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## 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 Area Lakes, including Peck Road Park Lake, Echo Park Lake, and Puddingstone Reservoir)

**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 for Los Angeles Area lakes, including Echo Park Lake, Peck Road Park Lake, and Puddingstone Reservoir:

- TMDLs for Chlordane, Dieldrin, PCBs, and DDT in Peck Road Park Lake, Echo Park Lake, and Puddingstone Reservoir
- Puddingstone Reservoir Mercury TMDL
- Peck Road Park Lake and Echo Park Lake Trash TMDLs

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.<sup>1</sup> 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.

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<sup>1</sup> The Industrial General Permit is available electronically at:  
[http://www.swrcb.ca.gov/water\\_issues/programs/stormwater/industrial.shtml](http://www.swrcb.ca.gov/water_issues/programs/stormwater/industrial.shtml).

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

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

### **DOCUMENT AVAILABILITY**

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

[http://www.waterboards.ca.gov/losangeles/water\\_issues/programs/stormwater/sw\\_index.shtml](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 Friday, May 13, 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 4<sup>th</sup> Street Suite 200  
Los Angeles, CA 90013

**By Email:**

[losangeles@waterboards.ca.gov](mailto:losangeles@waterboards.ca.gov)

Please indicate in the subject line of all written comments "**Comments on Draft TMDL-Specific IGP Requirements – Los Angeles Area Lakes.**" 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](mailto: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 Area Lakes Total Maximum Daily Loads (TMDLs) for Pesticides and PCBs**

Resolution No.	N/A (Established by U.S. Environmental Protection Agency Region IX)
Effective Date	March 26, 2012
Impaired Water Body(ies)	Lo Angeles Area Lakes (i.e., Peck Road Park Lake, Echo Park Lake, and Puddingstone Reservoir)
Pollutant(s)	Chlordane, Dieldrin, PCBs, and DDTs <sup>1</sup>
Responsible Dischargers	Industrial Storm Water General Permittees that discharge storm water associated with industrial activities <sup>2</sup> and/or non-storm water to the impaired waterbody either directly or via a municipal separate storm sewer system (MS4) or an upstream 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 chlordane, dieldrin, PCBs, and DDTs 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 chlordane, dieldrin, PCBs, and DDTs 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.</p> <p>Responsible Dischargers that have identified<sup>3</sup> their facility as a potential source of chlordane, dieldrin, PCBs, and DDTs in storm water discharges associated with industrial activities and/or in authorized NSWDs shall comply with a TMDL Action Level (TAL) for Suspended Sediment Concentration (SSC) of 1 mg/L. The following analytical test method shall be used.</p>

<sup>1</sup> DDT is not included in the TMDL for Echo Park Lake.

<sup>2</sup> Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

<sup>3</sup> Either in the facility's existing SWPPP, or through the update to the facility SWPPP and the Assessment of Potential Pollutant Sources, as described below.

Parameter	Test Method
SSC	ASTM D3977-97
<p>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.</p>	
<p>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.</p>	
<p><i>Monitoring and Reporting Requirements</i></p>	
<p>Where the facility's Assessment of Potential Pollutant Sources (described above) identifies the facility as a potential source of chlordane, dieldrin, PCBs, and DDTs 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:</p>	
<ul style="list-style-type: none"> <li>• Sampling and analysis for SSC during Qualifying Storm Events (QSEs);</li> <li>• Sampling and analysis of the facility's authorized NSWDS for SSC twice within a reporting year; and</li> <li>• U.S. EPA approved analytical methods, with appropriate method detection and reporting limits relative to the SCC TAL.</li> </ul>	
<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:  <a href="http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/">http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/</a></p>	

## **Fact Sheet for Los Angeles Area Lakes Pesticides and PCBs TMDLs**

Peck Road Park Lake and Echo Park Lake are located in the Los Angeles River watershed. Puddingstone Reservoir is located in the San Gabriel River watershed. Chlordane, dieldrin, PCBs, and DDTs are impairing these lakes' beneficial uses related to recreation, municipal water supply, aquatic and wildlife habitat, and fish consumption. The U.S. Environmental Protection Agency (U.S. EPA) adopted the TMDLs to address these impairments in 2012. The allocations set forth in these TMDLs apply both to discharges to these lakes as well as to upstream tributaries to these lakes.

Because of potential harm to human health and the environment, the use of these pollutants has been banned for many years; however, the physio-chemical properties of the pollutants cause them to persist in the environment. Moreover, all of these pollutants biomagnify as they move up the food web, thereby increasing concentrations in higher trophic-level aquatic organisms and wildlife. These pollutants, bound to soil particles, are easily transported with surface runoff to waterbodies. Contaminated sediments accumulate in the receiving waterbodies and aquatic organisms are exposed to the toxic pollutants. Sediment toxicity has been documented at Peck Road Park Lake, Echo Park Lake, and Puddingstone Reservoir and it is likely that pesticides and PCBs contribute to the toxic condition of the sediments.

