NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT

DRAFT TMDL-SPECIFIC PERMIT REQUIREMENTS FOR THE STATE WATER RESOURCES CONTROL BOARD'S INDUSTRIAL GENERAL STORM WATER PERMIT (Calleguas Creek 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 Calleguas Creek Watershed:

- Calleguas Creek, Tributaries and Mugu Lagoon TMDL for Metals
- Calleguas Creek Watershed Boron, Chloride, Sulfate, and Total Dissolved Solids (Salts) TMDL
- TMDLs for Pesticides, PCBs, and Sediment Toxicity in Oxnard Drain 3

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

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

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 7, 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 – Calleguas Creek 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

Calleguas Creek Watershed Total Maximum Daily Load (TMDL) for Metals and Selenium

Resolution No.	R06-012
Effective Date	March 27, 2007
Impaired Water Body(ies)	Lower Calleguas Creek (Reaches 2 and 3), Revolon Slough (Reach 4), and Mugu Lagoon (Reach 1)
Pollutants	Copper, nickel, mercury, and selenium (Revolon Slough only)
Responsible Dischargers	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, nickel, mercury, 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	*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: o For storm water discharges, a demonstration that sampling results from the last 4 Qualifying Storm

[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).

	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 copper, nickel, mercury, 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.

[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).

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

Reach	Copper[7]	Nickel	Mercury	Selenium[8]
Mugu Lagoon (Reach 1)	5.6	8.2	0.051	--
Calleguas Creek, below Potrero Rd. (Reach 2)	13.7	8.2	0.051	--
Calleguas Creek, between Potrero Rd. and Somis Rd. (Reach 3)	27.0	149	0.051	--
Revolon Slough (Reach 4)	3.7	8.3	0.051	5
Beardsley Wash (Reach 5)	3.7	8.3	0.051	5
Arroyo Las Posas (Reach 6)[9]	--	--	--	--
Arroyo Simi (Reach 7)[9]	--	--	--	--
Tapo Canyon Creek (Reach 8)[9]	--	--	--	--
Conejo Creek (Reaches 9A & 9B)	29.1	160	0.051	--
Arroyo Conejo (Reach 10)	29.1	160	0.051	--
Arroyo Santa Rosa (Reach 11)	29.1	160	0.051	--
North Fork Arroyo Conejo (Reach 12)	29.1	160	0.051	--
South Fork Arroyo Conejo (Reach 13)	29.1	160	0.051	--

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

Reach	Copper[7]	Nickel	Mercury	Selenium[8]
Mugu Lagoon	8.76	74	0.051	--

[7] The copper TALs for Mugu Lagoon and Calleguas Creek below Potrero Road are calculated using approved site-specific Water Effects Ratios (WERs) of 1.51 and 3.69, respectively. Site-specific WERs have not been approved for other reaches in the Calleguas Creek Watershed; therefore, the other copper TALs are based on the default WER value of 1.0.

[8] The selenium TAL is only applicable to Industrial Storm Water General Permittees whose non-storm water discharges and/or storm water discharges associated with industrial activities discharge to Revolon Slough or Beardsley Wash either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

[9] Discharges from these reaches do not reach lower Calleguas Creek and Mugu Lagoon during dry weather conditions; therefore, the copper and nickel TALs are not applicable to authorized NSWDs to these reaches.

(Reach 1)				
Calleguas Creek, below Potrero Rd. (Reach 2)	21.4	74	0.051	--
Calleguas Creek, between Potrero Rd. and Somis Rd. (Reach 3)	27.4	859	0.051	--
Revolon Slough (Reach 4)	5.8	75	0.051	290
Beardsley Wash (Reach 5)	5.8	75	0.051	290
Arroyo Las Posas (Reach 6)	31.0	958	0.051	--
Arroyo Simi (Reach 7)	31.0	958	0.051	--
Tapo Canyon Creek (Reach 8)	31.0	958	0.051	--
Conejo Creek (Reaches 9A & 9B)	43.3	1296	0.051	--
Arroyo Conejo (Reach 10)	43.3	1296	0.051	--
Arroyo Santa Rosa (Reach 11)	43.3	1296	0.051	--
North Fork Arroyo Conejo (Reach 12)	43.3	1296	0.051	--
South Fork Arroyo Conejo (Reach 13)	43.3	1296	0.051	--

