

**STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**TIME SCHEDULE ORDER NO. R4-2014-0023-A01**

**REQUIRING THE CITY OF LOS ANGELES  
(INNER CABRILLO BEACH, LOS ANGELES HARBOR)  
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN  
ORDER NO. R4-2012-0175, AS AMENDED  
(NPDES PERMIT NO. CAS004001)**

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board) finds:

1. On November 8, 2012, the Los Angeles Water Board adopted waste discharge requirements and a National Pollutant Discharge Elimination System (NPDES) Permit (Order No. R4-2012-0175) for municipal separate storm sewer system (MS4) discharges within the Coastal Watersheds of Los Angeles County, with the exception of those discharges originating from the City of Long Beach MS4 (Los Angeles County MS4 Permit). The Permit has been amended twice since issuance, first by the State Water Resources Control Board via Order WQ 2015-0075 on June 16, 2015 and second by the Los Angeles Water Board via Order No. R4-2012-0175-A01 on September 8, 2016.
2. The requirements of the Los Angeles County MS4 Permit apply to the Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities within the Los Angeles County Flood Control District with the exception of the City of Long Beach. The City of Los Angeles (City) is subject to the requirements of the Los Angeles County MS4 Permit.
3. The City of Los Angeles encompasses approximately 469 square miles. The City's MS4 conveys both storm water and non-storm water discharges into receiving waters in the watershed management areas of the Los Angeles River Watershed; the Santa Monica Bay Watershed Management Area; and the Dominguez Channel and Greater Los Angeles/Long Beach Harbors Watershed Management Area. The City's MS4 consists of natural and constructed channels, debris basins, 11 pump plants, 1,125 miles of storm drain pipes, and 66,260 catch basins.
4. The Los Angeles Harbor is administrated by the City through the Port of Los Angeles. The Port complex occupies 7,500 acres of land and water along 43 miles of waterfront. The City is the owner and operator of the Inner Cabrillo Beach (hereinafter, ICB), which is located in the Los Angeles Harbor.
5. Inner Cabrillo Beach offers a protected sand beach for swimming, attracting approximately 700,000 people annually.<sup>1</sup> Inner Cabrillo Beach attracts families with young children where the children can swim in the calm waters of the protected beach. A public boat launch and dock is north of the beach separated from the beach by a rock groin.
6. ICB was listed on California's 1998 Clean Water Act Section 303(d) List as impaired due to "Beach Closures (coliform)." To address impairments in the Los Angeles Harbor due to

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<sup>1</sup> Lifeguard counts, 2003, S. Vogel, Cabrillo Marine Aquarium, personal communication.

bacteria, on July 1, 2004, the Los Angeles Water Board adopted the Los Angeles Harbor Bacteria Total Maximum Daily Load (TMDL). The TMDL required point source dischargers, including the City's MS4 discharges, to comply with waste load allocation (WLAs) for bacteria by March 10, 2010.

7. The Los Angeles County MS4 Permit includes new water quality-based effluent limitations and corresponding receiving water limitations for bacteria to implement the WLAs established in the TMDL.
8. Attachment N of the Los Angeles County MS4 Permit requires the City to comply with the following final water quality-based effluent limitations for MS4 discharges to Inner Cabrillo Beach, as of the effective date of the Permit:

Constituent	Effluent Limitations (MPN or cfu)	
	Daily Maximum	Geometric Mean
Total coliform*	10,000/100 mL	1,000/100 mL
Fecal coliform	400/100 mL	200/100 mL
<i>Enterococcus</i>	104/100 mL	35/100 mL

Total coliform density shall not exceed a daily maximum of 1,000/100 mL, if the ratio of fecal-to-total coliform exceeds 0.1.

