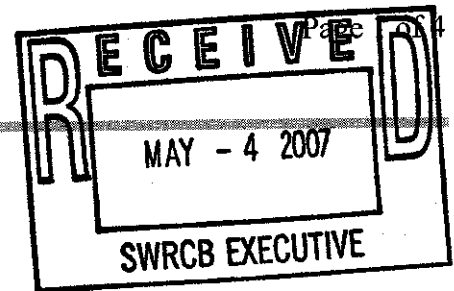


commentletters - Comment Letter - Draft Construction Permit



**From:** "Robert Charbonneau" <Robert.Charbonneau@ucop.edu>  
**To:** <commentletters@waterboards.ca.gov>  
**Date:** 5/4/2007 3:09 PM  
**Subject:** Comment Letter - Draft Construction Permit  
**CC:** "JZ" <jack.zimmermann@ucop.edu>, "Alicia Jensen" <Alicia.Jensen@ucop.edu>

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

To Whom It May Concern:

This note follows up on a hard copy of a comment letter dated May 3 previously submitted by the University of California (signed by Jack Zimmermann, Director - Planning Design & Construction).

The second paragraph of this letter (under General Comments) was inadvertently deleted.

The text of the letter is therefore reproduced below with the deleted paragraph **bolded**. Thanks for your consideration and sorry for the confusion.

May 3, 2007

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

Re: Draft NPDES General Permit for Storm Water Discharges from Construction Activities - Comments from the University of California

Dear Clerk Her:

The following comments are submitted on behalf of The Board of Regents of the University of California, representing the ten campuses and five medical centers which comprise the University of California system (hereinafter referred to collectively as the "University"). The University appreciates the opportunity provided by the Board to submit comments on the proposed draft 'NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.' In general, the University supports the efforts of the Board and its staff to develop effective controls for storm water runoff from construction sites in order to provide greater protection to the waters of the State. However, the University is concerned that some of the provisions of the draft permit may create unintended consequences for the regulated community or may not be practical or applicable to all construction sites across the State. Accordingly, the University respectfully submits the following comments to bring these issues to the attention of the Board and its staff.

**GENERAL COMMENTS**

The University of California is one of the largest and most prestigious institutions of higher education in the world, serving more than 209,000 students. The system is comprised of ten campuses and five medical centers, and manages a United States Department of Energy (DOE) national laboratory. During the past decade the University has constructed many new facilities to accommodate increasing numbers of undergraduate and graduate students from across the state and the nation. In order to accommodate this growth, the University invests approximately \$1-2 billion in capital development projects annually.

The University is committed to minimizing its impact on the environment and has formally adopted a 'Policy on Sustainable Practices,' which is available online at: <http://www.ucop.edu/facil/sustain/documents/ucregentgreenbldg.pdf>. Among a host of other sustainable practices, this policy sets a goal for most new university buildings to achieve a minimum standard equivalent to a LEED 2.1 "Certified" rating and to achieve a standard equivalent to a LEED "Silver" rating or higher whenever possible. One of the ways that the University achieves these ratings is through site planning and design features for storm water discharge control and treatment.

**The University is a State institution, and therefore must obtain its funding from the California State Legislature, external**

financing, donors, or a combination of these funding sources. In practical terms, this means that the process of taking a development project from design through construction often takes several years. In this regard, the University is similar to other colleges and public institutions that depend on state funding. Due to the nature of the state capital project funding and planning process, early identification of necessary storm water design features is paramount. After a project design is approved and funds are secured for construction, it is very problematic and costly to amend the project and obtain additional funds to meet newly imposed requirements. In light of these limitations, it is essential for the Board's final permit to provide a phase-in period to allow sufficient time to incorporate the proposed hydromodification requirements into projects undertaken by public institutions such as the University.

