



CITY OF ORANGE

Construction General
Permit - Stormwater
Deadline: 5/4/07 5pm

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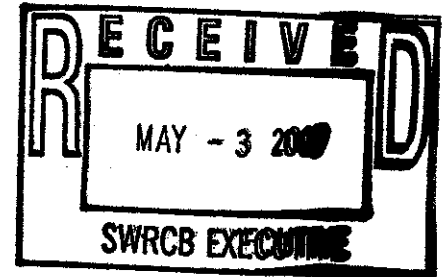
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May 3, 2007

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



Subject: Draft General Construction Storm Water Permit

Dear Ms. Her:

The City of Orange appreciates the opportunity to comment on the State's Draft General Construction Permit (General Permit). The City fully supports the goal of minimizing sediment laden and contaminated discharges from construction sites. Many municipal projects that the City undertakes are potentially regulated by the proposed General Permit and as such we would like to comment on some of the important aspects of this permit as they relate to City projects.

The City is concerned that some of the proposed measures in the General Permit are better addressed in other permits and that other measures require further review before they can be effectively used and implemented. Of particular concern are the proposed preproject runoff volume requirements (hydromodification), the potential for delay in getting projects approved in a timely manner, the impact of active treatment systems, categorizing of projects by risk and the stabilization of actively graded slopes.

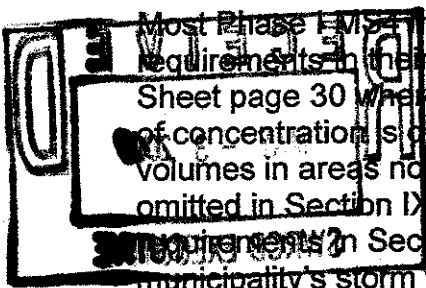
Following below are the City's comments on these issues.

Hydromodification Requirements

Section IX .K .1 requires new development and redevelopment to meet preproject runoff volumes and requires board approval on how this measure is met. Section IX.K.2 and Section IX.K.3 require post project time of concentration to be equal or greater to preproject time of concentration.

The City believes the General Permit should focus on impacts occurring during construction such as sediment and nonstorm water discharges. Hydromodification is a land use related impact that occurs after construction and is better addressed by the municipalities who regulate land use and the project environmental review process. Addressing project runoff volume requirements

after the projects has been designed, approved by the municipality and construction documents completed will undoubtedly lead to significant project delays, missed construction schedules and economic losses on project financing.



Most Phase I/II municipalities already have some form of hydromodification requirements in their municipal storm water permits. A fact recognized in Fact Sheet page 30 where it states "preserving drainage divides and maximizing time of concentration is designed to reduce post development peak flows and volumes in areas not covered under a municipal permit." However, this fact is omitted in Section IX.K where all municipalities will be required to implement the requirements in Section IX.K whether or not hydromodification is addressed in a municipality's storm water permit.

This requirement has the potential to conflict with existing municipal permits that address hydromodification. For example, the Santa Ana Regional Board's storm water permit for the City of Orange and Orange County cities requires a study when site hydrology is significantly changed. The discharger has the option to maintain preconstruction site hydrology but can also undertake a study that addresses impacts downstream for erosion and habitat destruction. The study may have several findings: 1) the downstream water body was designed to meet increased discharges from the watershed; 2) the water body is concrete or lined where no erosion can occur; or 3) a number of other things that may indicate that the project has no or minimal impact on the downstream water body. This flexibility is lost in the General Permit.

Requiring all projects to meet preproject runoff volume requirements may also have unintended consequences such as requiring infiltration in sites where the predominant soil is clay that does not allow for infiltration; requiring infiltration in hillsides that could lead to slope instability, both of which are undesirable conditions.

There may also be conflicts regarding when infiltration should be allowed. For instance, most municipal permits have some criteria regarding the depth to groundwater. Infiltration is not allowed where groundwater is within ten feet from the surface. There is also a requirement to coordinate large infiltration areas with the local groundwater management agency. Again, these issues are not addressed in the General Permit.

Another item of concern is how the hydromodification requirements will apply to projects permitted under previous permit 99-08 DWQ. Requiring existing projects to meet the hydromodification requirements may be nearly impossible and will force projects to be halted and redesigned at significant costs to the owner.