9. Attachment N of the Los Angeles County MS4 Permit requires the City to comply with the following final single sample bacteria receiving water limitations for MS4 discharges to Inner Cabrillo Beach, as of the effective date of the Permit:

Time Period	Receiving Water	Compliance Monitoring Location	Annual Allowable Exceedance Days of the Single Sample Objective (days)	
			Daily sampling	Weekly sampling
Summer Dry-Weather (April 1 to October 31)	Inner Cabrillo Beach	CB 01	0	0
Winter Dry-Weather (November 1 to March 31)	Inner Cabrillo Beach	CB 01	0	0
Wet Weather <sup>2</sup> (Year-round)	Inner Cabrillo Beach	CB 01	0	0

10. Attachment N of the Los Angeles County MS4 Permit requires the City to comply with the following geometric mean receiving water limitations for MS4 discharges to Inner Cabrillo Beach, as of the effective date of the Permit:

<sup>2</sup> Wet weather is defined as days with 0.1 inch of rain or greater and the three days following the rain event.

Constituent	Geometric Mean
Total coliform	1,000 MPN/100 mL
Fecal coliform	200 MPN/100 mL
<i>Enterococcus</i>	35 MPN/100 mL

11. Pursuant to Part VI.E.4. of the Los Angeles County MS4 Permit, permittees that believe additional time is necessary to comply with the water-quality based effluent limitations and/or receiving water limitations for State adopted TMDLs where the final compliance deadlines have passed may request a time schedule order (TSO) pursuant to California Water Code section 13300 for the Board's consideration.
12. On December 24, 2012, the City submitted a letter to the Los Angeles Water Board requesting a TSO for its MS4 discharges to ICB pursuant to California Water Code section 13300 to provide time for the City to comply with the new bacteria water quality-based effluent limitations and corresponding receiving water limitations. The City explained that it has made efforts to comply with the new water quality-based effluent limitations and corresponding receiving water limitations for bacteria contained in the Los Angeles County MS4 Permit. Despite these efforts, the ICB boat launch ramp (Station CB01) continues to have exceedances of indicator bacteria at frequencies above that allowed in the Los Angeles County MS4 Permit.
13. The City provided the Los Angeles Water Board with the following data summary for ICB Station CB01 of indicator bacteria sampling results based on samples conducted five days per week for the most recent six-year period from 2007 to 2012.

Annual number of bacteria indicator exceedance days at Station CB01 (2007-2012)\*

Year	Single samples Summer dry Weather		Single samples Winter dry Weather		Geometric mean Year round	
	Actual	Allowed	Actual	Allowed	Actual	Allowed
2007	15	0	9	0	84	0
2008	17	0	12	0	63	0
2009	3	0	10	0	31	0
2010	10	0	17	0	63	0
2011	19	0	18	0	59	0
2012	23	0	11	0	53**	0

\* Consistent wet weather sampling began in October 2010; thus far no single sample exceedances have been recorded.

\*\* Data included until December 7, 2012

14. The City has performed the following activities to comply with the TMDL:
  - a. Installed numerous structural and non-structural best management practices (BMPs) such as removal of an old sanitary sewer outfall line; circulation enhancement by removal of a rock groin; repairing and extending the bird exclusion structure; and educational signage.