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

Parameter	**Test Method**
Copper	EPA 200.8
Nickel	EPA 200.8
Mercury	EPA 245.7 or EPA 1631E
Selenium	EPA 200.8

The State and/or Regional Water Board may require industrial stormwater dischargers to implement additional actions to reduce discharges of copper, nickel, mercury, and/or selenium 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, nickel, mercury, and selenium during QSEs, if these parameters are not already monitored per Section XI.B; • Sampling and analysis of the facility's authorized NSWDs for copper, nickel, mercury, 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 Calleguas Creek Watershed Metals and Selenium TMDL

Metals are prevalent in the environment. They are derived from both natural and anthropogenic sources. Certain metals are essential for plant growth, and for animal and human health, but if present in excessive concentrations, they are toxic to aquatic life. Mercury also poses a threat to human health from consumption of organisms with elevated mercury concentrations. Selenium is not a metal, but it bioaccumulates in fish tissue, endangering aquatic life and avian reproduction.

The beneficial uses of lower Calleguas Creek, Mugu Lagoon, and Revolon Slough are impaired due to elevated concentrations of copper, nickel, mercury, and selenium. The Los Angeles Regional Water Quality Control Board (Los Angeles Board) adopted a TMDL to address these impairments in 2006. 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 storm water and urban runoff were sources of metals to the impaired waterbodies, among

others, and assigned wasteload allocations to permitted storm water dischargers, including Industrial Storm Water General Permittees.

Numeric Targets

The water column numeric targets for the TMDL are based on the federally promulgated water quality objectives established by the California Toxics Rule (CTR) for the protection of aquatic life and human health (40 C.F.R. § 131.38). For dry weather discharges, the numeric targets are based on the chronic criteria (or Criteria Continuous Concentration, CCC), while for wet weather discharges, the numeric targets are based on the acute criteria (or Criteria Maximum Concentration, CMC). The targets for copper and nickel are hardness dependent. These targets are based on the default CTR hardness value of 100 mg/L $CaCO_3$. The numeric targets for mercury and selenium are independent of hardness. The water column numeric targets applicable during dry weather and wet weather conditions are in the table below.

Waterbody	Copper (µg/L, dissolved)		Selenium (µg/L, total)		Nickel (µg/L, dissolved)	
	Dry	Wet	Dry	Wet	Dry	Wet
Mugu Lagoon	4.7	7.2	71	290	8.2	74
Calleguas Creek Reach 2	11.4	17.7	5	290	8.2	74
Calleguas Creek Reach 3	25.9	26.3	5	--	149	856
Revolon Slough/Beardsley Wash	3.1	4.8	5	290	8.2	74
Conejo Creek	27.9	41.6	5	--	160	1292
Arroyo Simi/Las Posas	29.3	29.8	5	--	168	958

Waterbody	Mercury (µg/L, total)
Mugu Lagoon	0.051
Calleguas Creek Reach 2	0.051
Calleguas Creek Reach 3	0.051
Revolon Slough/Beardsley Wash	0.051
Conejo Creek	0.051
Arroyo Simi/Las Posas	0.051

Wasteload Allocations

The TMDL assigns wasteload allocations (WLAs) that will ensure the numeric targets are achieved. The TMDL identifies permitted storm water dischargers, including dischargers subject to the Industrial Storm Water General Permit, as responsible dischargers. The TMDL includes mass-based WLAs for permitted storm water dischargers. The mass-based 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 for both dry weather and wet weather, which are based on the concentration-based numeric targets converted to total recoverable concentrations using default CTR conversion factors. These concentration-based WLA equivalents are consistent with the assumptions and requirements of the mass-based WLAs assigned to permitted storm water dischargers.

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

Dry-weather WLAs apply to authorized NSWDs when the daily flow in the reach is less than the 86th percentile daily flow for that reach.

