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## North Coast Regional Water Quality Control Board

October 6, 2021

Certified No. 7016 0750 0001 0048 6450

CalTrans District 4  
Mr. Hardeep Takhar  
111 Grand Avenue, Mail Station 8F  
Oakland, CA 94612  
[Hardeep.S.Takhar@dot.ca.gov](mailto:Hardeep.S.Takhar@dot.ca.gov)

Dear Mr. Takhar:

Subject: Notice of Violation of Statewide Stormwater Permit Order 2012-0011-DWQ and Clean Water Act section 401 Water Quality Certification

Files: Caltrans MS4 District 4 (SMARTS Permittee Id.); CIWQS PIN CW-810249 (ECM Primary Indexing No.)

You are hereby notified that California Department of Transportation, District 4 (Caltrans District 4) is in violation of California State Water Resources Control Board Order No. 2012-0011-DWQ<sup>1</sup> (Caltrans Statewide Stormwater Permit) and a Clean Water Act section 401 water quality certification.

### **I. Background**

The Caltrans Statewide Stormwater Permit regulates discharges from Caltrans District 4's Municipal Separate Storm Sewer System (MS4) to federal and state waters.

Caltrans Statewide Stormwater Permit provision E.2.e.2.d (Page 38) requires Caltrans to develop and utilize a watershed-based database to track and inventory treatment BMPs<sup>2</sup> and their maintenance within its jurisdiction. On March 1, 2021, the North Coast Regional Water Quality Control Board (Regional Water Board) sent a letter to the Caltrans District 4 Water Quality Program Manager requesting a copy of the District 4 treatment BMP inventory pursuant to Statewide Stormwater Permit Provision E.2.e.2.d. Caltrans District 4 provided its treatment BMP inventory on May 17, 2021.

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<sup>1</sup> As amended by Order WQ-2014-0006-EXEC, Order WQ-2014-0077-DWQ, ORDER WQ-2015-0036-EXEC, and Order WQ-2017-0026-EXEC

<sup>2</sup> The Caltrans Statewide Stormwater Permit uses the term "treatment BMPs" to refer to structural best management practices installed on a permanent basis to control stormwater pollutant discharges from Caltrans projects. These BMPs are also sometimes referred to as "post-construction BMPs," "permanent BMPs," and "Low Impact Development BMPs." For consistency with the Caltrans Statewide Stormwater Permit, the term "treatment BMPs" is used in this NOV.

The Caltrans Statewide Stormwater Permit requires installation of treatment BMPs on projects that create or redevelop a minimum of 1 acre of impervious area.<sup>3</sup> Also, the Regional Water Board requires all projects seeking Clean Water Act section 401 water quality certification (401 certifications) install treatment BMPs where 5,000 or more square feet of impervious area are created and/or redeveloped. Regional Water Board staff reviewed its online inventory of 401 certifications<sup>4</sup> to query 401 certifications issued to Caltrans District 4 between March 13, 2012, and June 1, 2016. Four 401 certifications for projects that included twelve treatment BMPs were issued to Caltrans during this time period (see Table 1 summary below). The twelve total required treatment BMPs from these four projects were compared to the treatment BMPs listed in the Caltrans-submitted treatment BMP inventory. Of the four 401 certification projects, one was fully represented in the Caltrans treatment BMP inventory. Of the twelve treatment BMPs, one was represented in the Caltrans treatment BMP inventory.

**Table 1: Treatment BMP Audit results**

Project	County and Route	BMP	In Caltrans Inventory?
Airport Fulton Interchange	Sonoma 101	Bioretention	No
		Bioretention	No
		Bioretention	No
		Infiltration Area	No
		Infiltration Area	No
		Infiltration Area	No
		Infiltration Area	No
		Infiltration Area	No
		Infiltration Area	No
Laguna de Santa Rosa Bridge Replacement	Sonoma 12	Biostrip	No
Estero Americano Bridge	Sonoma 1	Bioswale	No
Storm Damage Repair	Sonoma 1	Bioswale	Yes

Additional details about the Regional Water Board’s treatment BMP inventory audit are included in the attached memorandum, *District 4 LID BMP Inventory Compliance Audit*.