The primary concerns for the listed lakes are the high levels of pesticides and PCBs found in popularly consumed fish. Their continuous cycling in the food chain and accumulation in sediments creates difficulties in their removal from lake systems.

The point sources of pesticides and PCBs into Peck Road Park Lake, Echo Park Lake, and Puddingstone Reservoir are storm water and urban runoff discharges, including discharges from industrial facilities.

### **Numeric Targets**

Numeric targets are included in the TMDLs for pesticides and PCBs in water, sediment, and fish tissue to protect aquatic life, fishing, and other recreational uses in these lakes.

The sediment numeric targets are based on the freshwater Threshold Effect Concentration (TEC) guidelines compiled by the National Oceanic and Atmospheric Administration (NOAA).

### **Wasteload Allocations**

The suspended sediment in water flowing into the lakes is assigned wasteload allocations (WLAs). The WLAs for Industrial Storm Water General Permittees, in the tables below, are equivalent to the concentration-based TEC numeric targets for pollutants associated with suspended sediment.

**Table A. WLAs in Peck Road Park Lake Assigned to Storm Water Discharges and Authorized NSWDLs from Industrial Storm Water General Permittees**

<b>Pollutant</b>	<b>Suspended Sediment-Associated Contaminants (µg/kg dry weight)</b>
Total PCBs	1.29
Total DDTs	5.28
Chlordane	1.73
Dieldrin	0.43

**Table B. WLAs in Echo Park Lake Assigned to Storm Water Discharges and Authorized NSWDLs from Industrial Storm Water General Permittees**

<b>Pollutant</b>	<b>Suspended Sediment-Associated Contaminants (µg/kg dry weight)</b>
Total PCBs	1.77
Chlordane	2.10
Dieldrin	0.80

**Table C. WLAs in Puddingstone Reservoir Assigned to Storm Water Discharges and Authorized NSWDLs from Industrial Storm Water General Permittees**

<b>Pollutant</b>	<b>Suspended Sediment-Associated Contaminants (µg/kg dry weight)</b>
Total PCBs	0.59
Total DDTs	3.94
Chlordane	0.75
Dieldrin	0.22

The WLAs listed in Tables A, B and C will be superseded by the WLAs in Table D below if:

- 1) The fish tissue targets have been met for the preceding three or more years (i.e., total PCBs: 3.6 ppb wet weight; chlordane: 5.6 ppb wet weight; dieldrin: 0.46 ppb wet weight; or total DDTs: 21 ppb wet weight, respectively.) A demonstration that the fish tissue targets have been met in any given year must at minimum include a composite sample of skin off fillets from at least five largemouth bass each measuring at least 350 mm in length.

- 2) The Los Angeles Water Board Executive Officer approves the request and applies the alternative WLAs in the Table below, and
- 3) U.S. EPA does not object to the Los Angeles Water Board’s determination within 60 days of receiving notice of it.

**Table D. WLAs in Peck Road Park Lake, Echo Park Lake<sup>4</sup>, and Puddingstone Reservoir Assigned to Storm Water Discharges and Authorized NSWDs from Industrial Storm Water General Permittees, If the Fish Targets Have Been Met.**

<b>Pollutant</b>	<b>Suspended Sediment-Associated Contaminants (µg/kg dry weight)</b>
Total PCBs	59.8
Total DDTs	5.28
Chlordane	3.24
Dieldrin	1.90

These pesticides and PCBs preferentially bind to sediments; as a result, the key source of these pesticides and PCBs 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 Peck Road Park Lake, Echo Park Lake, and Puddingstone Reservoir either directly or via a MS4 or upstream tributary.

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

Compliance with Wasteload Allocations

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<sup>4</sup> WLAs for total DDTs don’t apply to the Echo Park Lake.

Responsible Dischargers subject to the Los Angeles Area Lakes TMDLs will be required to implement BMPs identified in their updated SWPPP and conduct sampling and analysis of authorized NSWDs and storm water discharges 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 Los Angeles Area Lakes Pesticides and PCBs TMDLs.

Responsible Dischargers that have identified<sup>5</sup> their facility as a potential source of chlordane, dieldrin, PCBs, and DDTs in storm water discharges associated with industrial activities and/or in authorized NSWDs shall comply with a TMDL Action Level (TAL)<sup>6</sup> 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

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<sup>5</sup> 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.

<sup>6</sup> 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).

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 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 NSWDLs and storm water discharges at achieving the applicable TAL for SSC.

