



Eisenberg, Olivieri & Associates
Environmental and Public Health Engineering

TECHNICAL MEMORANDUM

TO: SMCWPPP, SCVURPPP and ACCWP Member Agencies

FROM: Peter Schultze-Allen, Senior Scientist, EOA

DATE: March 24, 2014

SUBJECT: Guidance on Biotreatment Soil Mix Review and Approval Options

Background

Provision C.3.c.i(2)(b)(vi) of the Municipal Regional Permit (MRP) requires that biotreatment (or bioretention) systems use biotreatment soil media that meets the minimum specifications in Attachment L of the MRP. To assist permittees in complying with this requirement, EOA has produced three documents (attached):

1. "Biotreatment Soil Mix Verification Checklist" (Checklist)
2. "Biotreatment Soil Mix Supplier Certification Statement" (Statement)
3. "Biotreatment Soil Mix Suppliers List" (List)

This memorandum provides guidance on how to use the three documents.

The Checklist is intended to supply municipal staff, contractors, designers and others with an easy-to-read summary of the detailed information needed to verify that the biotreatment soil mix being provided by the Soil Mix Supplier meets the soil mix specification in Attachment L. The cover page narrative was written with the understanding that member agencies have different needs and may want to design their review processes accordingly. Some agencies may want to go through a detailed process with the Checklist every time or only with their own agency projects. Others may want to do that only with first time contractors or for a few projects until everyone is familiar with the process. Afterwards repeat contractors using a supplier from the List could be allowed to provide a less detailed verification. Some agencies may only want to use the Statement or a combination of the Statement and some backup test results.

The MRP and Attachment L require that permittees verify that the soil mix meets the specification. However, it is the opinion of EOA staff that there is flexibility in that requirement including allowing self-certification by Soil Mix Suppliers – especially those that have been previously vetted and have shown to be able to produce a product that consistently meets the specification.

With that background in mind, EOA has developed several options for member agencies to consider incorporating into their development project review and permitting processes. Other options such as requiring special inspections or requiring contractors to use geotechnical consultants can also be considered.

Biotreatment Soil Mix Specification Review/Approval Options

Private Projects

Three Options:

1. Use the Checklist for compliance.
 - a. During the plan check phase of the building permit review:
 - i. Require that a note be added to the civil and/or landscape plans stating the following: “The biotreatment soil mix used in all stormwater treatment landscapes shall comply with the specifications in Attachment L of the MRP. Proof of compliance shall be submitted by the contractor to the [name of member agency] 30 days prior to delivery of the material to the job site using the Biotreatment Soil Mix Verification Checklist.”
 - ii. Provide the Checklist and List to the applicant and/or direct them to the countywide program website to download the documents.
 - b. During the construction phase:
 - i. 30 days prior to delivery of soil mix, receive the completed Checklist through the contractor or directly from the Soil Mix Supplier.
 - ii. Review Checklist for compliance.
 - iii. Reject or approve Checklist within 15 days and inform contractor.
2. Use the Statement for compliance.
 - a. During the plan check phase of the building permit review:
 - i. Require that a note be added to the civil and/or landscape plans stating the following: “The biotreatment soil mix used in all stormwater treatment landscapes shall comply with the specifications in Attachment L of the MRP. Proof of compliance shall be submitted by the contractor to the [name of member agency] 30 days prior to delivery of the material to the job site using the Biotreatment Soil Mix Supplier Certification Statement.”
 - ii. Provide the Statement and List to the applicant and/or direct them to the countywide program website to download the documents.
 - b. During the construction phase:
 - i. 30 days prior to delivery of soil mix, receive completed Statement through contractor or directly from the Soil Mix Supplier.
 - ii. Review Statement for compliance.
 - iii. Reject or approve Statement within 15 days and inform contractor.
3. Do not require proof of compliance to be submitted to the agency – require applicant to assure compliance internally.
 - a. During the plan check phase of the building permit review:
 - i. Require that a note be added to the civil and/or landscape plans stating the following: “The biotreatment soil mix used in all stormwater treatment landscapes shall comply with the specifications in Attachment L of the MRP. Proof of compliance shall be submitted by the contractor to the [name of landscape architect or civil engineer] 30 days prior to delivery of the material to the job site using the Biotreatment Soil Mix Verification Checklist or Supplier Certification Statement.”
 - ii. Recommend and provide the Checklist, Statement and List to the applicant as a courtesy and/or direct them to the countywide program website to download.

- b. During the construction phase:
 - i. Remind the Contractor and design team that proof of compliance with Attachment L should be submitted to the landscape architect or civil engineer.

Public Projects

Three Options:

1. Use the Checklist for compliance.
 - a. During the plan check phase of the building permit review:
 - i. Add a note to the civil and/or landscape plans stating the following: “The biotreatment soil mix used in all stormwater treatment landscapes shall comply with the specifications in Attachment L of the MRP. Proof of compliance shall be submitted by the contractor to the [name of member agency] 30 days prior to delivery of the material to the job site using the Biotreatment Soil Mix Verification Checklist.”
 - ii. Provide the Checklist and List to the contractor and/or direct them to the countywide program website to download the documents.
 - b. During construction
 - i. 30 days prior to delivery of soil mix, receive the completed Checklist through the contractor or directly from the Soil Mix Supplier.
 - ii. Review Checklist for compliance.
 - iii. Reject or approve Checklist within 15 days and inform contractor.
2. Use the Statement for compliance.
 - a. During the plan check phase of the building permit review:
 - i. Require that a note be added to the civil and/or landscape plans stating the following: “The biotreatment soil mix used in all stormwater treatment landscapes shall comply with the specifications in Attachment L of the MRP. Proof of compliance shall be submitted by the contractor to the [name of member agency] 30 days prior to delivery of the material to the job site using the Biotreatment Soil Mix Supplier Certification Statement.”
 - ii. Provide the Statement and List to the contractor and/or direct them to the countywide program website to download the documents.
 - b. During construction
 - i. 30 days prior to delivery of soil mix, receive completed Statement through contractor or directly from the Soil Mix Supplier.
 - ii. Review Statement for compliance.
 - iii. Reject or approve Statement within 15 days and inform contractor.
3. Procure the Biotreatment Soil Mix directly from a Supplier.
 - a. Before ordering the soil mix, email one or more Soil Mix Suppliers from the List.

Two options:

 - i. Provide the Checklist and require that the completed Checklist be submitted to the member agency in order to move ahead with delivery, payment or purchase order; OR
 - ii. Provide the Statement and require that the Statement be submitted 30 days before delivery of the material.