In addition, site conditions vary widely from campus to campus across the University system and include steep hillside locations potentially subject to landslide risk, as well as urban and rural land types. Thus, while the University generally supports the new hydro-modification requirements of the draft permit, the University is concerned that the Board's reliance upon onsite percolation of storm water runoff may be overly restrictive and potentially harmful. Percolation of storm water into site soils is not appropriate for all sites and may detrimentally affect sites where there is a potential risk of landslides or where storm water is directly discharged into groundwater that is a potential source of drinking water.

### SPECIFIC COMMENTS

1. Sections I(6) and VII(2). Both the sections on Findings (I(6)) and Provisions (VII(2)) provide that the General Permit shall take effect 100 days after adoption by the State Board. As previously discussed under our General Comments, the University believes that a 100 day phase-in period does not provide adequate time to incorporate the hydromodification and other design requirements of the permit into existing projects or projects that have already obtained design and funding approvals. Due to the state funding and planning framework described above, the permit should provide a phase-in period of 3-5 years for the application of hydromodification and other site planning and design requirements required of capital projects, and exclude capital projects which have already received design approval by the University. This would prevent, for example, a situation wherein the approved site design configuration does not allow for the addition of an Active Treatment System, especially if the project has begun construction at the time the final permit becomes effective.
2. Section VII(K)(1). New Development and Re-development Storm Water Performance Standards. This provision requires the use of structural and non-structural measures at all sites to insure that post-development runoff volume approximates the pre-project runoff volume for sites covered with impervious surfaces. As discussed in our General Comments, the University believes that there are areas where infiltration is not feasible or recommended due to subsurface conditions, expansive soils, or poor infiltration rates. We believe that the General Permit must include a method or alternative to account for site conditions that will not support or are inappropriate for storm water infiltration.

In addition, the University requests that the General Permit be revised to allow developers to offset increased runoff generated at new development by reductions in runoff at other locations so that the net flow from a watershed or sub-watershed approximates pre-development flows. This approach is similar to the "bubble concept" used by EPA and other environmental agencies for air emissions and allows dischargers to develop the most cost-effective approach to meet the objectives of the permit. For example, if a developer proposes to create one acre of new impervious surface, the developer should be allowed to convert an acre of existing parking surface or other impervious surfaces to grass or parkland. The net effect on the hydrology of the watershed would approximate pre-development runoff without mandating undue constraints and conditions, or expensive changes in the planning and design of a building site. Furthermore, the US EPA has noted that it is important to allow for maximum flexibility within storm water and urban design plans in order to encourage smart growth which provides for the preservation of critical ecological area and contiguous open space. (US EPA 2006, Using Smart Growth Techniques as Stormwater Best Management Practices, p. 47).

This section of the draft permit also requires that dischargers must obtain Regional Water Board approval for the use of any structural control measures used to meet the hydromodification requirement. Unfortunately, the draft permit does not provide any guidance on the process for obtaining approval from the Regional Water Board. The approval requirement is also likely to result in expensive delays since it creates the possibility that a Regional Board may not approve a structural control which has been selected by the discharger and designed into a project. Since structural controls are a design element which must be incorporated into the project design, approval by the Regional Board after submittal of a NOI and a SWPPP comes too late in the process. The requirement for Regional Board approval also creates the possibility that the same proprietary structural control could be approved by some Regional Boards and rejected by others. In order to avoid conflicts between Regional Boards and to provide timely guidance at the design stage, the University recommends that the State Board or Regional Boards develop a pre-approved list of structural devices which may be used by developers.

Section VII(K)(2). New Development and Re-development Storm Water Performance Standards. This section provides that dischargers shall preserve the drainage divides for all drainage areas serving a first order stream where the disturbed area of a project will exceed two acres. A footnote to the section defines a "first order stream" as a stream with no tributaries. The University requests that the Board provide more specific guidance on what constitutes a "first order stream." For example, does a first order stream only include USGS blue line streams or does it also include intermittent or ephemeral streams? In addition, dischargers should be given flexibility to alter the drainage pattern in situations where an existing drainage has experienced erosion or is less able to handle runoff than another drainage.