The following analytical test method is appropriate.

<b>Parameter</b>	<b>Test Method</b>
SSC	ASTM D3977-97

### **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 NSWDLs and analyze them for SSC, chlordane, dieldrin, PCBs, and DDTs to determine compliance with the applicable WLAs in the TMDLs.

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

**Los Angeles Area Lakes Total Maximum Daily Load (TMDL) for Mercury**

Resolution No.	N/A (Established by U.S. Environmental Protection Agency Region IX)
Effective Date	March 26, 2012
Impaired Water Body(ies)	Puddingstone Reservoir
Pollutant(s)	Mercury
Responsible Dischargers	<p>Industrial Storm Water General Permittees whose facilities fall within the Standard Industrial Classification (SIC) code (4953) associated with the TMDL pollutant as set forth in Table 1 and that discharge non-storm water and/or storm water associated with industrial activities<sup>1</sup> to the impaired waterbody either directly or via a municipal separate storm sewer system (MS4) or an upstream tributary.</p> <p>The State and/or Regional Water Board may identify other Responsible Dischargers in addition to those within the SIC code 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 mercury is 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 mercury 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.</p> <p>Responsible Dischargers shall comply with the existing annual Numeric Action Level (NAL) for mercury in Table 2. Additionally,</p>

<sup>1</sup> Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

these Responsible Dischargers shall comply with the TMDL Action Level (TAL)<sup>2</sup> for total mercury and dissolved methylmercury expressed as an instantaneous maximum value 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.

Mercury TALs for Authorized NSWDLs and Storm Water Discharges

Pollutant	Instantaneous Maximum Value
Mercury (total)	4.0 ng/L
Methylmercury (dissolved)	0.081 ng/L

The following sampling test methods shall be used to evaluate samples against the TALs.

Parameter	Test Method
Mercury	EPA 245.1 or EPA 1631
Methylmercury	EPA 1630

The State and/or Regional Water Board may require Industrial Storm Water General Permittees to implement additional actions to reduce mercury in storm water discharges associated with industrial activities and in authorized NSWDLs based on, but not limited to, monitoring data and comparison to the applicable NAL/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 mercury in storm water discharges associated with industrial activities and/or in authorized NSWDLs, Responsible Dischargers shall update the facility Monitoring Implementation Plan (Section X.I) per Section XI.B.6.e-f to include:

- Sampling and analysis for total mercury and methylmercury during Qualifying Storm Events (QSEs) if not already monitored per Section XI.B;
- Sampling and analysis of the facility’s authorized NSWDLs for total mercury and methylmercury twice within a reporting

<sup>2</sup> 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>year; and</p> <ul style="list-style-type: none"> <li>• U.S. EPA approved analytical methods, with appropriate method detection and reporting limits relative to the TAL in the table above.</li> </ul> <p>The updated Monitoring Implementation Plan shall be included in the revised SWPPP and submitted via the Storm Water Multiple Application and Report Tracking System (SMARTS) no later than 6 months after incorporation of these TMDL-specific requirements in this Order.</p>
<p>TMDL documents are available at:  <a href="http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/tmdl_list.shtml">http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/tmdl_list.shtml</a></p>	

**Fact Sheet for Los Angeles Area Lakes Mercury TMDL for Puddingstone Reservoir**

Puddingstone Reservoir is located in the San Gabriel River watershed. Mercury is impairing Puddingstone Reservoir’s beneficial uses related to recreation, municipal water supply, aquatic life, and fish consumption. The U.S. Environmental Protection Agency (U.S. EPA) established the Mercury TMDL in 2012 to address these impairments. The allocations set forth in this TMDL apply both to discharges to the reservoir as well as to upstream tributaries to this reservoir.

The primary concerns for the listed reservoir are the high levels of mercury found in fish tissue. The two primary endpoints of concern are wildlife species that eat fish and people that consume sport fish. Mercury is a heavy metal that bioaccumulates and biomagnifies up the food chain. Methylmercury is created through the methylation of mercury by bacterial processes. As fish grow, they accumulate more methylmercury in their tissue such that older and larger fish have higher concentrations of methylmercury than younger and smaller fish. These pollutants are effectively transferred through the food web, magnifying at each trophic level. The concentrations of these pollutants in fish tissue exceed the State of California’s Fish Contaminant Goals (FCGs) to protect human health.

The point sources of mercury into Puddingstone Reservoir are storm water and urban runoff discharges, including discharges from industrial facilities in the northern subwatershed.

**Numeric Targets**

Numeric targets are included in the TMDL for mercury in water column and fish tissue to protect human health, wildlife, and other recreational uses in the reservoir.

