



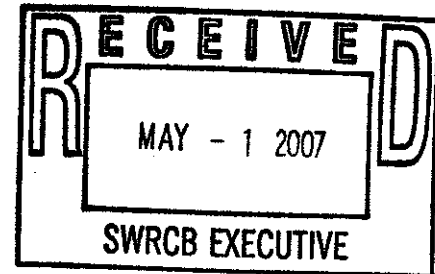
**Construction General
Permit – Stormwater**
Deadline: 5/4/07 5pm

May 1, 2007

Ms. Song Her, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Subject: Comment Letter – Draft Construction Permit

Ms. Her and Members of the Board:



The San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) believes that the preliminary draft General Permit for Discharges of Storm Water Associated with Construction Activities (Construction General Permit) has a number of positive features that should help to better control sediment and pollutant runoff from construction sites. We also believe there are a number of aspects of the preliminary draft permit that need additional work. The SMCWPPP supports comments provided by the California Stormwater Quality Association (CASQA) and the Bay Area Stormwater Management Agencies Association and is providing the following additional, specific comments and suggestions for developing the formal Draft Construction General Permit.

Proposed Hydromodification Requirements

Background

According to the Notice of Public Workshop, one of the three goals of the preliminary draft Construction General Permit is to:

“Establish a standard to avoid, minimize, and mitigate hydromodification impacts associated with all new and re-development projects.”

The findings provide the following information about these proposed new requirements for construction sites:

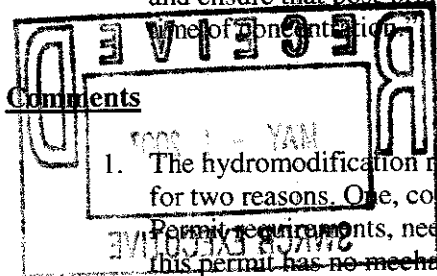
“9. ... This General Permit requires all dischargers to maintain pre-development hydrologic characteristics, such as flow patterns, and surface retention and recharge rates, in order to minimize post-development impacts to offsite water bodies.”

“31. ... The requirement for all construction sites to match pre-project recharge will help to ensure that communities in California built under coverage of this permit will at least have the same amount of groundwater recharge as they did before the project.”

The proposed permit's IX. Project Implementation Requirements include the following requirements to control hydromodification (under K on page 24):

“1. The discharger shall, through the use of non-structural and structural measures, ensure that the post-development runoff volume approximates the pre-project runoff volume for areas covered with impervious surfaces...”

2. For projects whose disturbed project area exceeds two acres, the discharger shall preserve the post-construction drainage divides for all drainage areas serving a first order stream or larger and ensure that post-project time of concentration is equal or greater than post-project [sic]



1. The hydromodification requirements do not fit well within the Construction General Permit for two reasons. One, compliance with these requirements, unlike other Construction General Permit requirements, needs to be addressed very early in the project-planning phase. Two, this permit has no mechanism to assure the implementation of hydromodification requirements once the project has been deemed complete and the permittee no longer has coverage under the permit.
2. It would be poor public policy to regulate hydromodification in both the Construction General Permit and in municipal stormwater permits. The SMCWPPP is subject to hydromodification requirements that the San Francisco Bay Regional Water Quality Control Board adopted in March 2007 (Order No. R2-2007-0027) as a permit amendment to its municipal stormwater permit. It would be confusing, duplicative, and a waste of resources to have somewhat similar, but not identical requirements, established in the Construction General Permit.

Examples of the differences between the two approaches to controlling hydromodification include the size thresholds of projects that trigger hydromodification requirements, the technical basis of the flow controls, and the amount of flexibility each approach offers. The SMCWPPP permit regulates hydromodification from projects that create and replace one acre or more of impervious surface while the Construction General Permit is focused on the disturbance of one acre or more of soil. The Construction General Permit is based on making sure that the volume of runoff does not increase when the pre and post-project conditions are compared, while the SMCWPPP relies on keeping the flow durations similar between pre and post-project conditions. This more sophisticated flow duration control approach focuses on a range of flows that contribute most of the work done on channels. Another important difference is that the SMCWPPP's recently adopted hydromodification control permit amendment recognizes that hydromodification requirements are important in some locations, but not in others. For example, the SMCWPPP's permit amendment does not require hydromodification controls for projects that are located along tidally-influenced creeks, in areas with continuously hardened channels that lead to tidal areas, in areas that drain to low gradient creeks that are depositing sediment, or in highly developed areas where infill projects will not significantly change the hydrograph of a channel. The preliminary draft Construction General Permit does not make any such watershed and site-specific distinctions and its requirements would apply to all projects everywhere.

Proposed Changes

Either delete all of the proposed hydromodification requirements in the Construction General Permit or qualify the requirements with an additional condition, such as the following.

"The Construction General Permit's hydromodification requirements do not apply to projects within geographic areas where hydromodification requirements have been adopted as part of a municipal stormwater permit."