Concentration-based WLA Equivalents for Authorized NSWDs (µg/L total recoverable metals)

Reach	Copper[10]	Nickel	Mercury	Selenium[11]
Mugu Lagoon (Reach 1)	5.6	8.2	0.051	--
Calleguas Creek, below Potrero Rd. (Reach 2)	13.7	8.2	0.051	--
Calleguas Creek, between Potrero Rd. and Somis Rd. (Reach 3)	27.0	149	0.051	--
Revolon Slough (Reach 4)	3.7	8.3	0.051	5
Beardsley Wash (Reach 5)	3.7	8.3	0.051	5
Arroyo Las Posas (Reach 6)[12]	--	--	--	--
Arroyo Simi (Reach 7)[12]	--	--	--	--
Tapo Canyon Creek (Reach	--	--	--	--

[10] The copper WLA equivalents for Mugu Lagoon and Calleguas Creek below Potrero Road are calculated using approved site-specific Water Effects Ratios (WERs) of 1.51 and 3.69, respectively. Site-specific WERs have not been approved for other reaches in the Calleguas Creek Watershed; therefore, the other copper WLA equivalents are based on the default WER value of 1.0.

[11] The selenium WLA equivalents are only applicable to Industrial Storm Water General Permittees whose non-storm water discharges and/or storm water discharges associated with industrial activities discharge to Revolon Slough or Beardsley Wash either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

[12] Discharges from these reaches do not reach lower Calleguas Creek and Mugu Lagoon during dry weather conditions; therefore, the WLAs are not applicable to authorized NSWDs to these reaches.

Reach	Copper[10]	Nickel	Mercury	Selenium[11]
8)[12]				
Conejo Creek (Reaches 9A & 9B)	29.1	160	0.051	--
Arroyo Conejo (Reach 10)	29.1	160	0.051	--
Arroyo Santa Rosa (Reach 11)	29.1	160	0.051	--
North Fork Arroyo Conejo (Reach 12)	29.1	160	0.051	--
South Fork Arroyo Conejo (Reach 13)	29.1	160	0.051	--

Wet-weather WLAs apply to storm water discharges when the daily flow in the reach is greater than the 86th percentile daily flow for that reach.

Concentration-based WLA Equivalents for Storm Water Discharges

Reach	Copper[10]	Nickel	Mercury	Selenium[11]
Mugu Lagoon (Reach 1)	8.76	74	0.051	--
Calleguas Creek, below Potrero Rd. (Reach 2)	21.4	74	0.051	--
Calleguas Creek, between Potrero Rd. and Somis Rd. (Reach 3)	27.4	859	0.051	--
Revolon Slough (Reach 4)	5.8	75	0.051	290
Beardsley Wash (Reach 5)	5.8	75	0.051	290
Arroyo Las Posas (Reach 6)	31.0	958	0.051	--
Arroyo Simi (Reach 7)	31.0	958	0.051	--
Tapo Canyon Creek (Reach 8)	31.0	958	0.051	--
Conejo Creek (Reaches 9A & 9B)	43.3	1296	0.051	--
Arroyo Conejo (Reach 10)	43.3	1296	0.051	--
Arroyo Santa Rosa (Reach 11)	43.3	1296	0.051	--
North Fork Arroyo Conejo (Reach 12)	43.3	1296	0.051	--
South Fork Arroyo Conejo (Reach 13)	43.3	1296	0.051	--

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

activities[13] have the potential to contain copper, nickel, mercury 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.

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 source of metals to the impaired waterbodies, 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)[14]; 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)[15], 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.[16]
- 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).[17,18]

[13] Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities
[14] At which point, the Discharger remains in baseline status for the TMDL pollutant(s).
[15] 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).
[16] At which point, the Discharger remains in baseline status for the TMDL pollutant(s).
[17] 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).
[18] At which point, the Discharger remains in baseline status for the TMDL pollutant(s).

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, nickel, mercury, 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, nickel, and mercury are more stringent than the NALs in Table 2.[19] 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.

[19] The TAL for selenium is equal to the NAL for selenium in Table 2.