**II. Alleged Violations**

Caltrans Statewide Stormwater Permit provision E.2.e.2. requires:

*The Department shall develop and utilize a watershed-based database to track and inventory treatment BMPs and treatment BMP maintenance within its jurisdiction. At a minimum, the database shall include:*

<sup>3</sup> Order Provision 2.d.2.a, page 32

<sup>4</sup> [https://www.waterboards.ca.gov/northcoast/board\\_decisions/water\\_quality\\_certification/](https://www.waterboards.ca.gov/northcoast/board_decisions/water_quality_certification/)

- i) *Name and location of BMP;*
- ii) *Watershed, Regional Water Board and District where project is located;*
- iii) *Size and capacity;*
- iv) *Treatment BMP type and description;*
- v) *Date of installation;*
- vi) *Maintenance certifications or verifications;*
- vii) *Inspection dates and findings;*
- viii) *Compliance status;*
- ix) *Corrective actions, if any; and*
- x) *Follow-up inspections to ensure compliance.*

*Electronic reports for each BMP inspected during the reporting period shall be submitted to each associated Regional Water Board in tabular form. A summary of the tracking system data shall be included in the Annual Report along with a report on maintenance activities for post construction BMPs. The tracking system database shall be made available to the State Water Board or any Regional Water Board upon request.*

Caltrans District 4 violated Caltrans Statewide Stormwater Permit provision E.2.e.2. because treatment BMPs for the Airport Fulton Interchange, Laguna de Santa Rosa Bridge Replacement, and Estero Americano Bridge projects were not entered into the Caltrans District 4 tracking and inventory database.

Additionally, Caltrans is in violation of Condition number 34 of the Laguna de Santa Rosa Bridge Replacement Curve Improvement Project 401 certification, which requires that:

*The [biofiltration] strip shall be entered into the District's permanent stormwater treatment BMP database and monitored and maintained to ensure BMP efficacy.*

### **III. Required Actions**

The Airport Fulton Road Interchange Bioretention and Infiltration Area BMPs, the Laguna de Santa Rosa Bridge Replacement biostrip, and the Estero Americano Bridge bioswale listed above in Table 1 shall be entered into the tracking database as required by provision E.2.e.2. , which consists of both the Caltrans District 4 "Stormwater Portal" and "Integrated Maintenance Management System." Caltrans shall field verify that these treatment BMPs are installed and that they are well maintained and functioning as designed. If they are not installed or fully functional, then Caltrans shall submit a timeline for Regional Water Board approval to install and/or maintain the BMPs to their functional design as required by the Caltrans Statewide Stormwater Permit.

**Caltrans District 4 shall verify compliance with these required actions no later than 60 days from issuance of this Notice of Violation.** Please submit your response via e-mail to [NorthCoast@waterboards.ca.gov](mailto:NorthCoast@waterboards.ca.gov) and [Brendan.Thompson@waterboards.ca.gov](mailto:Brendan.Thompson@waterboards.ca.gov) and include documentation, including a

minimum, photographs, documentation of any maintenance conducted, and documentation that the databases have been updated.

**IV. Future Enforcement Action**

The Regional Water Board is issuing a California Water Code Section 13383 Investigative Order concurrent with this Notice of Violation to obtain additional information about Caltrans 4's processes for tracking treatment BMPs.

Please be aware that pursuant to Water Code section 13385, the Regional Water Board may take enforcement actions for violation of conditions of the Certification and Caltrans Statewide Stormwater Permit, including but not limited to assessment of civil liabilities of up to \$10,000 per violation per day, and \$10 per gallon of waste discharged in excess of the first 1,000 gallons of discharge.

The Regional Water Board will consider your response to this Notice of Violation, as well as the number of days of violation already incurred, in determining whether to seek the imposition of an administrative civil liability complaint as well as additional legal action. Therefore, it is imperative that you comply as soon as possible.

Should you have any questions regarding this matter, please contact Brendan Thompson of my staff at (707) 407-0036, or via email at [Brendan.Thompson@waterboards.ca.gov](mailto:Brendan.Thompson@waterboards.ca.gov).

