waterbodies as well as to upstream tributaries to them.

Numeric Targets

The numeric targets are the target conditions in the waterbody necessary to support beneficial uses. The numeric targets for nitrate, nitrite, ammonia, and pH in this TMDL are based on the numeric objectives listed in the Los Angeles Basin Plan.

Wasteload Allocations

In the TMDL, storm water sources are generally considered a more minor source of ammonia, nitrite, and nitrate relative to publicly owned wastewater treatment facilities. However, because these sources can potentially have localized effects on water quality, they are assigned concentration-based wasteload allocations (WLAs) equivalent to the numeric targets. Industrial storm water dischargers subject to the Industrial Storm Water General Permit are generally expected to be able to meet these WLAs through the implementation of best management practices (BMPs) and the related monitoring and reporting programs required by the Industrial Storm Water General Permit.

Industrial storm water dischargers were required to meet the WLAs below as of March 23, 2004, or upon incorporation of the WLAs into applicable NPDES permits. WLAs are established to address both acute effects (one-hour average concentration) and chronic effects (30-day average concentration) on aquatic life. For purposes of monitoring under this Industrial Storm Water General Permit, the one-hour average WLAs are treated as instantaneous maximums, while the 30-day average concentration is treated as an annual average. The WLAs are not separately established for wet conditions and dry conditions, rather they apply during both wet and dry conditions.

Nitrate-N, Nitrite-N, and Nitrate+Nitrite-N WLAs for Storm Water Discharges and NSWDS from Industrial Storm Water Dischargers (30-day average, mg/L)

Nitrate-N	Nitrite-N	Nitrate+Nitrite-N
8.0	1.0	8.0

Ammonia-N WLAs for Storm Water Discharges and NSWDS from Industrial Storm Water Dischargers (one-hour average, mg/L)

LA River above LA-Glendale WRP	LA River below LA-Glendale WRP	LA River Tributaries
4.7	8.7	10.1

The 30-day average ammonia-N WLAs related to chronic effects are dependent on temperature, pH, and the presence/absence of early life stages of fish (ELS), and therefore are reach-specific.

Required Actions

The required actions apply to Industrial Storm Water General Permittees whose facilities fall within Standard Industrial Classification (SIC) codes associated with the TMDL pollutants as set forth in Table 1 (102X, 144X, 207X, 281X, 284X, 287X, 34XX, 3479, 45XX and 4953) and that discharge non-storm water and/or storm water associated with industrial activities⁴ to Los Angeles River Reaches 1-6, Tujunga Wash, Burbank Western Channel, Verdugo Wash, Arroyo Seco, Rio Hondo, or Compton Creek either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary. These are referred to as Responsible Dischargers. The State and/or Regional Water Board may identify other Responsible Dischargers in addition to those within the SIC codes listed above based on site-specific inspections and/or investigations.

If nitrogen compounds, pH, odor, and scum/foam 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 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), shall be updated based on the results, pursuant to Section X.B.1-2. The revised SWPPP shall be certified and submitted via SMARTS no later than 6 months after the incorporation of these TMDL-specific requirements in this Order.

Compliance with Wasteload Allocations

Responsible Dischargers subject to the Los Angeles River Nitrogen Compounds and Related Effects TMDL will be required to implement BMPs identified in their updated SWPPP and conduct sampling and analysis of NSWDs and storm water discharges for TMDL pollutants to assess BMP effectiveness in order to ensure their 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

⁴ 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 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 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 nitrogen compounds 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.

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; 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 WLAs assigned to industrial storm water discharges in the Los Angeles River Nitrogen Compounds and Related Effects TMDL.

The Industrial Storm Water General Permit already contains Numeric Action Levels (NALs) for certain TMDL pollutants, including pH, nitrate-nitrite-N, and ammonia-N (as an annual average) (Table 2 of the permit). Compliance with these NALs will achieve the compliance with the WLAs for these pollutants. However, the permit does not contain a NAL to address the acute toxicity caused by ammonia-N. Therefore, for the purposes of this permit, the one-hour average WLAs for ammonia-N are the TMDL Action Levels (TALs), which are included in the table below.

Ammonia-N TALs for Storm Water Discharges and NSWDs from Industrial Storm Water Dischargers (instantaneous maximum, mg/L)

LA River above LA-Glendale WRP	LA River below LA-Glendale WRP	LA River Tributaries
4.7	8.7	10.1

Responsible Dischargers will be required to demonstrate through sampling and analysis that the facility's NSWDs and storm water discharges associated with industrial activities do not exceed the applicable NALs/TALs for the Los Angeles River Nitrogen Compounds and Related Effects TMDL. If there is an exceedance of a NAL or TAL, the Responsible Discharger must undertake the Exceedance Response Actions (ERAs) process described in Section XII of the permit.

