

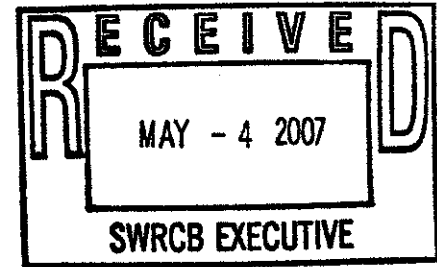
FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

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

File 510.1313

May 1, 2007

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



Dear Ms. Her,

Preliminary Draft General Construction Permit

Thank you for the opportunity to comment on the Preliminary Draft California General Permit for Construction Activities, dated March 2, 2007. As the lead agency for the Fresno/Clovis Area NPDES Municipal Stormwater Permit, we understand that protection of receiving water quality and beneficial uses is the ultimate objective of the permit. The Fresno Metropolitan Flood Control District and its co-permittees (City of Fresno, City of Clovis, California State University Fresno) support that objective.

To protect receiving water quality and maintain local water resources, the State's construction stormwater objectives and intent to introduce greater accountability into the NPDES General Permit implementation process can be best met by:

- 1) Continued support of MS4 permits as the proper vehicle for mitigation of hydromodification impacts. Many MS4 permits have existing performance standards or equally performing regional stormwater retention facilities, such as the case in the Fresno/Clovis area, and are already meeting the State's objectives. Any discussion of hydromodification in the Permit should be directed to areas not covered by existing MS4 permits.
- 2) Reconfiguring the construction site stormwater sampling, analysis and monitoring requirements to directly support the iterative process of improving site management in response to identified stormwater impacts. More specifically, any proposed sampling, analysis and monitoring program should be used to verify the effectiveness of BMPs and provide feedback to improve on-site practices.

These and other issues are discussed below as they apply in the Fresno/Clovis area.

The Fresno/Clovis System of Stormwater Control and Treatment

In the course of considering changes to General Construction Permit, it is important to understand that, throughout the State, there are profound differences in how stormwater is managed. For example, the Fresno/Clovis regional stormwater control system is characterized by a unique set of conditions including flat topography, low rainfall, a comprehensive system of engineered multiple-use detention basins, deliberate interconnectivity with municipal and irrigation district conveyance systems and minimal and intermittent hydrologic connectivity to receiving waters.

The Fresno/Clovis urban storm drainage system, owned and operated by the Fresno Metropolitan Flood Control District, comprises 143 operational stormwater ponding basins and five large flood control dams and reservoirs. Each ponding basin is an engineered feature between 10 and 40-acres in size, situated at the lowest elevation within its drainage area. Each drainage area is a small watershed that collects runoff from about one square mile of urbanized land. Basin storage capacities vary from 100 to 600 acre-feet of water. The regional basin system collects urban runoff from a 160 square mile area, capturing 90% of the stormwater runoff generated by the region. The remaining stormwater is either discharged directly into canals, creeks or the San Joaquin River.

Over the course of an average year, 70% percent of annual rainfall is infiltrated/recharged back into the local aquifer, 25 % is discharged into irrigation canals, while the remaining 5% is discharged into the San Joaquin River through detention basins. Approximately 17,000 acre-feet of stormwater are recharged back into the local aquifer every year. The stormwater retention basins also act as an effective stormwater pollutant trap.

New and Redevelopment Performance Standards for Hydromodification Impacts

The Preliminary Draft Permit Section IX.K.1 attempts to regulate site-specific development by imposing a requirement that:

“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. The discharger shall obtain Regional Water Board approval for the use of any structural control measures used to comply with this requirement.”

The Fresno-Clovis metropolitan area, via long-established local (City, County, District) project review and permitting processes and our regional system of stormwater conveyance, detention and infiltration, already achieves the intended effect of Draft Permit Section IX.K.1. Rather than attempting to install mitigation devices at the tract map level,

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stormwater capture, treatment and infiltration systems are planned and funded as part of a comprehensive master planned urban drainage system covering the Fresno/Clovis metropolitan area. By design, our post-development runoff is already at or below pre-project levels, and future stormwater facilities will also be designed and operated to this effect.

For the Fresno/Clovis region, the imposition of site-specific requirements and mandatory SWRCB review of infrastructural elements implementing these requirements is unnecessary. Concurrent increases in the cost of development and extension of construction timeframes will duplicate requirements already in place. Developers in our region already pay for the expansion and maintenance of a regional flood control system that limits neighborhood and regional stormwater runoff discharges to receiving waters to levels at or below pre-development levels. Additional requirements would do nothing to improve receiving water quality in the Fresno/Clovis area.

Further, the new permit language recognizes the validity of our existing approach: new permit condition VII.7 requires that "All dischargers shall comply with all requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of stormwater to separate storm sewer drainage systems or other watercourses under their jurisdiction, including applicable requirements in municipal stormwater management programs subject to municipal separate storm sewer system NPDES permits". This requirement alone achieves the State's intended purposes by mandating that dischargers follow the local regulations already in place i.e. the project-specific stormwater controls already integrated into the design and planning phases during project review by governing co-permittees and the District.

The Fresno/Clovis area is not alone in its comprehensive regional approach to stormwater control. The State should allow NPDES-implementing jurisdictions the flexibility to meet the General Construction Permit's hydromodification control objective at a scale that best suits a region's topography, hydrology and governmental/intergovernmental structure. It should be kept in mind that the State's attempts to regulate site-specific hydromodification potential evolved out of the State's original intent to impose community-level limitations on stormwater runoff; therefore, community-level solutions should be acceptable proxies for site-specific control measures.