The water column numeric targets for total mercury and methylmercury are based on beneficial use. The fish tissue numeric targets are based on the fish contaminant goal for mercury and methylmercury defined by the California Office of Environmental Health Hazard Assessment (OEHHA).

## **Wasteload Allocations**

Discharges from Industrial Storm Water General Permittees to Puddingstone Reservoir are assigned concentration-based wasteload allocations (WLAs) for total mercury of 4.0 ng/L Hg and dissolved methylmercury of 0.081 ng/L.

## **Required Actions**

The required actions apply to Industrial Storm Water General Permittees whose storm water discharges associated with industrial activities and authorized non-storm water discharges (NSWDs) have the potential to contribute mercury to Puddingstone Reservoir either directly or via a MS4 or an upstream tributary.

If mercury is 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 mercury 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), must be updated based on the results, pursuant to Section X.B.1-2. The revised SWPPP must be certified and submitted via SMARTS no later than 6 months after the incorporation of these TMDL-specific requirements into this Order.

### Compliance with Wasteload Allocations

Responsible Dischargers subject to the Mercury TMDL for Puddingstone Reservoir will be required to implement BMPs identified in their updated SWPPP and conduct sampling and analysis of authorized NSWDs and storm water discharges for mercury 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 mercury can be achieved by utilizing Best Management Practices (BMPs) that eliminate exposure of storm water

discharges and NSWs 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 mercury; 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 dischargers in the Puddingstone Reservoir Mercury TMDL.

The Industrial Storm Water General Permit already contains Numeric Action Levels (NALs) for certain TMDL pollutants, including mercury (as annual averages) (Table 2 of the permit). However, the annual average NAL in Table 2 is less stringent than the WLA for total mercury. Therefore, TMDL Action Levels (TALs) are included in the table below for total mercury and methylmercury as instantaneous maximum values. Compliance with these TALs will achieve the compliance with the WLAs for these pollutants.

**Total Mercury and Dissolved Methylmercury TALs for Storm Water Discharges Associated with Industrial Activities and Authorized NSWs to Puddingstone Reservoir**

<b>Mercury (Total) (ng/L)</b>	<b>Methylmercury (Dissolved) (ng/L)</b>
4.0	0.081

Responsible Dischargers will be required to demonstrate through sampling and analysis that the facility's authorized NSWs and its storm water discharges associated with industrial activities do not exceed the applicable NAL/TAL for the Los Angeles Area Lakes (i.e., Puddingstone Reservoir) Mercury 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 NSWs 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 mercury 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 NAL/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 NAL/TAL, 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 applicable NAL/TAL, as necessary to achieve the WLAs, the State Water Board finds that sampling and analysis of a facility's storm water discharges for mercury 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 mercury and methylmercury during Qualifying Storm Events, if the parameter is 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 WLAs, the State Water Board finds that sampling and analysis of a facility's authorized NSWDS for mercury and methylmercury 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 six (6) months after the incorporation of these TMDL-specific requirements into this Order to include sampling and analysis of the facility's authorized NSWDS for 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.

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 NAL and TAL.

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

### **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 mercury and methylmercury 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**

**Peck Road Park Lake and Echo Park Lake Trash TMDLs**

Resolution No.	N/A (Established by U.S. Environmental Protection Agency Region IX)
Effective Date	March 26, 2012
Impaired Water Body(ies)	Peck Road Park Lake and Echo Park Lake <sup>1</sup>
Pollutant(s)	Trash <sup>2</sup>
Responsible Dischargers	Industrial Storm Water General Permittees that discharge non-storm water and/or storm water associated with industrial activities <sup>3</sup> to the impaired waterbodies 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 this Industrial Storm Water General Permit (Order No. 2014-0057-DWQ).</p> <p>If trash is 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 trash 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>

<sup>1</sup> Peck Road Park Lake and Echo Park Lake are both located within the Los Angeles River watershed.

<sup>2</sup> Trash is defined as all improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural materials.

Trash generated from non-industrial activities (e.g., cigarette butts, candy wrappers, etc.) within the industrial activity area of the facility is considered an industrial material for the purposes of these TMDLs and is subject to Industrial Storm Water General Permit coverage.