Sincerely,

Charles Reed, P.E.  
Supervising Water Resource Control Engineer

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Certified – Return Receipt Required

Attachment: District 4 LID BMP Inventory Compliance Audit

cc: Dragomir Bogdanic, Caltrans District 4, [Dragomir.Bogdanic@dot.ca.gov](mailto:Dragomir.Bogdanic@dot.ca.gov)

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## North Coast Regional Water Quality Control Board

**TO:**

- Heaven Moore, NPDES Division Senior
- Gil Falcone, Southern Nonpoint Source and 401 Certification Unit Senior
- File, SMARTS Final Inspection Report

**FROM:** Brendan Thompson  
Environmental Scientist  
**NPDES MS4 STORMWATER**

**DATE:** September 27, 2021

**SUBJECT:** DISTRICT 4 COMPLIANCE AUDIT—MS4 ORDER PROVISION E.2.e.2.d,  
COMPLETENESS OF BMP INVENTORY

### I. AUDIT FINDINGS

Caltrans District 4 provided a post-construction stormwater treatment Best Management Practices (BMPs)<sup>1</sup> inventory to the Regional Water Board on May 17, 2021. Regional Water Board staff reviewed four Caltrans District 4 projects issued Clean Water Act section 401 water quality certifications and found that that treatment BMPs for one of the four projects and eleven of the twelve LID BMPs were in the Caltrans inventory. If treatment BMPs are not in the Caltrans inventory then their pollutant removal characteristics are not being maintained by Caltrans staff. The Regional Water Board should request Caltrans provide a description of and proposed improvements of their current process for entering treatment BMPs into their treatment BMP inventory as well as identify all other treatment BMPs missing from the Caltrans BMP inventory.

### II. BACKGROUND

California State Water Resources Control Board Order No. 2012-0011-DWQ<sup>2</sup> (Caltrans Statewide Stormwater Permit) regulates discharges from the California Department of Transportation (Caltrans) municipal separate storm sewer system (MS4).

Provision E.2.e.2.d (PAGE 38) requires that the Department develop and utilize a watershed-based database to track and inventory post-construction treatment BMPs and their maintenance within its jurisdiction. North Coast Regional Water Quality Control Board (Regional Water Board) staff received a copy of Caltrans District 4's LID BMP inventory on May 6, 2021.

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<sup>1</sup> Post-construction stormwater treatment BMPs, also known as Low Impact Development (LID) BMPs, are referred to as "LID BMPs" in this document.

<sup>2</sup> As amended by Order WQ-2014-0006-EXEC, Order WQ-2014-0077-DWQ, ORDER WQ-2015-0036-EXEC, and Order WQ-2017-0026-EXEC

The Caltrans Statewide Stormwater Permit requires installation of LID BMPs on projects that create or redevelop a minimum of 1 acre of impervious area. Also, the Regional Water Board requires all projects seeking Clean Water Act section 401 water quality certification (401 certifications) install LID BMPs where 5,000 or more square feet of impervious area are created and/or redeveloped.

### III. AUDIT PURPOSE AND OBJECTIVE

Operators of MS4s, including Caltrans, are required by their respective MS4 stormwater permits to track and ensure maintenance of LID BMPs installed in their jurisdictions. These requirements are intended to ensure that LID BMPs are in-place, functioning, well maintained, and continue to function as designed over time to reduce pollutant discharge to receiving waters.

The Regional Water Board reviewed LID BMPs required through Clean Water Act section 401 water quality certifications to determine whether this representative subset of Caltrans LID BMPs were in the Caltrans District 4 LID BMP inventory.

### IV. AUDIT PROCESS

Regional Water Board staff used its online inventory of 401 certifications<sup>3</sup> to query 401 certifications issued to Caltrans District 4 between March 13, 2012, and June 1, 2016. 401 certifications issued in this time period include sufficient LID BMP information in both the permits and electronic project file to allow an assessment of LID BMP type, treatment area, and location. Additionally, these projects have completed project construction and the BMPs should be in the Caltrans inventory.