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 Advanced BMPs where necessary, the Discharger is not likely to discharge nitrogen compounds 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 NALs/TALs 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 of results to NALs/TALs, visual/olfactory 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 applicable NALs/TALs, as necessary to achieve the WLAs, the State Water Board finds that sampling and analysis of a facility's storm water discharges for nitrogen compounds 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) to include sampling and analysis for ammonia-N and nitrate+nitrite-N during Qualifying Storm Events, if these parameters are not already monitored per Section XI.B.⁵

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 WLAs, the State Water Board finds that sampling and analysis of a facility's authorized NSWDS for ammonia-N, nitrate+nitrite-N, and pH 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) to include sampling and analysis of the facility's authorized NSWDS for these pollutants 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.

⁵ Sampling and analysis for pH during QSEs is already required by Section XI.B.6.b. Responsible Dischargers for this TMDL shall continue to follow the requirements of Sections XI.B.6.b and XI.C.2 for pH, and shall compare results to the NAL for pH in Table 2. Sampling event visual observations are also already required by Section XI.A.2, including a requirement to observe and record the presence or absence of floating and suspended materials, such as scum/foam, and odors. Responsible Dischargers for this TMDL shall continue to follow the requirements of Sections XI.A.2, including subparagraph XI.A.2.c.

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 NALs and TALs.

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

Dischargers shall compare sampling results with the applicable instantaneous maximum TAL for ammonia-N, and also with the NALs for pH, nitrate+nitrite-N, and ammonia-N (as an annual average). As described above, an exceedance of a TAL/NAL will require the Discharger to follow the NAL Exceedance Response Actions requirements in Section XII.

Regulatory Mechanisms

The regulatory mechanisms available to the State and/or Regional Water Boards 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 Boards may require an Industrial Storm Water General Permittee to collect samples of its storm water and NSWDS and to analyze them for nitrogen compounds and pH, and to conduct observations for odor and scum/foam to determine compliance with the applicable WLAs in the TMDL.

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

Long Beach City Beaches and Los Angeles River Estuary Total Maximum Daily Load (TMDL) for Indicator Bacteria

Resolution No.	N/A (Established by U.S. Environmental Protection Agency Region IX)
Effective Date	March 26, 2012
Impaired Water Body(ies)	Long Beach City Beaches and Los Angeles River Estuary
Pollutant(s)	Total coliform, Fecal coliform, Enterococcus
Responsible Dischargers	Industrial Storm Water General Permittees that discharge non-storm water and/or storm water associated with industrial activities ¹ to the impaired waterbodies ² either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.
Required Actions	<p>Comply with the conditions and requirements of the Industrial Storm Water General Permit (Order No. 2014-0057-DWQ).</p> <p>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, and 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.</p> <p>Responsible Dischargers that have identified industrial areas of</p>

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

² Due to its close proximity, the Long Beach City Beaches have the potential to be impacted by other waterbodies discharging to the San Pedro Bay. Specifically, the San Gabriel River, Los Angeles River, and Alamitos Bay watersheds (collectively termed "*adjacent drainages*") discharge not directly to, but in close proximity to, the Long Beach City Beaches, as does the Los Angeles River Estuary direct drainage. Responsible dischargers include both those that are within the direct drainages to the Long Beach City Beaches and the Los Angeles River Estuary, as well as those dischargers within adjacent and upstream drainages, since discharges from those adjacent and upstream drainages are ultimately conveyed to the Long Beach City Beaches and the Los Angeles River Estuary.

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)³, expressed as instantaneous maximum values, in the table below. 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.

**Long Beach City Beaches and Los Angeles River Estuary
(Marine Waters, REC-1)**

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

These 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

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).

	<p>(described above) identifies industrial areas as a potential source of total coliform, fecal coliform, or enterococcus in authorized NSWs and/or storm water discharges, Responsible Dischargers shall update the facility Monitoring Implementation Plan (Section X.1) per Section XI.B.6.e-f to include:</p> <ul style="list-style-type: none">• 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 NSWs 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. <p>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.</p>
<p>TMDL documents are available at: http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/Established/Longbeach/finalTMDLs-LongBeachCityBeaches-LARiverEstuaryBacteria.pdf</p>	

**Fact Sheet for the Long Beach City Beaches and Los Angeles River Estuary
TMDL for Indicator Bacteria**

On March 26, 2012, the United States Environmental Protection Agency, Region IX (U.S. EPA) established the Long Beach City Beaches and Los Angeles River Estuary TMDL for Indicator Bacteria. The TMDL became effective upon establishment.

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 Long Beach City Beaches and the Los Angeles River Estuary TMDL for Indicator Bacteria addresses the impairment of the water contact recreation (REC-1) beneficial use for the Long Beach City Beaches and Los Angeles River Estuary.