<sup>3</sup> Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

	<p>Responsible Dischargers shall comply with the TMDL Action Level (TAL)<sup>4</sup>, expressed as a prohibition of discharges of trash, in the table below.</p> <p style="text-align: center;"><b>TAL for Industrial Storm Water General Permittees</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Parameter</th> <th>Applicability</th> <th>TAL</th> </tr> </thead> <tbody> <tr> <td>Trash</td> <td>Authorized NSWDs/Storm Water Discharges</td> <td>Zero units of trash<sup>5</sup></td> </tr> </tbody> </table> <p>Responsible Dischargers shall comply with the TAL by eliminating trash from all storm water and authorized NSWDs by utilizing one of the following methods:</p> <ol style="list-style-type: none"> <li>1. <u>Full Capture Systems</u>: Install, operate, and maintain certified <i>full capture systems</i><sup>6</sup> for all drainage infrastructure that capture</li> </ol>	Parameter	Applicability	TAL	Trash	Authorized NSWDs/Storm Water Discharges	Zero units of trash <sup>5</sup>
Parameter	Applicability	TAL					
Trash	Authorized NSWDs/Storm Water Discharges	Zero units of trash <sup>5</sup>					

<sup>4</sup> 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).

<sup>5</sup> A unit of trash is equal to one piece of trash, independent of size, monitored at a location downgradient of control measures and at, or upgradient of, discharge point(s) to the receiving water.

<sup>6</sup> A full capture system is defined as any single device or series of devices, certified by the Los Angeles Water Board Executive Officer or State Water Board Executive Director (or designee), that traps all particles that are 5 mm or greater, and has a design treatment capacity that is either: a) of not less than the peak flow rate, Q, resulting from a one-year, one-hour storm in the sub-drainage area, or b) appropriately sized to, and designed to carry at least the same flows as, the corresponding storm drain. The Rational Equation is used to compute the peak flow rate:

$$Q = C \times I \times A,$$

Where:

Q = design flow rate (cubic feet per second, cfs);

C = runoff coefficient (dimensionless);

I = design rainfall intensity (inches per hour, as determined per the Los Angeles County rainfall isohyetal maps relevant to the Los Angeles River watershed), and

A = sub-drainage area (acres).

Uncertified full capture systems will not satisfy these TMDL-based requirements. To request certification, a Responsible Discharger shall submit a certification request letter that includes all relevant supporting documentation to the State Water Board's Executive Director. The Executive Director, or designee, shall issue a written determination approving or denying the certification of the proposed full capture system or conditions of approval, including a schedule to review and reconsider the certification.

Full capture systems previously certified by the Los Angeles Water Board will satisfy these requirements, unless the State Water Board's Executive Director (or designee) determines otherwise. The Los Angeles Water Board currently recognizes eight full capture systems. These are: Vortex Separation Systems (VSS) and seven other Los Angeles Water Board Executive Officer certified full capture systems, including specific types or designs of trash nets; two gross solids removal devices (GSRDs); catch basin brush inserts and mesh screens; vertical and horizontal trash capture screen inserts; and a connector pipe screen device.

	<p>storm water and non-storm water from areas of industrial activity at the site. Use of <i>full capture systems</i> are subject to the following:</p> <ol style="list-style-type: none"> <li>a. Responsible Dischargers may progressively install <i>full capture systems</i> throughout their site until all drainage areas with industrial activity are addressed.</li> <li>b. <i>Full capture systems</i> must be adequately sized and maintained, and all conditions in the certification must be met.</li> <li>c. Maintenance records for <i>full capture systems</i> must be up-to-date and available for inspection by the Los Angeles Water Board and State Water Board.</li> </ol> <p>2. <u>Minimum Frequency of Assessment and Collection Approach:</u> Implement a program for minimum frequency of assessment and collection (MFAC) for trash in conjunction with BMPs. The MFAC/BMP program must meet the following criteria:</p> <ol style="list-style-type: none"> <li>a. The MFAC/BMP program includes an initial minimum frequency of trash assessment and collection and suite of structural and/or non-structural BMPs consisting of any combination of <i>full capture systems</i>,<sup>7</sup> <i>partial capture devices</i>,<sup>8</sup> and <i>institutional controls</i><sup>9</sup> for all areas of industrial activity at the site. The MFAC/BMP program shall include collection and disposal of all trash found in industrial areas of the site. Responsible Dischargers shall implement an initial suite of BMPs based on current trash management practices in industrial areas that are found to be sources of trash. Responsible Dischargers shall update their SWPPP with an initial minimum frequency of trash assessment and collection and corresponding BMPs. 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.</li> <li>b. MFAC protocols shall be based on Surface Water</li> </ol>
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<sup>7</sup> In areas where full capture systems are installed, Responsible Dischargers shall comply with the requirements in 1.b and 1.c, above.

<sup>8</sup> A partial capture device is defined as any structural trash control device that has not been certified by the Los Angeles Water Board Executive Officer or State Water Board Executive Director (or designee) as meeting the “full capture” performance requirements.

<sup>9</sup> Institutional controls is defined as non-structural BMPs (i.e., no structures are involved). For Industrial Storm Water General Permittees, these include the non-structural BMPs as set forth in Section X.H of the facility’s Storm Water Pollution Prevention Plan (SWPPP). These may include, but not be limited to, sweeping, trash bins, collection of the trash, and anti-litter educational and outreach programs at the industrial facility.