Proposed Active Treatment Systems and Advanced Source Control

Background

The State's Effluent Limitations Blue Ribbon Panel (BRP) observed that active treatment technologies exist that use polymers with relatively large storage systems to achieve low discharge turbidity. These technologies, however, have "only been applied to larger construction sites, generally five acres or greater." In addition, "The cost-effectiveness of active treatment systems is greatly enhanced for large drainage areas, at which construction occurs for an extended period of time, over one or more wet season." "... the Panel recommends that the Board give particular attention to improving the application of cost-effective source controls to small construction sites."

One of the proposed findings provides the following information about the reasons for an active treatment system or additional source controls:

- "19. Soils with more than 10% (by weight) of their particles smaller than 0.02 millimeters (mm) (i.e., finer than medium silt) do not settle easily using conventional measures for sediment control (i.e., sediment basins). Given their long settling time, disruption of such soil results in a significant risk that fine particles will be released into surface waters and cause unacceptable downstream impacts. If operated correctly, an Active Treatment System (ATS) can prevent or reduce the release of fine particles from construction sites. Therefore, dischargers whose sites contain such soils must implement either an ATS or, alternatively, the source control measures specified in Section G to ensure that these fine particles are not released into receiving waters."

The proposed permit's IV. Effluent Limitations included under 4.d (page 11) would require, in part, the following numeric effluent limitations for ATS discharges:

"Turbidity of all ATS discharges shall be less than 10 NTU."

The proposed permit has extensive requirements listed in section G under IX. Project Implementation Requirements. The following are two excerpts:

- "2. Thirty days before deploying an ATS, the discharger shall submit a supplemental report to the appropriate Regional Water Board for approval prior to discharge."
- "5.c. The discharger shall direct all ATS discharges through a physical filter such as a vegetated swale and provide outlet protection to prevent erosion and scour of the embankment and channel."

Comments

1. The proposed permit requirements should limit the use of ATS to construction sites that are five acres or larger. This is consistent with the BRP's observations that these technologies have only been applied to larger construction sites, generally five acres or greater. The BRP also concluded that the costs of ATS may be prohibitive on small sized projects.

If the State Water Resources Control Board adopted Construction General Permit

requirements that are too costly, an unintended consequence would be to create a disincentive for constructing smaller projects. Many of these smaller projects would be infill and redevelopment projects located within urban areas that already have the water, sewage treatment, stormwater, and transportation infrastructure to support smart growth.

2. The numeric effluent limit for turbidity from ATS should be changed to an action level given the unproven benefits of establishing numeric effluent limits at this time. In addition, while the BRP concluded that ATS could consistently produce a discharge less than 10 NTUs, there is a lack of experience using ATS under the different types of conditions found throughout California.
3. The source control option that includes providing vegetated buffer strips between the active construction area and any water body should recognize the technical limitations on this type of treatment system. Vegetated buffer strips are designed to treat sheet flow and the maximum thickness of the drainage area in the direction of flow should be 60 feet according to the CASQA Handbook (<http://www.cabmphandbooks.com/Documents/Development/TC-31.pdf>). There may be practical site constraints on using vegetated buffer strips especially in smaller developments where the space will be limited.
4. There are several other minor wording issues with the source control options. For example, it is impractical to expect that 100 percent of the inactive construction site would be covered at all times, and it would be unnecessary provided the soil is adequately covered during the rainy season. Further, it is unnecessary to limit the active construction site to exactly five acres.
5. The proposed Implementation Requirements under section G. Active Treatment Systems that are quoted above under the Background section are impractical. For example, it is unrealistic to require that dischargers wait for the Regional Water Board to approve their supplemental reports that describe their proposed ATS prior to being allowed to discharge. The Regional Water Board staff does not have time to review such reports in a timely manner, and it is unnecessary for them to approve such reports because it is each discharger's responsibility to install and operate a functional ATS. These reports could be provided to the Regional Water Board as information.

The requirement that the ATS discharge to a "physical filter such as a vegetated swale" is unnecessary because there should be a negligible amount of sediment to try to filter after the runoff has been treated by the ATS.

Proposed Changes

1. Modify the source control option under H.1.d. as follows: "Provide vegetated buffer strips where feasible to treat sheet flow runoff from between the active construction area prior to discharging to and any water bodies."
2. Modify the Source Control Option under H.1.b as follows: "Limit the areas of active construction to five acres or less at any one time."
3. Modify the Source Control Option under H.1.c as follows: "Provide ~~100 percent~~ soil cover for all areas of inactive construction throughout the entire time of construction, ~~on a year-~~

~~round basis~~ during the rainy season.”

4. Modify the Active Treatment System requirements under G.2 as follows: “Thirty days before deploying an ATS, the discharger shall submit a supplemental report to the appropriate Regional Water Board staff for approval information prior to discharge...”
5. Modify the Active Treatment System requirements under G.5.c as follows: “The discharger shall ~~direct all ATS discharges through a physical filter such as a vegetated swale and provide outlet protection for~~ ATS discharges to prevent erosion and scour of the embankment and channel.”

If you have any questions about these comments, please contact me at 415-508-2134.

Sincerely,



Matthew Fabry

San Mateo Countywide Water Pollution Prevention Program Coordinator