Recommendation: For all of the above reasons and more, the hydromodification requirements in Section IX.K should be omitted from the General Permit.

Permit Application Submittal

Submitting the permit application electronically along with the complete SWPPP and SWPPP checklist is a concern due to unknown time delays.

Section 7.1a. states that the project Permit Registration Documents (PRDs) should be submitted 14 days prior to the commencement of construction activities. Section 13.2 states that the public shall have 90 days for public review of permit applications. The Section also states that the Region Water Board may take actions to rescind the permit, require public hearings, require revision of the SWPPP or monitoring program or require formal Regional Water Board permit approval.

Sections 7 and 13 appear to be contradictory and the permit application approval process is ambiguous and unclear as to how long the permit approval process will take. Submitting a permit application 14 days prior to commencement of construction activity seems reasonable. However, it appears that the 90-day public review period may delay issuance of coverage under the General Permit. How these two requirements apply to permitting process is unclear.

Further confusing the issue is the process outlined on Page 31 of the Fact Sheet where it is stated that project fees cannot be submitted until the application is accepted. Then, upon acceptance the discharger can download a Fee Submittal Form. It is not clear if this means a Fee Form will be available as soon as the PRD documents are submitted through the electronic system or after some unknown time frame.

Recommendation: The General Permit should clearly identify the permit application and project document review process. It is suggested that no more than 30 days be allowed for public project review as is done with most environmental documents.

For municipalities, submittal of a SWPPP with the permit application is problematic. The task of preparing A SWPPP as required by the General Permit is often delegated to the project contractor. The contractor is given this flexibility based on his knowledge of the project and the sequence of activities on which his bid is based. Requiring submittal of the SWPPP with the project application prior to contract award removes this flexibility and any cost savings that may be achieved by the municipality and the public.

Conversely, if a municipality awards the contract and requires the contractor to prepare a SWPPP and complete the permit application, project scheduling

becomes problematic because of an unknown permitting time frame. This unknown time frame may result in project delays and monetary penalties to the contractor due to missed deadlines.

Recommendation: Eliminate the need to submit the SWPPP with the project documents and expand the Notice of Intent to provide some of the information that could be provided in the SWPPP such as project acreage, receiving water information, impaired water information, potential project pollutants, list of sediment and erosion control BMPs, project starting date, and other information that is known in advance.

Active Treatment Systems (ATS)

Section IX.G of the General Permit requires all sites containing medium sized silt particles of 20um or less where they constitute at least 10% by weight of all site soils to employ an ATS. Trying to capture medium silt particles onsite is laudable, but may be impractical for the following reasons.

The use of active treatment systems is new to California and trying to implement a new technology with which there is little experience could lead to unknown consequences that could be problematic. A more reasonable approach would be to phase in the use of an ATS over time until its full impacts are known. Potential problems with an ATS include the discharge of toxic chemicals because of the polymer used, the loss of a sediment source to downstream natural water bodies and beaches and the lack of trained ATS operators.

On page 38 of the Fact Sheet it is acknowledged that polymers used in an ATS for flocculation may cause toxicity downstream. Without knowing which chemicals to use, toxicity may occur downstream. Trying to manage the toxicity in the basin by making changes or adjusting the chemicals in an ATS is also problematic because any toxicity will not be known for several days or weeks after the toxicity test results have been returned from the lab. To avoid these pitfalls, the General Permit should not be a rush to make an ATS a requirement but an option for those wishing to use this technology.

Capturing all particles to the 20 um and potentially smaller may also not be wise. Downstream natural streams and beaches depend on upstream sources to replenish their sediment supply. When these downstream water bodies lose their upstream sediment sources their equilibrium is changed and the loss of the sediment source must be acquired from a different source, usually stream banks. This is likely to result in increased stream erosion, the very thing the General Permit is attempting to avoid through the hydromodification requirements of Section IX.K.

We agree with the need to use trained operators but since these systems have not been generally used in California, there is likely to be a shortage of trained operators. So that even if one wishes to use an ATS, finding a trained operator may be problematic.

Recommendation: The intent of the General Permit should follow the requirements of the previous permit (99-08-DWQ), which only required that there not be a net increase in the sediment discharge from the preconstruction site level. The General Permit has measures to retain most sediment on site, which may lead to erosion problems downstream due to a lack of sediment. It is also suggested that an ATS be considered a second option to Source Control and that the 5-acre limit in the Source Control option be increased to what a discharger can properly maintain. It is also suggested that the requirement for an ATS be phased in over the five-year period of the permit until more experience is gained in the state and sufficient operators are trained.