	<p>Ambient Monitoring Program (SWAMP) protocols for rapid trash assessment, unless alternative protocols are proposed by Responsible Dischargers and approved by the Los Angeles Water Board Executive Officer.</p> <ul style="list-style-type: none"><li>c. Implementation of the MFAC/BMP program should include a Health and Safety Program to protect personnel.</li><li>d. The State Water Board or Los Angeles Water Board may require a Responsible Discharger to increase its assessment and collection frequency under the MFAC:<ul style="list-style-type: none"><li>i. To prevent trash from accumulating in deleterious amounts that cause nuisance or adversely affect beneficial uses between collections;</li><li>ii. To reflect the results of trash assessment and collection;</li><li>iii. If the amount of trash collected does not show a decreasing trend, where necessary, such that a shorter interval between collections is warranted.</li></ul></li></ul> <p>Responsible Dischargers installing flow-based or volume-based control measures for trash must meet the design storm criteria in Section X.H.6.</p> <p>If visual observations 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, unless the Discharger documents that all drainage areas and infrastructure associated with industrial activities are addressed by <i>full capture systems</i> as defined above. Exceedance of the TAL of zero (0) units of trash is translated as finding one (1) or more pieces of trash in storm water or authorized NSWDs from areas of industrial activity at the facility.</p> <p>The State and/or Regional Water Board may require Industrial Storm Water General Permittees to implement additional actions to eliminate trash in authorized NSWDs and/or storm water discharges based on, but not limited to, monitoring data and comparison to the applicable TAL, visual observations, discharger reports, or site-specific inspections and/or investigations.</p> <p><i>Monitoring and Reporting Requirements</i></p> <p>Responsible Dischargers shall comply with the requirements in Section XI.A. (Visual Observations), including monthly visual observations (Section XI.A.1), sampling event visual observations (Section XI.A.2), visual observation records (Section XI.A.3), and</p>
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**Peck Road Park Lake and Echo Park Lake Trash TMDLs**

**Page 5**

	revision of BMPs as necessary (Section XI.A.4).  Any structural control measures for trash must also be included on the facility's site map (Section X.E.3.c).
TMDL	documents are available at: <a href="http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/Established/Lakes/LALakesTMDLEntireDocument.pdf">http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/Established/Lakes/LALakesTMDLEntireDocument.pdf</a>

## **Fact Sheet for Peck Road Park Lake and Echo Park Lake Trash TMDLs**

On March 26, 2012, the United States Environmental Protection Agency (U.S. EPA) established 33 TMDLs for a variety of pollutants pertaining to nine Los Angeles area lakes. These Los Angeles Area Lakes TMDLs became effective upon establishment. One of the pollutants addressed in the Los Angeles Area Lakes TMDLs is trash. This section of the Fact Sheet only addresses the trash impairments to Peck Road Park Lake and Echo Park Lake, as these are the two trash impaired lakes where U.S. EPA identified Industrial Storm Water General Permittees as sources of trash by assigning wasteload allocations to those sources.

Trash is defined as all improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural materials.

Peck Road Park Lake and Echo Park Lake are both located within the Los Angeles River watershed. The existing beneficial uses assigned to Echo Park Lake include water contact recreation (REC1), non-contact water recreation (REC2), warm freshwater habitat (WARM), and wildlife habitat (WILD). Peck Road Park Lake is not identified specifically in the Los Angeles Basin Plan; therefore, the beneficial uses associated with the downstream segment (Rio Hondo below Spreading Grounds) apply: REC1, REC2, WARM, WILD, municipal and domestic supply (MUN), and ground water recharge (GWR). Trash can potentially impair the REC1, REC2, WARM, and WILD beneficial uses in a variety of ways, including causing toxicity to aquatic organisms, damaging habitat, impairing aesthetics, and impeding recreation.

U.S. EPA provides extensive detail as to the significant water quality problems associated with trash in waterbodies, including adverse impacts to humans, fish, and wildlife. This includes reduced habitat for aquatic life, direct harm to wildlife from ingestions or entanglement, and health impacts to people recreating near trash potentially contaminated with human or pet wastes (pgs. 3-8 to 3-9). The prevention and removal of trash in waterbodies will ultimately lead to improved water quality, protection of aquatic life and habitat, improved opportunities for public recreational access and restoration activities, enhancement of public interest in the lakes, propagation of the vision of the watersheds as a whole, and enhancement of the quality of life of riparian residents.