- b. Completed surveys and hydrodynamic studies on storm drain and sewer lines in 2002 through 2004. Those potential problem lines were repaired, diverted, plugged or removed, including two leaking sanitary sewer lines from the bathhouse and lifeguard station. In 2004, the main storm drain line affecting the beach area was diverted to the sanitary sewer, which has the capacity to handle dry weather flow and first flush.
  - c. Beach area housekeeping practices, including additional trash removal, restroom maintenance, beach sand grooming, and sidewalk and parking lot maintenance were examined and operating procedures improved in the 2004-2006 time frame.
  - d. The beach sand from the high tide line inland to the sidewalk area was excavated and replaced in two phases between 2007 and 2010. In addition, the beach was re-contoured to eliminate ponding that had occurred after high tides.
15. The Los Angeles Water Board found that the City justified its December 24, 2012 request for a TSO. Therefore, at a hearing held on February 6, 2014, the Board adopted TSO No. R4-2014-0023 to provide the City with a time period of approximately three years and eleven months to implement watershed control measures to comply with the final water quality-based effluent limitations and corresponding final receiving water limitations for total coliform, fecal coliform, and enterococcus in the Los Angeles County MS4 Permit.
16. Since the original issuance of TSO No. R4-2014-0023 on February 6, 2014, the City has assessed the feasibility of diversion of identified storm drains impacting CB01. The City concluded that diversion of storm drain SD01 would not achieve the intended purpose of elimination bacteria exceedances at compliance point CB01. In its *Inner Cabrillo Beach SD01 Conceptual Design Feasibility Assessment, Final Report* to the Los Angeles Water Board, the City determined that diversion of flows from storm drain SD01 was not feasible due to: (i) site characteristics, which significantly limit the design storm volume that could be diverted, and (ii) very low dry weather flows from SD01 such that diversion of SD01 would not reduce dry weather exceedances at the CB01 compliance point. As a result, the task "Construct feasible storm drain modifications" previously included under provision 3, below, is no longer applicable as it was dependent on a favorable assessment of the feasibility of diversion of SD01.
17. Once the City concluded that storm drain diversion was not feasible, the City began to investigate alternative structural BMPs. The City's feasibility assessment evaluated potential control measures to mitigate elevated bacterial concentrations at compliance point CB01 and concluded that installation of a tide gate at storm drain SD01 was the best alternate control measure to implement. The tide gate would eliminate tidal influx into the storm drain system, while also reducing the frequency of discharges from SD01 to the harbor.
18. The City has also been conducting Microbial Source Tracking (MST) studies at Inner Cabrillo Beach, focusing initially on the TMDL compliance point CB02 located adjacent to the swimming beach area, using human marker procedures as set forth in the California Microbial Source Identification Manual. The City has determined that the majority of the *enterococcus* exceedances are related to birds; therefore, the City has begun to do pathogen analysis work on bird feces.

19. On April 18, 2017, the City requested an extension of the term of this TSO to February 5, 2019, in order to mirror the MST efforts being conducted at CB02, as described above, at CB01.
20. California Water Code section 13300 states:

“Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.”
21. Based on monitoring data, the City's MS4 discharges to ICB is not able to consistently comply with the final water quality-based effluent limitations and corresponding final receiving water limitations for total coliform, fecal coliform, and *enterococcus* in the Los Angeles County MS4 Permit. Accordingly, pursuant to California Water Code section 13300, a discharge of waste is taking place and/or threatens to take place that violates requirements prescribed by the Los Angeles Water Board.
22. California Water Code section 13385, subdivisions (h) and (i), require the Los Angeles Water Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. Section 13385(j)(3) exempts violations of an effluent limitation from mandatory minimum penalties "where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, *if all of the [specified] requirements are met.*" (emphasis added).
23. In accordance with California Water Code section 13385(j)(3), the Los Angeles Water Board finds that: (a) the bacteria water quality-based effluent limitations applicable to the City's MS4 discharges to ICB are new limitations in the Los Angeles County MS4 Permit, (b) the City needs to implement new or modified control measures in order to comply with the bacteria limitations, and (c) the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
24. Since the time schedule for completion of the actions necessary to bring the waste discharge into compliance exceeds one year from the effective date of this TSO, this TSO includes interim requirements and the dates for their achievement. The interim requirements include both interim water quality-based effluent limitations and corresponding interim receiving water limitations for total coliform, fecal coliform, and *enterococcus* and actions and milestones leading to compliance with the final water quality-based effluent limitation and corresponding final receiving water limitations for these pollutants. This TSO does not exceed five years.
25. This TSO establishes interim water quality-based effluent limitations and corresponding interim receiving water limitations for single samples of total coliform, fecal coliform, and *enterococcus* during summer and winter dry weather and for the geometric mean concentration of these indicator bacteria. This TSO also requires the City to undertake specific actions to control bacteria in its MS4 discharges to ICB to put the City on the path towards compliance with the final water quality-based effluent limitations and corresponding

final receiving water limitations for total coliform, fecal coliform, and *enterococcus*. The established time schedule is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the final water quality based effluent limitations and corresponding final receiving water limitations for total coliform, fecal coliform, and *enterococcus*.