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

Reach	Copper[20]	Nickel	Mercury	Selenium[21]
Mugu Lagoon (Reach 1)	5.6	8.2	0.051	--
Calleguas Creek, below Potrero Rd. (Reach 2)	13.7	8.2	0.051	--
Calleguas Creek, between Potrero Rd. and Somis Rd. (Reach 3)	27.0	149	0.051	--
Revolon Slough (Reach 4)	3.7	8.3	0.051	5
Beardsley Wash (Reach 5)	3.7	8.3	0.051	5
Arroyo Las Posas (Reach 6)[22]	--	--	--	--
Arroyo Simi (Reach 7)[22]	--	--	--	--
Tapo Canyon Creek (Reach 8)[22]	--	--	--	--
Conejo Creek (Reaches 9A & 9B)	29.1	160	0.051	--
Arroyo Conejo (Reach 10)	29.1	160	0.051	--
Arroyo Santa Rosa (Reach 11)	29.1	160	0.051	--
North Fork Arroyo Conejo (Reach 12)	29.1	160	0.051	--
South Fork Arroyo Conejo (Reach 13)	29.1	160	0.051	--

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 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 states that Dischargers shall ensure

[20] The copper TALs for Mugu Lagoon and Calleguas Creek below Potrero Road are calculated using approved site-specific Water Effects Ratios (WERs) of 1.51 and 3.69, respectively. Site-specific WERs have not been approved for other reaches in the Calleguas Creek Watershed; therefore, the other copper TALs are based on the default WER value of 1.0.

[21] The selenium TAL is only applicable to Industrial Storm Water General Permittees whose non-storm water discharges and/or storm water discharges associated with industrial activities discharge to Revolon Slough or Beardsley Wash either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

[22] Discharges from these reaches do not reach lower Calleguas Creek and Mugu Lagoon during dry weather conditions; therefore, the TALs are not applicable to authorized NSWDs to these reaches.

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 Calleguas Creek Watershed Metals and Selenium 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. Some of these TALs are more stringent than the NALs in Table 2. Compliance with these TALs 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 (µg/L total recoverable metals)

Reach	Copper[20]	Nickel	Mercury	Selenium[21]
Mugu Lagoon (Reach 1)	8.76	74	0.051	--
Calleguas Creek, below Potrero Rd. (Reach 2)	21.4	74	0.051	--
Calleguas Creek, between Potrero Rd. and Somis Rd. (Reach 3)	27.4	859	0.051	--
Revolon Slough (Reach 4)	5.8	75	0.051	290
Beardsley Wash (Reach 5)	5.8	75	0.051	290
Arroyo Las Posas (Reach 6)	31.0	958	0.051	--
Arroyo Simi (Reach 7)	31.0	958	0.051	--
Tapo Canyon Creek (Reach 8)	31.0	958	0.051	--
Conejo Creek (Reaches 9A & 9B)	43.3	1296	0.051	--
Arroyo Conejo (Reach 10)	43.3	1296	0.051	--
Arroyo Santa Rosa (Reach	43.3	1296	0.051	--

Reach	Copper[20]	Nickel	Mercury	Selenium[21]
11)				
North Fork Arroyo Conejo (Reach 12)	43.3	1296	0.051	--
South Fork Arroyo Conejo (Reach 13)	43.3	1296	0.051	--

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, nickel, mercury, 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.

<u>Monitoring and Reporting Requirements</u>

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 copper, nickel, mercury, and selenium 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, nickel, mercury, 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 when there has been no measurable precipitation in the previous 24 hours), 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
Nickel	EPA 200.8
Mercury	EPA 245.7 or EPA 1631E
Selenium	EPA 200.8

Responsible Dischargers shall compare sampling results with the more stringent of the applicable TAL or NAL for each parameter. As described above, an exceedance of a TAL or NAL 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, nickel, mercury, and selenium 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

Total Maximum Daily Load for Boron, Chloride, Sulfate, and Total Dissolved Solids (Salts) in the Calleguas Creek Watershed

Resolution No.	R4-2007-016
Effective Date	December 2, 2008
Impaired Water Body(ies)	Calleguas Creek Watershed, specifically Reach 3 (mainstem), 4 (Revolon Slough above Wood Road), 6 (Arroyo Las Posas & Fox/Barranca Channel), 7 (Arroyo Simi), 8 (Tapo Canyon Creek), 9A and 9B (Conejo Creek), 10 (Arroyo Conejo), 11 (Arroyo Santa Rosa), 12 (North Fork Arroyo Conejo), and 13 (South Fork Arroyo Conejo)
Pollutant(s)	Boron, Chloride, Sulfate, and Total Dissolved Solids (TDS) (these pollutants are commonly referred to as salts)
Responsible Dischargers	Industrial Storm Water General Permittees that discharge non-storm water 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 salts 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 boron, chloride, sulfate, or TDS 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[1] industrial areas of their facility as a potential source of boron, chloride, sulfate, or

[1] 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.

