



Los Angeles Regional Water Quality Control Board

December 30, 2019

Paul Alva
Assistant Deputy Director
County of Los Angeles
900 South Fremont Avenue
Alhambra, CA 91803

VIA EMAIL

APPROVAL OF ALTERNATIVE BIOFILTRATION SPECIFICATION PURSUANT TO PART VI.D.7.c.iii.(1)(b)(i) OF THE LOS ANGELES COUNTY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT (NPDES PERMIT NO. CAS004001; ORDER NO. R4-2012-0175 AS AMENDED BY STATE WATER BOARD ORDER WQ 2015-0075 AND LOS ANGELES WATER BOARD ORDER R4-2012-0175-A01)

Dear Mr. Alva:

On June 20, 2019, and August 8, 2019 for the City of Lomita, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) received a letter from the County of Los Angeles (County), on behalf of the Contract Cities,¹ requesting approval for the use of Filterra Bioretention Systems (Filterra) manufactured by Contech Engineered Solutions LLC as an alternative biofiltration design specification.

The County's request includes an excerpt from a document entitled "Filterra Equivalency Analysis and Design Criteria" (Equivalency Analysis) as an attachment, that details a proposed design approach and equivalency criteria for Filterra to achieve equivalent performance to the biofiltration design specifications defined in the Los Angeles County MS4 Permit.

Pursuant to Part VI.D.7.c.iii.(1)(b)(i) of the Los Angeles County MS4 Permit, projects using biofiltration as an alternative compliance measure may use alternative design

¹ The County of Los Angeles provides land development review services for the cities of Carson, Irwindale, La Cañada Flintridge, Lomita, Rolling Hills Estates and Westlake Village (Contract Cities).

specifications for on-site biofiltration systems if approved by the Los Angeles Water Board Executive Officer.

Background

Part VI.D.7 of the Los Angeles County MS4 Permit requires Permittees to implement a Planning and Land Development Program. As part of this program, Permittees shall require all New Development and Redevelopment projects identified in Part VI.D.7.b (hereinafter “new projects”) to control pollutants, pollutant loads, and runoff volume emanating from the project site. Except as provided in Part VI.D.7.c.ii (Technical Infeasibility or Opportunity for Regional Ground Water Replenishment), Part VI.D.7.d.i (Local Ordinance Equivalence), or Part VI.D.7.c.v (Hydromodification), each Permittee shall require new projects to retain on-site the Stormwater Quality Design Volume (SWQDv).

Pursuant to Part VI.D.7.c.iii.(1) of the Los Angeles County MS4 Permit, Permittees may allow new projects to use on-site biofiltration when the project applicant has demonstrated that it is technically infeasible to retain 100 percent of the Stormwater Quality Design Volume (SWQDv) on-site. If a Permittee conditions a project using biofiltration due to demonstrated technical infeasibility, then the new project must biofiltrate 1.5 times the portion of the SWQDv that is not reliably retained on-site, as calculated by the following equation:

$$Bv = 1.5 [SWQDv - Rv]$$

Where: *Bv = biofiltration volume*
 SWQDv = the stormwater runoff from a 0.75 inch, 24-hour storm or
 the 85th percentile storm, whichever is greater
 Rv = volume reliably retained on-site

As a condition for on-site biofiltration, bioretention/biofiltration systems shall meet the design specifications provided in Attachment H of the Los Angeles County MS4 Permit unless otherwise approved by the Los Angeles Board Executive Officer.

Public Review

On September 30, 2019, the Los Angeles Water Board provided public notice and a 30-day period to allow for public review and written comment on the proposed use of Filterra alternative biofiltration design specification. No comments were received.

Alternative Biofiltration Specification Approval

I hereby approve the County’s proposal for the use of Filterra as an alternative on-site biofiltration design specification pursuant to Part VI.D.7.c.iii(1)(b)(i) of the Los Angeles County MS4 Permit, provided the following conditions are met:

1. **Sizing:** The County shall verify the appropriateness of the recommended loading rates used in the "Filtterra Equivalency Analysis and Design Criteria".

If the County finds no issues with the loading rate, Filtterra systems must be designed and sized following the methodology in Section 4 of the August 2015 report entitled "Filtterra Equivalency Analysis and Design Criteria".

If the County finds that the recommended loading rate is too high, Filtterra systems must be designed and sized to account for an appropriate lower loading rate.

2. **O&M:** Operation and maintenance of Filtterra systems must be conducted consistent with the recommendations in the Filtterra maintenance manual provided by the manufacturer and any revisions thereto.
3. **Media:** Filtterra systems use an engineered biofiltration media. Filtterra systems, including the engineered biofiltration media, must be provided by the manufacturer. No substitution of materials/media is allowed.
4. **Hydromodification:** There is no presumption by this approval that a Permittee's implementation of the abovementioned design parameters and use specifications of the Filtterra system meet the separate hydromodification requirements of Section VI.D.7.c.iv of the Los Angeles County MS4 Permit. Hydromodification requirements apply regardless of the type of biofiltration system used.

This approval only applies to the use of Filtterra as an alternative on-site biofiltration design in situations where a project applicant has demonstrated that it is technically infeasible to retain 100 percent of the SWQDv on-site. Furthermore, this approval does not constitute certification or verification of the performance of the Filtterra since the Los Angeles Water Board does not have a testing and certification program for treatment control BMPs. This approval is given based on the supporting documentation provided in the request and relies on the County's review of the system.

The County shall comply with Maintenance Agreement and Transfer requirements outlined in Part VI.D.7.d.iii of the Los Angeles County MS4 Permit. These requirements include:

1. Part VI.D.7.d.iii – prior to issuing approval for final occupancy, the County shall require new development and redevelopment projects subject to post-construction BMP requirements to provide an operation and maintenance plan; monitoring plan, where required; and verification of ongoing maintenance provisions for LID practices, treatment control BMPs, and hydromodification control BMPs.
2. Part VI.D.7.d.iii.(1)(a) – verification of post-construction BMP maintenance agreement shall include all the documents included in this provision.

3. Part VI.D.7.d.iii.(1)(b) – the County shall ensure a plan is developed for the operation and maintenance of all structural and treatment controls. The County shall examine the plan for relevance to keeping the BMPs in proper working order. Furthermore, operation and maintenance plans for private BMPs shall be kept on-site for periodic review by County inspectors.
4. Part VI.D.7.d.iv.(c) – the County shall verify proper maintenance and operation of post-construction BMPs operated by the County.
5. Part VI.D.7.d.iv.(d) – for post-construction BMPs operated and maintained by parties other than the County, the County shall require the other parties to document proper maintenance and operations.
6. Part VI.D.7.d.iv.(e) – the County shall undertake any enforcement as appropriate per the established progressive enforcement policy.

If you have any questions, please contact Ms. Susana Vargas of the Storm Water Permitting Unit at Susana.Vargas@waterboards.ca.gov or by phone at (213) 576-6688. Alternatively, you may also contact Ivar Ridgeway, Chief of the Storm Water Permitting Unit, at Ivar.Ridgeway@waterboards.ca.gov or by phone at (213) 620-2150.

Sincerely,



Renee Purdy
Executive Officer