Risk factors

Categorizing projects based on risk and its potential to impact water quality is supported by the City and makes sense. However, the draft General Permit does not seem to provide significant differentiation between the various risk levels.

A project can be categorized as Low only if there is no grading during the rainy season and the site has an Erosivity Index less than 5. It is clear that working during the dry season has its advantages and there is little chance of discharges due to rain related events. However, the category does not take into account smaller projects that also pose minimal impacts to water quality. An example of such a project would be an in-fill redevelopment project 1-5 acres where the site is flat and where runoff and erosion can be controlled effectively with the use of sediment traps, hydroseeding, silt fencing and sandbags. This type of project appears to pose minimal threat to water quality yet would be classified at least as a Medium project subject to potential receiving water monitoring and sampling that may be several miles downstream after entering the storm drain system.

Recommendation: The City recommends that the Low risk category be expanded to include those projects graded during the rainy season that have a low potential of impacting water quality. Parameters to determine Low risk projects include site slope, project size (less than 10 acres) and whether the project has been graded previously.

The difference between what is a Medium and High risk site also appears to be insignificant. As noted above, a project that is graded during the rainy season is at least a Medium risk project and if it discharges into a flood control channel or storm drain and is 5 acres or more is automatically a High risk project exclusive

of other risk factors. The main difference between the two projects is the size of the project. Other factors such as soil group, Erodibility Index and whether sediment basins are important, but in this case they are not even considered in determining whether a project is High or Medium.

Based on the criteria specified in Attachment F of the General Permit, most projects graded during the rainy season are starting at 150 points (Medium risk) because they may be graded during the rainy season and drain into the storm drain system. Further, if the project is five acres or more, the project will be classified as a High risk. This is a significant distinction between the projects in terms of risk categorization because Medium risk projects that exceed action levels for turbidity, TPH and pH on two consecutive storm events are required to monitor the receiving waters. Projects designated as High require receiving water monitoring automatically due to any exceedance of an action level for turbidity, TPH or the NEL for pH.

Recommendation: The points assigned to the various risk factors should be reconsidered and points assigned based upon what would truly affect water quality. In terms of risk, large projects may have a greater impact than smaller projects but the difference in size in the General Permit is not reflective of this condition. Under the current point system, most projects within the City will be designated as High risk. To eliminate this bias, the City suggests that the 5-acre threshold that is currently used to differentiate project size be increased to 25 or 50 acres. The points assigned to discharging into a storm drain or channel should be reduced significantly to 10. The changes in these two factors will allow for other factors such as soil erosivity and soil group to be considered in determining project risk, which would not be required to be considered under the proposed General Permit.

Stabilization of Active Slopes

Section IX.C.2 requires that all actively graded slopes undergoing disturbance be stabilized. We interpret this to mean that the slope should have some form of protection from erosion, which may include mats, soil binders, straw or other stabilization measures.

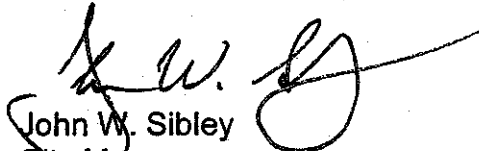
We agree that slopes and areas that are not actively graded for weeks may require temporary stabilization but to stabilize actively graded slopes does not appear to make much sense. The SWPPP requires that an effective combination of erosion and sediment control measures be applied throughout the duration of the project. Where erosion control cannot be provided, sediment BMPs such as sediment basins, sediment traps and other BMPs are to be used to capture the sediment from exposed project areas.

Stabilizing actively graded slopes will only result in the destruction of the measures used for stabilization since by its very meaning "active" means ongoing work. This measure will also result in additional project costs that may be unnecessary.

Recommendation: This item be removed from the General Permit.

We hope you'll consider these comments prior to formally adopting the proposed General Permit.

Sincerely,


John W. Sibley
City Manager

cc: Gail Farber, Public Works Director – City Engineer
Alice Angus, Community Development Director
Marie Knight, Community Services Director
Bob Von Shimmelmenn, Manager, Maintenance Division
Roger Hohnbaum, Assistant City Engineer