Comments to Administrative Draft of the San Francisco Bay Municipal Regional Permit, July 13, 2007

Jeremiah Lehman
CONTECH Stormwater Solutions
12021-B NE Airport Way
Portland, OR 97220
503.258.3136

Finding 28 states that a technique recommended by BASMAA's "Start at the Source" is "to use permeable pavements to infiltrate stormwater while still providing a stable load-bearing surface. **C.3.c.i** also requires that single-family home projects creating 5000+ square feet of impervious surface implement one or more lot-scale BMPs from a list including the installation of "driveways, patios, and walkways with pervious material such as pervious concrete or pavers". While permeable pavements and pervious concrete allow load-bearing surfaces without the typical loss of pervious area, these materials filter and collect particulate from stormwater runoff, eventually clogging. Without proper maintenance, these surfaces will eventually contribute to the impervious area of the site, potentially transporting pollutants and generating discharge at flows above the HMP requirements.
Recommend including pervious pavements as areas of at least Medium Priority or higher for street and road sweeping as defined in **C.2.a**, or recommending other specific maintenance requirements.

C.3.a.i.(10) requires use of Low Impact Development (LID) principles into project design on all Regulated projects. While LID can be an efficient and effective strategy for addressing both Water Quality and HMP issues, mandating its use raises the following issues:

- Maintenance—it is commonly assumed that maintenance requirements of LID systems are less costly and less intensive than traditional treatment control measures. However, like any other BMP, LID systems fail without proper maintenance, leading to pollutant transport, vector control issues, and potential replacement costs. Maintenance is often left to landscaping crews, who commonly treat the LID system as other landscaped areas, applying fertilizers, pesticides, and other chemicals with detrimental effects to the receiving body. **Recommend** providing guidance on maintenance requirements for common LID systems based on existing studies and requiring detailed maintenance specifications for LID systems as part of the O&M Verification Program detailed in **C.3.e.**
- Irrigation—**C.3.a.i.(9)** requires use of source control measures including "landscaping that minimizes irrigation and runoff". However, LID systems such as grass swales and bioretention ponds will likely require irrigation during the dry months of Central California. In fact, the City of San Jose requires that irrigation be provided as part of swale design for DOT/PW projects.
- Applicability—any BMP that is misapplied will function inefficiently, if at all. While LID should be encouraged as part of any project planning, mandating its use on a preferential basis as listed in **C.3.a.i.(11)** may lead to misapplication in which the Water Quality and HMP objectives are compromised for the sake of following a regulatory process. **Recommend** removing the preferential selection requirement of **C.3.a.i.(11a-c)** and encourage selection of stormwater pollution control BMPs on a project-by-project basis, focusing on the applicability of selected controls to reduce pollutant transport and address HMP requirements across a long-term system life.

C.10. The Trash Reduction initiative is well-conceived though broad in scope. The Trash Action Levels identified in **C.10.c** are clear and well-defined; however the program for implementation of Pilot Trash Reduction Measures in **C.10.e** has no time component associated with it. **Recommend** stipulating a program initiation deadline (i.e. one year from permit issuance) for each permittee listed to ensure that Trash Reduction is addressed swiftly.

Attachment B, Contra Costa HMP Requirements—While most of the permittees have endorsed the BAHM, CCCWP promotes use of its own HMP modeling software which is subject to some questions in terms of its technical accuracy and input assumptions (see evaluation by Clear Creek Solutions:
http://www.clearcreeksolutions.com/EasyEditor/assets/contra%20costa%20imp%20review%20memo.pdf
Indeed, **Attachment B (2)** requires the monitoring of the CCCWP IMP model for two rainy seasons to verify input parameters. During this time, IMPs designed using the software may be undersized or misapplied, resulting in detrimental effects to the receiving bodies. **Recommend** BAHM be explicitly promoted as an alternate model to be used in Contra Costa during this monitoring period to avoid confusion at both the project design and approval stages.