Finally, the new Permit does not include enforceable standards. The Permit language does not specify a design storm (specific intensity and duration) against which to evaluate the existing or proposed permit. In many respects, detailed evaluation of the proposal is precluded by the lack of information about what type of storm event developers must protect against and may vary among the State's Regional Water Quality Control Boards.

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The SWRCB should modify the permit language to accept local regional stormwater basin systems and other similar existing municipal performance standards that meet the intent of the permit to have pre-development runoff volumes approximate post development runoff volumes.

Sampling & Analysis

The new permit requirement for sampling receiving waters immediately upstream and downstream of each drainage location when construction project stormwater discharge exceeds a Numerical Action Level or Numeric Effluent Limit is problematic for the Fresno/Clovis region. In the Fresno/Clovis area, "downstream" waters are urban detention basins which are the terminus for most urban flows. Virtually all surface flows from the region are conveyed via District infrastructure to a ponding basin for storage, infiltration and transfer to other basins. When basin capacity is exceeded, water is discharged to an irrigation canal or to the San Joaquin River via one of the planned basins near the river.

Overall, the sampling requirements in the new permit reflect an unrealistic, oversimplified conception of stormwater management in most urban systems, especially basin-centered systems such as in the Fresno/Clovis area. By the time project-specific runoff makes its way through the public drainage system to receiving waters, it has been intermingled with runoff from many square miles of urban land uses. Sampling at receiving waters in order to judge the impact of individual construction projects would provide no useful data to decision makers.

The sampling & analysis requirement does not provide clear guidance on when to sample. Sampling that is triggered by the scale (duration and intensity) of a storm event assumes that the ultimate size of the event can be predicted and sampling resources (trained staff, equipment) mobilized within a short time frame. The actual runoff produced by a storm event is largely conditioned by antecedent soil moisture (infiltration capacity), which is a function of season, soil type, prior precipitation and how a construction site is being worked.

If the State wants to understand and control project discharge, sampling should take place at the project boundary, not at the receiving waters. Test requirements should be for parameters that can be readily measured using equipment and expertise that can be deployed in the field in a timely manner. As made clear in CASQA's Stormwater program Effectiveness Assessment Guidance document (May 2007), sampling and analysis is part of an iterative site management improvement process; changes in behavior and BMP implementation lead to load reductions which result in improvements in urban runoff/discharge water quality. Site-specific sampling and analysis is the means to gauge the effectiveness of changes in behavior and methodology. The proper role of sampling and analysis, in the context of attaining NPDES compliance at the site and local level, is to

gather site-specific data to identify malfunctioning BMPS or drive replacement of one type of BMP with a superior method.

Given the above considerations, sampling construction site runoff within the Fresno Metropolitan Flood Control District's drainage area boundaries, should be conducted to only evaluate the effectiveness of construction site BMP's, using the results to add, modify or maintain construction site BMP's. Receiving water monitoring should not be required when there is not a significant nexus between the construction site and the receiving water.

Active Treatment Systems

The ATS requirement does not take into account local topography. The flat terrain in the Fresno-Clovis area makes for lower risk of sediment mobilization on many construction sites. Imposition of this requirement, absent modification to better take into account site-specific factors, could impose unnecessary economic burden on developers without significant gain in surface water protection. The trigger for requiring an ATS needs to take into account the nature of the receiving waters. Where there is no possibility that a 303(d) water body could be impacted, the regulation should set a higher threshold for deployment of an ATS. The use of an ATS should be driven by the failure or inadequacy of standard BMPs, not as a matter of course.

Risk-Based Permitting Scheme

The matrix for determining a project's risk category yields highly generalized results. The scheme needs to be modified to reflect the fact that soil type, site slope and proximity to potential receiving waters are not discrete values; these vary continuously from nearly zero contribution to risk to completely dominating a site's risk/discharge potential. Further, the matrix fails to include the other two key determinative factors; the length of construction period where soil is exposed and whether the site has any potential to discharge to 303(d) impaired waters.

Regional Board Approvals

Given staffing limitations and the amount of development occurring in the State, it seems highly unlikely that the Regional Boards will be able to effectively review the mass of documentation required in the PRD package, the plethora of SWPPP and incident-generated reports, approve ATS installations and hydromodification mitigation, or provide follow up direction in response to concerns raised during the SWPPP/NOI public review period. We recommend that the State, prior to issuance of the next draft of the proposed Permit, develop an estimate of the State staff hours necessary to effectively implement the Permit and determine which elements of the new permit it can actually afford to adopt.

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Minimum Requirements and Soil Characterization

The regulations need to acknowledge that in some parts of the State the topography is such that deliberate soil stabilization/cover for runoff control is unnecessary, but could be employed as a dust control BMP. In our region, many sites are flat and easily turned into minimum sediment transport zones by installing the usual types of sediment perimeter controls (wattles, silt fences). In these cases, soil type is not the most influential variable; slope and topography, analyzed in the context of the MUSLE and the design storm, are the dominant factors. Minimum erosion control along with perimeter sediment controls will most likely control sediment runoff; if BMPs are in place and working, 100% soil cover/soil stabilization (undefined in the proposal, actually mean) should not be necessary.

Rain Event Action Plan

The REAP requirement should be folded into the SWPPP and could simply be a subsection of the SWPPP. The REAP section of the SWPPP should list materials that the site needs to have on hand to respond to the design storm event, to enable ready confirmation of site compliance with the SWPPP.

We thank you again for the opportunity to review the Preliminary Draft General Construction Permit and to provide our thoughts in developing a more proactive and constructive stormwater management program. If you have any questions regarding our comments, please feel free to contact Daniel Rourke of my staff at (559) 456-3292 or danielr@fresnofloodcontrol.org.

Sincerely,



Bob Van Wyk
General Manager

BVW/dr/nl