26. This TSO does not establish interim water quality-based effluent limitations for single samples during wet-weather because there is insufficient data to establish an interim water quality-based effluent limitation at this time.
27. The interim water quality-based effluent limitations and interim receiving water limitations are set equal to the 99<sup>th</sup> and 95<sup>th</sup> percentiles of the single sample maximum and geometric mean exceedances, respectively, calculated using data from 2007 through 2012.
28. California Water Code section 13385(j)(3) requires the City to prepare and implement a Pollution Prevention Plan (PPP) pursuant to California Water Code section 13263.3. Therefore, a PPP will be necessary for total coliform, fecal coliform, and *enterococcus*.
29. A TSO is appropriate in these circumstances to allow the City the necessary time to undertake actions to reduce the amount of bacteria discharged from the City's MS4 to ICB. The temporary bacteria exceedances allowed by this TSO are in the public interest given the significant environmental benefits associated with promptly achieving compliance with the final water quality-based effluent limitations for bacteria.
30. Full compliance with the requirements of this TSO exempts the City from mandatory minimum penalties only for violations of the final water quality-based effluent limitations for total coliform, fecal coliform, and *enterococcus* in the Los Angeles County MS4 Permit, pursuant to California Water Code section 13385(j)(3).
31. As long as the City is in compliance with the applicable TMDL requirements in this TSO, it is not the Los Angeles Water Board's intention to take an enforcement action for violations of Part V.A. of the Los Angeles County MS4 Permit for the specific pollutants addressed in this TSO.
32. This TSO is being issued for the protection of the environment. Therefore, issuance and amendment of this TSO is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21100 *et seq.*) in accordance with sections 15301 and 15321(a)(2) of Title 14 of the California Code of Regulations.
33. The Los Angeles Water Board has notified the City and interested agencies and persons of its intent to amend this TSO concerning compliance with waste discharge requirements and had provided them with an opportunity to submit written comments. The Los Angeles Water Board considered all comments pertinent to this matter.
34. Any person aggrieved by this action of the Los Angeles Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the Los Angeles Water Board action, except that if the thirtieth day following

the date action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

**IT IS HEREBY ORDERED** that, pursuant to California Water Code section 13300, the City shall comply with the requirements listed below to ensure its MS4 discharges to ICB comply with the final water quality-based effluent limitations and corresponding receiving water limitations for bacteria indicators in Order No. R4-2012-0175:

1. From February 6, 2014 to February 5, 2019, the City's MS4 discharges to ICB shall not exceed the water quality-based effluent limitations for total coliform, fecal coliform, and *enterococcus* more than the allowable number of exceedance days provided in the table below, on an annual basis (November 1-October 31):

Compliance Monitoring Location	Annual Allowable Exceedance Days (days)		
	Single Sample Summer Dry Weather	Single Sample Winter Dry Weather	Geometric Mean Year round
Station CB01	23	18	79

2. From February 6, 2014 to February 5, 2019, the City shall comply with the following interim receiving water limitations at ICB for total coliform, fecal coliform, and *enterococcus* at Station CB01, on an annual basis (November 1-October 31):

Compliance Monitoring Location	Annual Allowable Exceedance Days (days)		
	Single Sample Summer Dry Weather	Single Sample Winter Dry Weather	Geometric Mean Year round
Station CB01	23	18	79

3. The City shall implement and complete watershed control measures according to the following schedule:

Task	Completion Date
Continue to monitor Station CB01 for indicator bacteria on a 5-day per week basis	Ongoing
Investigate and institute additional non-structural BMPs, including but not limited to, distributing education materials; assess function/ drainage of boat wash facility; install signage as needed; verify housekeeping procedures to limit animal waste	July 31, 2014
Investigate and institute simple structural BMPs, including but not limited to, determining the feasibility of animal excluding devices in ICB parking lot storm drain	July 31, 2014
Assess effectiveness of non-structural and simple structure BMPs	December 31, 2014