TDS in authorized NSWDs shall comply with the TMDL Action Levels (TALs)[2], 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.

TALs for Authorized Non-Storm Water Discharges

Pollutant	Concentration (mg/L, instantaneous maximum)
Boron[3]	1
Chloride	150
Sulfate	250
TDS	850

Authorized NSWDs shall be compared against these TALs when there has been no measurable precipitation in the previous 24 hours.

The State and/or Regional Water Board may require Industrial Storm Water General Permittees to implement additional actions to reduce salts in authorized NSWDs 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 boron, chloride, sulfate, or TDS in authorized NSWDs, Responsible Dischargers shall update the facility Monitoring Implementation Plan (Section X.I) per Section XI.B.6.e-f to include:

- Sampling and analysis of the facility's authorized NSWDs for boron (discharges to Revolon Slough (Reach 4) and Arroyo Simi (Reach 7) only), and chloride, sulfate, and TDS (all discharges to impaired waterbodies, as described above) twice within a reporting year; and
- U.S. EPA approved analytical methods, with appropriate method detection and reporting limits relative to the TALs in

[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] The Boron TAL only applies to Authorized NSWDs in the Arroyo Simi (Reach 7) and Pleasant Valley (Revolon Slough/Reach 4) subwatersheds.

	the table 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.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/tmdl_list.shtml	

Fact Sheet for Calleguas Creek Watershed Boron, Chloride, Sulfate, and Total Dissolved Solids (Salts) TMDL

The TMDL addresses eleven reaches (specifically Reach 3 (mainstem), 4 (Revolon Slough above Wood Road), 6 (Arroyo Las Posas & Fox/Barranca Channel), 7 (Arroyo Simi), 8 (Tapo Canyon Creek), 9A and 9B (Conejo Creek), 10 (Arroyo Conejo), 11 (Arroyo Santa Rosa), 12 (North Fork Arroyo Conejo), and 13 (South Fork Arroyo Conejo)) in the Calleguas Creek Watershed that are identified as having elevated levels of boron, chloride, sulfate, and/or total dissolved solids (TDS) (these pollutants are commonly referred to as salts). Salts primarily impact two beneficial uses: agricultural supply and groundwater recharge. Salt discharges impact beneficial uses mostly in dry weather where high concentrations of salts in agriculture supply water can damage crops, affect plant growth, degrade drinking water, and damage industrial equipment. Most salts do not naturally degrade, and can accumulate in groundwater for decades. The economic cost of increased groundwater and surface water salinity to California – manifested in fallowed farmland, unsuitable drinking water supply, and environmental degradation – is estimated in the millions of dollars annually.[4]

Sources of salts in the watershed include water supply (water imported from the State Water Project or Freeman Diversion and deep aquifer groundwater pumping), water softeners that discharge to publicly owned treatment works (POTWs), POTW treatment chemicals, atmospheric deposition, pesticides and fertilizers, and indoor water use (chemicals, cleansers, food, etc.). These salts are then transported through POTW discharges and agricultural and urban runoff to surface water, shallow groundwater, and/or stranded on the watershed in the soils. While the concentration of salts in the introduced water is usually below water quality objectives, the quantity of water brought into the watershed is sufficient to rank introduced water as the greatest source of salts to the watershed.

To address these impairments, on October 4, 2007, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) established the Calleguas Creek Watershed Boron, Chloride, Sulfate, and TDS (Salts) TMDL. The TMDL became effective on December 2, 2008. The goal of the TMDL is to protect and restore the water quality in the Calleguas Creek Watershed by controlling the loading and accumulation of salts.

Numeric Targets

Numeric targets are based on the site-specific numeric water quality objectives provided in the Water Quality Control Plan for the Los Angeles Region (Los Angeles Basin Plan).