3. Section XIII(1). Regional Water Quality Control Board Authorities. This section provides that the Regional Boards may review permit registration documents (PRDs) and reject or accept permit coverage or require formal permit application approval. As discussed previously, this section should be modified as it applies to projects which are currently under construction or have received design and funding approval so that an already approved project will not be halted in mid-construction. In particular, the Regional Boards should not be authorized to revoke permit coverage for a project which has already begun construction. In those situations, the Regional Board could be authorized to require the discharger to submit technically and economically feasible proposals to meet the objectives of the General Permit without actually having to halt construction. In most instances, halting construction would result in project delays and cost over-runs. Halting ongoing construction could also have the unintended consequence of leaving a disturbed site open to the elements when completion of construction could occur prior to the annual rainy season. For these reasons, the Regional Boards should not be authorized to halt construction of existing projects after submissions of the permit registration documents.
4. Attachment D (#7(g)). Storm Water Pollution Prevention Plan Requirements. Among other things, this section requires that where Active Treatment Systems are used the SWPPP must include information regarding the laboratory selected to conduct "sampling and analysis." This section implies that a laboratory must be hired to collect samples as well as to analyze the samples. This is contrary to the customary practice where either the discharger or a consultant would collect samples which are then shipped to a laboratory for analysis. The University requests that this section be revised to allow the discharger to collect samples instead of requiring the analytical laboratory to perform the sampling, or simply delete the reference to 'sampling' in this section.
5. Attachment E (#E). Monitoring Program and Reporting Requirements. This section on "Sampling and Analysis" requires that dischargers at medium and high risk construction sites collect samples for pH, turbidity and TPH analysis. Due to the possibility of multiple samples being taken during a large prolonged storm event, it would be most efficient if all samples could be analyzed in the field as opposed to requiring them to be analyzed in a laboratory. The University therefore requests that the monitoring requirements be revised and limited to parameters and methodology applicable to field instrumentation. Field analyses, moreover, provide rapid real-time results which allow for timely response to water quality issues. In contrast, laboratory results normally are not available until several days or weeks after the storm event has occurred.
6. Attachment F (#4). Sediment Transport Risk Worksheet. The Sediment Transport Risk Worksheet requires dischargers to calculate the potential risk of sediment runoff using a specified "Erodibility Index" equation. The relevance of this equation in determining the potential risk of erosion is unclear. In particular, the 'T' value or 'T level' specified in this equation was established by the Natural Resources Conservation Service (NRCS) and represents the 'maximum average annual soil loss expressed as tons per acre per year that will permit current crop production levels to be maintained economically and indefinitely' in different types of soils. However, it is unclear how current crop production levels are relevant to determining acceptable or unacceptable sediment transport from urban construction sites. Moreover, it is our understanding that no 'T' values are available for urban soils, which is not surprising since the NRCS probably never imagined that annual crop loss would be relevant for urban soils. Since several of the UC campuses and medical centers are located in urban areas, it is unclear what 'T' value should be used by the University to calculate the potential risk of sediment runoff on urban campuses. Accordingly, the University urges the Board to adopt a more relevant and appropriate means of calculating sediment runoff risk for construction sites, particularly for urban sites.

#### SUMMARY

As discussed at the outset of this letter, the University appreciates the opportunity to submit comments on the draft General Permit and support the efforts of the Board and its staff to develop provisions that will reduce the potential for erosion and discharges of sediment from construction sites. However, the Board should reconsider some of the proposals contained in the draft permit in order to ensure that the requirements are practical and will not result in delay or unnecessary increases in construction costs. The University's most significant concern is that the draft General Permit does not provide adequate time to phase in the hydromodification and other design requirements for either existing construction projects or public projects which have already been approved at the design and funding stages. At a minimum, development projects undertaken by public institutions should not be subject to these requirements for three to five years. This lead time is essential to avoid site planning and design feasibility issues, and costly delays in trying to retrofit projects which have already obtained design approval and secured funding for construction.

Sincerely,

/original signed/

Jack Zimmermann  
Director –

Planning, Design, and Construction