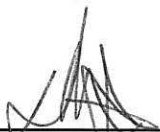
Assess feasibility of diversion of identified storm drains impacting Station CB01, including but not limited to, conducting engineering surveys and determining feasibility of low-flow diversion connections to sewer lines	December 31, 2014
Monitor CB01 area in conjunction with installation of tide gate, utilizing digital droplet polymerase chain reaction (PCR) and quantitative PCR to compare methods.	November 1, 2017 through July 1, 2018
Perform pathogen sampling and analysis for bird and human-related pathogens.	Summer 2017 and Summer 2018
Perform source allocation analysis to determine relative contributions.	Summer 2017 and Summer 2018
Install a tide gate at storm drain SD01.	November 30, 2017

4. The City's MS4 discharges to ICB shall achieve full compliance with the final water quality-based effluent limitations and corresponding final receiving water limitations for total coliform, fecal coliform, and *enterococcus* as soon as possible, but no later than February 6, 2019.
5. The City shall submit a Pollution Prevention Plan (PPP) workplan for bacteria, with a time schedule for implementation, for approval of the Executive Officer no later than April 7, 2014, pursuant to California Water Code section 13263.3.
6. The City shall submit annual progress reports by January 15<sup>th</sup> of each year of efforts taken by the City towards achieving compliance with the final water quality-based effluent limitations and receiving water limitations for bacteria indicators. The reports shall summarize the progress to date, activities conducted during that calendar year, and the activities planned for the upcoming year. The reports shall also state whether or not the City was in compliance with the interim water-quality based effluent limitations and receiving water limitations for bacteria during the reporting period. The first progress report shall be received by the Los Angeles Water Board by January 15, 2015, and will cover the months of February 2014 through December 2014.
7. Upon issuance of this amended TSO, the City shall also submit a semi-annual progress report by July 15, 2018, covering the reporting period January 2018 through June 2018. The semi-annual progress report shall summarize the progress to date, activities conducted during the preceding six months, and the activities planned for the next six months. The report shall also state whether or not the City was in compliance with the interim water-quality based effluent limitations and receiving water limitations for bacteria during the reporting period.
8. The City shall submit a final report on the results of the implementation and evaluation of the selected actions/measures by April 5, 2019. The report shall include: a) a description of the actions/measures selected; b) the monitoring data collected after the implementation of the selected actions/measures including treatment process, if any; and c) an evaluation of the effectiveness of the selected actions/measures, including comparison to final water quality-based effluent limitations and receiving water limitations.



9. All technical and monitoring reports required under this TSO are required pursuant to California Water Code sections 13267 and 13383. The Los Angeles Water Board needs the required information in order to determine compliance with this TSO and Order No. R4-2012-0175. The Los Angeles Water Board believes that the burdens, including costs, of these reports bear a reasonable relationship to the needs for the reports and the benefits to be obtained from the reports.
10. Any person signing a document submitted under this TSO shall make the following certification:  
  
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
11. If the City fails to comply with any provision of this TSO, the Los Angeles Water Board may take any further action authorized by law. The Executive Officer, or his/her delegee, is authorized to take appropriate enforcement action pursuant, but not limited to, California Water Code sections 13350 and 13385. The Los Angeles Water Board may also refer any violations to the Attorney General for judicial enforcement, including injunction and civil monetary remedies.
12. All other provisions of Order No. R4-2012-0175 (NPDES Permit No. CAS004001) not in conflict with this TSO are in full force and effect.
13. The Los Angeles Water Board may reopen this TSO at its discretion or at the request of the City or interested person, if warranted. Lack of progress towards compliance with this TSO may be cause for the Los Angeles Water Board to modify the conditions of this TSO.
14. This amended TSO becomes effective immediately upon issuance and it expires on February 5, 2019, or upon the effective date of a new Los Angeles County MS4 Permit that supersedes Order No. R4-2012-0175, whichever date occurs first.

IT IS SO ORDERED.

  
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Samuel Unger, P.E. *for*  
Executive Officer

8-9-17  
Date