Site-specific surface water quality objectives for the Calleguas Creek Watershed are applicable upstream of Potrero Road where surface waters are characterized as freshwater (as opposed to brackish or saltwater). Site-specific objectives have not been

[4] State Water Board, Groundwater Ambient Monitoring and Assessment Program, Groundwater Information Sheet on Salinity, pg. 2, at http://www.waterboards.ca.gov/gama/docs/coc_salinity.pdf.

established, as of this time, for Calleguas Creek below Potrero Road because the reach is tidally influenced. Below are the water quality objectives for Calleguas Creek and its tributaries upstream of Potrero Road.

Pollutant	Surface Water Quality Objectives Upstream of Potrero Road[5] (mg/L)
Boron	1
Chloride	150
Sulfate	250
TDS	850

Wasteload Allocations

The Calleguas Creek Watershed Salts TMDL identifies permitted storm water dischargers, including dischargers subject to the Industrial Storm Water General Permit, as responsible dischargers. Permitted storm water dischargers are assigned an aggregate, mass-based, final dry-weather wasteload allocation (WLA) equal to the average dry-weather critical condition flow rate multiplied by the numeric target for each pollutant. Dry-weather WLAs apply when instream flow rates are below the 86th percentile daily flow and there has been no measurable precipitation in the previous 24 hours.

Aggregate, Mass-based, Final Dry-weather WLAs for Permitted Storm Water Dischargers

Subwatershed	Critical Condition Flow Rate (mgd)	Chloride Allocation (lb/day)	TDS Allocation (lb/day)	Sulfate Allocation (lb/day)	Boron Allocation (lb/day)
Simi	1.39	1,738	9,849	2,897	12
Las Posas	0.13	157	887	261	N/A
Conejo	1.26	1,576	8,931	2,627	N/A
Camarillo	0.06	72	406	119	N/A
Pleasant Valley (Calleguas)	0.12	150	850	250	N/A
Pleasant Valley (Revolon)	0.25	314	1,778	523	2

The mass-based WLAs are derived from the 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

[5] These objectives apply upstream of Wood Road in the Revolon Slough (Reach 4) subwatershed.

concentration-based WLA equivalents are consistent with the assumptions and requirements of the mass-based WLAs assigned to permitted storm water dischargers.

Concentration-based WLA Equivalents for Authorized NSWDs from Industrial Storm Water General Permittees

Pollutant	Concentration (mg/L, instantaneous maximum)
Boron[6]	1
Chloride	150
Sulfate	250
TDS	850

No WLAs are established for storm water discharges from permitted storm water dischargers. Because wet-weather flows transport a large mass of salts at low concentrations, permitted storm water discharges are generally meeting water quality objectives during wet weather based on available data.

Required Actions

The required actions apply to Industrial Storm Water General Permittees that discharge non-storm water to the impaired waterbodies either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

As described below, compliance with the conditions and requirements of the Industrial Storm Water General Permit is generally expected to achieve the dry weather WLAs assigned to permitted storm water dischargers in the Calleguas Creek Watershed Salts TMDL. Where necessary, this will be verified through sampling and analysis of authorized NSWDs and comparison of results to TMDL Action Levels (TALs), as described below.

Compliance with Wasteload Allocations

The Industrial Storm Water General Permit defines dry-weather discharges 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 (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).

Considering the existing conditions and requirements in the Industrial Storm Water General Permit regarding unauthorized and authorized NSWDs, if a Discharger complies with the Industrial Storm Water General Permit, the Discharger is not likely to

[6] The Boron TAL only applies to Authorized NSWDs in the Arroyo Simi (Reach 7) and Pleasant Valley (Revolon Slough/Reach 4) subwatersheds.

discharge salts 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 authorized NSWDs from 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.

Monitoring and Reporting Requirements

Dischargers covered under the Industrial Storm Water General Permit are required to conduct monthly visual observations of their site (IGP, Section XI.A). 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 General Permittees are also 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 authorized NSWDs, including identification of industrial pollutants related to receiving waters with Clean Water Act section 303(d) listed impairments or approved TMDLs that may be causing or contributing to an exceedance of a water quality standard in the receiving waters (IGP, Section X.G.2).

1. TMDL Action Levels (TALs)

Responsible Dischargers shall analyze effluent samples for salts 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.