Numeric Targets

The numeric targets for the Long Beach City Beaches and the Los Angeles River Estuary are 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 geometric mean limits and single sample limits and apply during dry and wet weather year-round, since there is water contact recreation throughout the year.

	Marine Waters (REC-1)
<u>Rolling 30-Day Geometric Mean</u> Fecal coliform Enterococcus Total coliform	200 MPN or CFU/100 mL 35 MPN or CFU/100 mL 1,000 MPN or CFU/100 mL
<u>Single Sample</u> Fecal coliform Enterococcus Total coliform Total coliform density if the ratio of fecal-to-total coliform exceeds 0.1	400 MPN or CFU/100 mL 104 MPN or CFU/100 mL 10,000 MPN or CFU/100 mL 1,000 MPN or CFU/100 mL

Wasteload Allocations

The Long Beach City Beaches and Los Angeles River Estuary TMDL for Indicator Bacteria identifies storm water dischargers, including dischargers subject to the Industrial Storm Water General Permit, as responsible dischargers. The TMDL states that potential pollutants from an industrial site will depend on the type of facility and operations that take place at that facility; but also states that storm water and non-storm

water discharges (NSWDs) from industrial activities are generally not expected to be significant sources of bacteria. Therefore, the TMDL assigns to industrial storm water dischargers a wasteload allocation (WLA) of zero (0) days of allowable exceedances of the single sample indicator bacteria targets for both dry and wet weather and no exceedances of the 30-day geometric mean targets for all three time periods.⁴ The WLAs are thus equal to the applicable 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.

Required Actions

The required actions apply to Industrial Storm Water General Permittees that discharge non-storm water and/or storm water associated with industrial activities⁵ to the Long Beach City Beaches and Los Angeles River Estuary either directly or via a municipal separate storm sewer (MS4) or an upstream reach of tributary. Due to its close proximity, the Long Beach City Beaches have the potential to be impacted by other waterbodies discharging to the San Pedro Bay. Specifically, the San Gabriel River, Los Angeles River, and Alamitos Bay watersheds (collectively termed “*adjacent drainages*”) discharge not directly to, but in close proximity to, the Long Beach City Beaches, as does the Los Angeles River Estuary direct drainage. Responsible dischargers include both those that are dischargers within the direct drainages to the Long Beach City Beaches and the Los Angeles River Estuary, as well as those industrial storm water dischargers within adjacent and upstream drainages, including the Los Angeles River Watershed, San Gabriel River Watershed, and Alamitos Bay Watershed, since discharges from those adjacent and upstream drainages are ultimately conveyed to the Long Beach City Beaches and the Los Angeles River Estuary.⁶

Currently, the Industrial Storm Water General Permit only regulates discharges of non-storm 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. 2014-0057-DWQ). These discharges are currently not expected to be a significant source of 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 Long Beach City Beaches and Los Angeles

⁴ The WLAs apply during three distinct time periods: summer dry weather (April 1-October 31), winter dry weather (November 1-March 31), and wet weather (days with 0.1 inch of precipitation or more and the 3 days following, year-round).

⁵ Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

⁶ Due to its close proximity, the Long Beach City Beaches have the potential to be impacted by other waterbodies discharging to the San Pedro Bay. Specifically, the San Gabriel River, Los Angeles River, and Alamitos Bay watersheds (collectively termed “*adjacent drainages*”) discharge not directly to, but in close proximity to, the Long Beach City Beaches, as does the Los Angeles River Estuary direct drainage. Responsible dischargers include both those that are within the direct drainages to the Long Beach City Beaches and the Los Angeles River Estuary, as well as those dischargers within adjacent and upstream drainages, since discharges from those adjacent and upstream drainages are ultimately conveyed to the Long Beach City Beaches and the Los Angeles River Estuary.

River Estuary TMDL for Indicator Bacteria. 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), described below.

Compliance with WLAs

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 applicable 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 dischargers 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 NSWs) 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 NSWs 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 NSWs and their sources, (2) authorized NSWs, 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 NSWs. Dischargers with an active Notice of Intent who have identified industrial sources of indicator bacteria with the potential to be present in the facility's industrial storm water discharges or authorized NSWs 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.

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Parameter	Applicability	Reporting Units	TAL
Total Coliform	Storm Water Discharges/ Authorized NSWs	MPN or CFU/100 mL	10,000
Total Coliform if the ratio of fecal-to-	Storm Water Discharges/ Authorized NSWs	MPN or CFU/100 mL	1,000

total coliform exceeds 0.1			
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

These 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 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, and 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

Authorized NSWDs Identified as a Potential Source: 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 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 TMDL-specific requirements in this Order.

Storm Water Discharges Identified as a Potential Source: 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 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.

Analytical Methods: 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 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.