### **Numeric Targets**

The Peck Road Park Lake and Echo Park Lake Trash TMDLs are based on numeric targets derived from narrative water quality objectives in the Los Angeles Basin Plan for floating materials (“Waters shall not contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses”) and for solid, suspended, or settleable materials (“Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely

affect beneficial uses”). Since any amount of trash impairs beneficial uses, the loading capacity of the lakes is set to zero allowable trash.

The numeric target for the TMDLs is 0 (zero) trash in or on the water and on the shoreline. Zero trash is defined as no allowable trash discharged into the waterbody of concern, shoreline, and channels. No information has been found to justify any value other than zero that would fully support the designated beneficial uses (pg. 4-72 & 6-53). Furthermore, court rulings have found that a numeric target of zero trash is legally valid.<sup>10</sup>

### **Wasteload Allocations**

The TMDLs identify Industrial Storm Water General Permittees as responsible dischargers because they are source of trash contribution to both lakes. Therefore, the TMDLs assign Industrial Storm Water General Permittees a wasteload allocation (WLA) of zero allowable trash for both impaired lakes (pg. 4-80 & 6-59). This requires that current loads be reduced by 100%. Trash generated from non-industrial activities (e.g., cigarette butts, candy wrappers, etc.) within the industrial activity area of the facility is considered an industrial material for the purposes of these TMDLs and is subject to Industrial Storm Water General Permit coverage.

In developing the TMDLs, U.S. EPA solely addressed technical issues related to the development of WLAs; the TMDLs do not address implementation requirements. However, the TMDLs suggest that WLAs may be complied with via full capture systems, partial capture systems, nonstructural BMPs, or other lawful means that meet the target of zero trash. U.S. EPA recommends the installation of full capture systems throughout the watersheds.

### **Required Actions**

The required actions apply to Industrial Storm Water General Permittees that discharge non-storm water and/or storm water associated with industrial activities<sup>11</sup> to Peck Road Park Lake or Echo Park Lake either directly or via a municipal separate storm sewer system (MS4) or an upstream reach or tributary.

#### **Updating the Facility SWPPP: Assessment of Potential Pollutant Sources**

If trash is 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

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<sup>10</sup> *City of Arcadia et al. v. Los Angeles Regional Water Quality Control Board et al.* (2006) 135 Cal.App.4th 1392.

<sup>11</sup> Including storm water not associated with industrial activities that is commingled with storm water associated with industrial activities.

facility relative to their potential as a source of trash 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.

Compliance with Wasteload Allocations

The Industrial Storm Water General Permit prohibits discharges that violate any discharge prohibitions contained in applicable Regional Water Board Water Quality Control Plans (Basin Plans), or statewide water quality control plans and policies. (Section III.D). The Permit also prohibits industrial storm water discharges and authorized NSWDS that contain pollutants that cause or threaten to cause pollution, contamination, or nuisance. (Section III.C).

Responsible Dischargers shall comply with the TMDL Action Level (TAL)<sup>12</sup>, expressed as a prohibition of discharges of trash, in the table below.

**TAL for Industrial Storm Water General Permittees**

<b>Parameter</b>	<b>Applicability</b>	<b>TAL</b>
Trash	Authorized NSWDS/Storm Water Discharges	Zero units of trash <sup>13</sup>

Responsible Dischargers shall comply with the TAL by eliminating trash from all storm water and authorized NSWDS by utilizing one of the following methods:

1. Full Capture Systems: Install, operate, and maintain certified *full capture systems*<sup>14</sup> for all drainage infrastructure that capture storm water and non-storm

<sup>12</sup> 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).

<sup>13</sup> A unit of trash is equal to one piece of trash, independent of size, monitored at a location downgradient of control measures and at, or upgradient of, discharge point(s) to the receiving water.

<sup>14</sup> A full capture system is defined as any single device or series of devices, certified by the Los Angeles Water Board Executive Officer or State Water Board Executive Director (or designee), that traps all particles that are 5 mm or greater, and has a design treatment capacity that is either: a) of not less than the peak flow rate, Q, resulting from a one-year, one-hour storm in the sub-drainage area, or b) appropriately sized to, and designed to carry at least the same flows as, the corresponding storm drain. The Rational Equation is used to compute the peak flow rate:

$$Q = C \times I \times A,$$

Where:

Q = design flow rate (cubic feet per second, cfs);

C = runoff coefficient (dimensionless);

water from areas of industrial activity at the site. Use of *full capture systems* are subject to the following:

- a. Responsible Dischargers may progressively install *full capture systems* throughout their site until all drainage areas with industrial activity are addressed.
  - b. *Full capture systems* must be adequately sized and maintained, and all conditions in the certification must be met.
  - c. Maintenance records for *full capture systems* must be up-to-date and available for inspection by the Los Angeles Water Board and State Water Board.
2. Minimum Frequency of Assessment and Collection Approach: Implement a program for minimum frequency of assessment and collection (MFAC) for trash in conjunction with BMPs. The MFAC/BMP program must meet the following criteria:
- a. The MFAC/BMP program includes an initial minimum frequency of trash assessment and collection and suite of structural and/or non-structural BMPs consisting of any combination of *full capture systems*,<sup>15</sup> *partial capture devices*,<sup>16</sup> and *institutional controls*<sup>17</sup> for all areas of industrial activity at the site. The MFAC/BMP program shall include collection and disposal of all trash found in industrial areas of the site. Responsible Dischargers shall implement an initial suite of BMPs based on current

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I = design rainfall intensity (inches per hour, as determined per the Los Angeles County rainfall isohyetal maps relevant to the Los Angeles River watershed), and  
A = sub-drainage area (acres).

Uncertified full capture systems will not satisfy these TMDL-based requirements. To request certification, a Responsible Discharger shall submit a certification request letter that includes all relevant supporting documentation to the State Water Board's Executive Director. The Executive Director, or designee, shall issue a written determination approving or denying the certification of the proposed full capture system or conditions of approval, including a schedule to review and reconsider the certification.

Full capture systems previously certified by the Los Angeles Water Board will satisfy these requirements, unless the State Water Board's Executive Director (or designee) determines otherwise. The Los Angeles Water Board currently recognizes eight full capture systems. These are: Vortex Separation Systems (VSS) and seven other Los Angeles Water Board Executive Officer certified full capture systems, including specific types or designs of trash nets; two gross solids removal devices (GSRDs); catch basin brush inserts and mesh screens; vertical and horizontal trash capture screen inserts; and a connector pipe screen device.

<sup>15</sup> In areas where full capture systems are installed, Responsible Dischargers shall comply with the requirements in 1.b and 1.c, above.

<sup>16</sup> A partial capture device is defined as any structural trash control device that has not been certified by the Los Angeles Water Board Executive Officer or State Water Board Executive Director (or designee) as meeting the "full capture" performance requirements.

<sup>17</sup> Institutional controls is defined as non-structural BMPs (i.e., no structures are involved). For Industrial Storm Water General Permittees, these include the non-structural BMPs as set forth in Section X.H of the facility's Storm Water Pollution Prevention Plan (SWPPP). These may include, but not be limited to, sweeping, trash bins, collection of the trash, and anti-litter educational and outreach programs at the industrial facility.

trash management practices in industrial areas that are found to be sources of trash. Responsible Dischargers shall update their SWPPP with an initial minimum frequency of trash assessment and collection and corresponding BMPs. 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.

- b. MFAC protocols shall be based on Surface Water Ambient Monitoring Program (SWAMP) protocols for rapid trash assessment, unless alternative protocols are proposed by Responsible Dischargers and approved by the Los Angeles Water Board Executive Officer.
- c. Implementation of the MFAC/BMP program should include a Health and Safety Program to protect personnel.
- d. The State Water Board or Los Angeles Water Board may require a Responsible Discharger to increase its assessment and collection frequency under the MFAC:
  - i. To prevent trash from accumulating in deleterious amounts that cause nuisance or adversely affect beneficial uses between collections;
  - ii. To reflect the results of trash assessment and collection;
  - iii. If the amount of trash collected does not show a decreasing trend, where necessary, such that a shorter interval between collections is warranted.

Responsible Dischargers installing flow-based or volume-based control measures for trash must meet the design storm criteria in Section X.H.6.

#### Monitoring and Reporting Requirements

Dischargers covered under the Industrial Storm Water General Permit are required to execute visual observations of their site (IGP, Section XI.A), including monthly visual observations (Section XI.A.1), sampling event visual observations (Section XI.A.2), visual observation records (Section XI.A.3), and revision of BMPs as necessary (Section XI.A.4). This includes required visual observation and recording of the presence or absence of floating and suspended materials and trash/debris, and source(s) of any discharged pollutants. (Section XI.A.2.c).

Any structural control measures for trash must also be included on the facility's site map (Section X.E.3.c).

If visual observations 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, unless the Discharger documents that all drainage areas and infrastructure associated with industrial activities are addressed by *full capture systems* as defined above. Exceedance of the TAL of zero (0) units of trash is translated as finding one (1) or more pieces of trash in storm water or non-storm water discharges from areas of industrial activity at the facility.

## **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 to eliminate trash in authorized NSWDLs and/or storm water discharges include: the Industrial Storm Water General Permit and the authority contained in sections 13263, 13267, and 13383 of the California Water Code. If it is determined, based on, but not limited to, monitoring data and comparison to the applicable TAL, 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.