TALs for Authorized Non-Storm Water Discharges

Pollutant	**Concentration (mg/L, instantaneous maximum)**

Boron[7]	1
Chloride	150
Sulfate	250
TDS	850

Authorized NSWDs shall be compared to TALs when there has been no measurable precipitation in the previous 24 hours.

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

If salts are not already addressed in the facility's current SWPPP, upon incorporation of these TMDL-specific requirements into the Industrial Storm Water 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 boron, chloride, sulfate, or TDS in authorized 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.

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 boron, chloride, sulfate, or TDS in authorized NSWDs will be required to update the facility Monitoring Implementation Plan to include sampling and analysis of authorized NSWDs for boron, chloride, sulfate, and TDS 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.

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 at achieving the salts TALs.

[7] The Boron TAL only applies to Authorized NSWDs in the Arroyo Simi and Pleasant Valley (Revolon Slough) subwatersheds.

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 authorized NSWDs and analyze the discharges for salts to determine compliance with the WLAs in the TMDL.

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

Oxnard Drain No. 3 Total Maximum Daily Load (TMDL) for Pesticides, PCBs, and Sediment Toxicity

Resolution No.	N/A (Established by U.S. Environmental Protection Agency Region IX)
Effective Date	October 6, 2011
Impaired Water Body(ies)	Oxnard Drain No. 3[1]
Pollutant(s)	Bifenthrin, chlorpyrifos, chlordane, DDT, dieldrin, toxaphene, PCBs, and sediment toxicity
Responsible Dischargers	Industrial Storm Water Permittees that discharge storm water associated with industrial activities[2] 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 bifenthrin, chlorpyrifos, chlordane, DDT, dieldrin, toxaphene, 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 bifenthrin, chlorpyrifos, chlordane, DDT, dieldrin, toxaphene, and 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[3] their facility as a potential source of bifenthrin, chlorpyrifos, chlordane, DDT, dieldrin, toxaphene, and PCBs in storm water discharges associated with industrial activities and/or in authorized NSWDs

[1] Also known as Rio de Santa Clara, Arnold Road Drain, or L Street Drain.

[2] Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

[3] 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.

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.

Parameter	Test Method
SSC	ASTM D3877-97

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.

The State and/or Regional Water Board may require Industrial Storm Water General Permittees to implement additional actions to reduce these pesticides and PCBs in storm water discharges associated with industrial activities and in authorized NSWDs based on, but not limited to, monitoring data and comparison to the SSC TAL, 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 the facility as a potential source of bifenthrin, chlorpyrifos, chlordane, DDT, dieldrin, toxaphene, and/or PCBs in storm water discharges associated with industrial activities and/or in authorized NSWDs, 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 SSC during Qualifying Storm Events (QSEs);
- Sampling and analysis of the facility's authorized NSWDs for SSC twice within a reporting year; and
- U.S. EPA approved analytical methods, with appropriate method detection and reporting limits relative to the SCC TAL.

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.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/

Fact Sheet for Oxnard Drain No. 3 Pesticides, PCBs, and Sediment Toxicity TMDL

Oxnard Drain No. 3 is located near Oxnard, CA in the Calleguas Creek watershed. The Oxnard Drain No. 3 watershed largely overlaps with the Mugu Lagoon subwatershed and the Ormond Beach area. The drain is 3.3 miles long and typically about 50 feet wide. Freshwater enters Oxnard Drain No. 3 through a system of agricultural drainage canals and seasonal ponds in a duck club. Oxnard Drain No. 3 also experiences muted tidal action from leaking tide gates connected to Mugu Lagoon. Almost all of Oxnard Drain No. 3 lies within the Point Mugu Naval Air Base. Although on naval property, most of the land immediately surrounding Oxnard Drain No. 3 is an undeveloped wetland, which supports a great diversity of wildlife. Over 200 migratory bird species utilize the Ormond Beach area, and more shorebird species are known to use Ormond Beach than any other site in Ventura County. Six threatened and endangered species and six species of concern have been identified in the area (Ormond Beach Wetlands Restoration Project, 2011). Human recreation is restricted to the area off naval property, near Arnold Road. Visitors are not allowed to fish, boat, or swim in the drain but fishing is known to occur (USEPA 2011).