The 401 certifications and project files were reviewed to populate a spreadsheet inventorying the LID BMPs required on these projects. This LID BMP inventory was then compared to Caltrans's submitted LID BMP inventory.

### V. AUDIT RESULTS

Audit results are summarized below in Table 1.

**Table 1: Audit results**

Project	County and Route	BMP	In Caltrans Inventory?
Airport Fulton Interchange	Sonoma 101	Bioretention	No
		Bioretention	No
		Bioretention	No
		Infiltration Area	No
		Infiltration Area	No
		Infiltration Area	No
		Infiltration Area	No
		Infiltration Area	No
Laguna de Santa Rosa Bridge Replacement	Sonoma 12	Biostrip	No
Estero Americano Bridge	Sonoma 1	Bioswale	No
Storm Damage Repair	Sonoma 1	Bioswale	Yes

<sup>3</sup> [https://www.waterboards.ca.gov/northcoast/board\\_decisions/water\\_quality\\_certification/](https://www.waterboards.ca.gov/northcoast/board_decisions/water_quality_certification/)

Of the four 401 certification projects, one was represented in the Caltrans BMP inventory. Of the twelve LID BMPs, only one was represented in the Caltrans LID BMP inventory.

## VI. DISCUSSION

The Statewide Stormwater Permit requires “a watershed-based database to track and inventory treatment BMPs and treatment BMPs maintenance within its jurisdiction.” This requirement helps ensure that Caltrans maintains LID BMPs remain in place and maintained to control pollutant discharges from impervious surfaces. If any LID BMP is missing from the Caltrans treatment BMP inventory, then that is a significant problem because it means the BMP is either not in place, or if it is, its functionality is likely not being preserved. Additionally, failure to track and maintain LID BMPs is a violation of the Caltrans Statewide Stormwater Permit and 401 certifications requiring LID BMPs.

It is extremely concerning that all but one of the LID BMPs reviewed are missing from the Caltrans BMP inventory. Caltrans District 4 should have a process for relaying newly constructed LID BMPs into its BMP inventory, including its Integrated Maintenance Management System (IMMS)<sup>4</sup>. A thorough investigation of the existing process and its shortcomings is required so that the process may be modified and rendered “failsafe” to prevent future LID BMP omissions. Additionally, the number of projects reviewed was a rather small sample size, suggesting that there are more LID BMPs yet to be identified that are not in the Caltrans District 4 BMP inventory.

## VII. RECOMMENDATIONS AND NEXT STEPS

Based upon the results of this Audit, I recommend the following for management’s consideration:

1. At least eleven required LID BMPs are missing from the LID BMP inventory, which is a violation of the Caltrans Statewide Stormwater Permit. Management should consider whether a Notice of Violation is appropriate.
2. The Regional Water Board should consider issuing a California Water Code section 13383 Investigative Order to Caltrans District 4 that includes:
  - a. A description of District 4’s process for relaying LID BMPs into its Stormwater Portal and IMMS as it existed in March 2021 when the Regional Water Board requested a copy of the Caltrans District 4 LID BMP inventory;
  - b. An explanation for why the eleven LID BMPs in Table 1 are not in District 2’s BMP inventory;

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<sup>4</sup> Caltrans uses two databases to maintain its LID BMP inventory; the Stormwater Portal and IMMS. The Stormwater Portal is used by Caltrans as a stormwater program management resource and IMMS is used by maintenance staff to track Caltrans assets requiring ongoing upkeep.

- c. Based upon the findings produced from the above inquiries, a proposal for procedural modifications to ensure that future LID BMPs are transmitted into the District 4 LID BMP inventory and a timeline for implementation of the proposed modifications, subject to the approval of the Regional Water Board Executive Officer; and
- d. A proposal and implementation timeline to:
  - I. Identify all LID BMPs installed since 2005, including those required by 401 certifications;
  - II. Identify all LID BMPs that are not in IMMS;
  - III. Add those BMPs identified in 2.e.II into IMMS;
  - IV. Conduct inspections of all BMPs identified in 2.e.II and reinstall and/or maintain all BMPs as appropriate to ensure they are functioning as designed; and
  - V. For each of the above, provide reports documenting compliance.