Oxnard Drain No. 3 is on the Clean Water Act Section 303 (d) List as impaired due to pesticides, PCBs, and sediment toxicity. Pesticides and PCBs are chemical substances that persist in the environment, bioaccumulate through the food web, and pose a risk of causing adverse effects to human health and aquatic life. Chlordane, DDT, dieldrin, toxaphene and PCBs are legacy pollutants, the use of which has been banned or restricted, but which persist in the environment. Bifenthrin and chlorpyrifos are pesticides that are currently in use.

To address these impairments, the US EPA established a TMDL in 2011. The Oxnard Drain No. 3 Pesticides, PCBs, and Sediment Toxicity TMDL addresses the protection of beneficial uses of the Oxnard Drain No. 3 and Mugu Lagoon, which is downstream, associated with the following: preservation of biological habitats, commercial and sport fishing, estuarine habitat, marine habitat, migration of aquatic organisms, rare, threatened, or endangered species, water contact recreation, non-contact water recreation, shellfish harvesting, spawning, reproduction and/or early development of fish, wetland habitat, and wildlife habitat.

Numeric Targets

The numeric targets are those required to protect the beneficial uses above. The numeric targets include water column targets, sediment targets and fish tissue targets. They are based on the water quality objectives in 40 C.F.R. section 131.38, sediment quality guidelines by MacDonald et al. (2000), biota-sediment accumulation factors (BSAF), and Office of Environmental Health Hazard Assessment fish contaminant goals (FCGs).

Wasteload Allocations

The wasteload allocations (WLAs) for Industrial Storm Water General Permittees, in the table below, are equivalent to the concentration-based numeric targets.

WLAs Assigned to Storm Water Discharges and Authorized NSWDs from Industrial Storm Water General Permittees

Pollutant	Concentration (as instantaneous maximum)		
	Water Column (µg/L)	Suspended Sediment[4] (µg/dry kg)	Alternate Suspended Sediment WLA[5] (µg/dry kg)
Bifenthrin	0.0006	-	-
Chlordane (total)	0.00059	0.5	3.3
Chlorpyrifos	0.0056	-	-
4,4'-DDT	0.00059	1.0	-
4,4'-DDE	0.00059	2.2	2.2
4,4'-DDD	0.00084	2.0	2.0
Dieldrin	0.00014	0.02	4.3
Toxaphene	0.0002	0.1	360
PCBs (total)	0.00017	22.7	180

These organic substances preferentially bind to sediments; as a result, the key source of these organic substances in authorized NSWDs and in storm water discharges from Industrial Storm Water General Permittees is sediment conveyed in runoff from these industrial facilities.

Required Actions

The required actions apply to Industrial Storm Water General Permittees whose storm water discharges associated with industrial activities and authorized NSWDs have the potential to contribute pesticides and PCBs to Oxnard Drain No. 3 either directly or via a MS4 or upstream tributary.

If bifenthrin, chlorpyrifos, chlordane, DDT, dieldrin, toxaphene 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

[4] The suspended sediment WLAs apply unless sampling results from the receiving water are provided demonstrating that the TMDL fish tissue target and sediment toxicity target are achieved in Oxnard Drain No. 3.

[5] The alternate suspended sediment WLAs apply if sampling results from the receiving water have been provided demonstrating that the TMDL fish tissue target and sediment toxicity target are achieved in Oxnard Drain No. 3.

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 Oxnard Drain No. 3 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 TMDL pollutants 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 pesticides and PCBs can be achieved by utilizing Best Management Practices (BMPs). The pesticides and PCBs 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 Oxnard Drain No. 3 Pesticides, PCBs, and Sediment Toxicity TMDL.

Responsible Dischargers that have identified[6] their facility as a potential source of bifenthrin, chlorpyrifos, chlordane, DDT, dieldrin, toxaphene, and/or PCBs in storm water discharges associated with industrial activities and/or in authorized NSWDs shall

[6] 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.

comply with a TMDL Action Level (TAL)[7] for Suspended Sediment Concentration (SSC) of 1 mg/L, expressed as an instantaneous maximum value. 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 pesticides and 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 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

[7] 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).

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 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 analyze them for SSC, pesticides and PCBs to determine compliance with the applicable WLAs in the TMDL.