Public Comment
Draft Construction Permit
Deadline: 6/11/08 by 12 p.m.

ESCONDIDO
City of Choice

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June 11, 2008

Ms. Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 1 Street, 24th Floor
Sacramento, CA 95814

Re: National Pollutant Discharge Elimination System Proposed Draft General Permit for Discharges of Storm Water Associated with Construction Activities

Dear Ms. Townsend:

On March 18, 2008 the State Water Resources Control Board released the new Draft General Construction Permit for public review. The latest Permit applies to almost all construction activities that result in soil disturbance of one or more acres. Many of the Permit's proposed requirements will have a significant effect on municipalities, mostly in terms of cities' ability to implement the increasingly complex and comprehensive requirements, as well as their ability to pay for them. Furthermore, if adopted as proposed, the new regulations will diminish municipalities' land use, planning and design authority—an authority that cities must preserve to effectively respond to the needs of their residents and businesses. The problematic and significant issues regarding the Draft Permit are described in more detail in the bullet points listed below, which were developed by the City of Irvine but well represent the perspective and concern of many municipalities, including the City of Escondido.

- *A New Opportunity to Challenge Land Use Approvals After Grading Permits Are Issued.* The Draft Permit specifies that construction sites must file Notices of Intent (NOIs), Stormwater Pollution Prevention Plans (SWPPPs) and other Project Review Documents (PRDs) online for public review fourteen days prior to initiating construction activities. PRDs must be "accepted" before construction activities are permitted, but there is no provision in the Draft Permit addressing actions by the Regional Board or State Board that constitute "acceptance." Further, the Draft Permit specifies that the public may submit comments to the Regional Board on any project filing PRDs at any point in time after PRDs are filed, so construction activities may begin within 14 days after filing, but comments on a project can be submitted to the Regional Board years after construction activities begin. Comments may address any aspect of the project--not just provisions of the SWPPP, but also post-construction project design. The Regional Board is expressly authorized to mandate changes to the project in response to comments received, whenever the comments are received. As a result, Regional Boards may stop or preclude the construction of project designs and plans already approved by municipalities at any point during the construction process. In addition, in response to comments, Regional Boards may rescind the discharge permit for any construction site, even if discharges have already occurred, and the Board may even assess penalties for discharges that may have occurred after the construction project was permitted, but prior to receipt by the Regional Board of public comments, which

creates a substantial compliance trap for construction operators. These provisions apply to public works and municipal projects, as well as private construction projects.

➢ *Fiscal Impacts* The present draft version of the General Construction Permit is very prescriptive in nature and highly technical compared to the permit that was issued in 1999 and currently in effect. Based on the expanded requirements of the draft Permit, municipalities anticipate much higher costs in the planning stage of a project, e.g., for SWPPP development and permit coverage, the implementation stage, including BMP installation and maintenance and site inspection, compliance monitoring and reporting, and project closure. Moreover, the draft General Permit will require highly qualified and technical experts to develop the documents that need to be prepared—one of the primary reasons for the significant cost increase. Additional anticipated costs include those incurred from any delays to the project related to the issuance of an NOI, phased grading extending the project timeline, the re-submittal of the PRDs, the public comment period or other regulatory actions. Based on a given set of variables, including project size, the risk levels, and the requirements enumerated in the draft Permit, these costs could annually exceed $1 million.

➢ *Limitations on Project Design Imposed for Hydromodification Control; No Approved Project "Grandfathering."* The Draft Permit mandates design standards for post-construction BMPs for all construction projects greater than 1 acre located within areas that are not covered by a Phase I or II MS4 Permit. These post-construction project design standards would apply under the General Construction Permit, although it is inappropriate for a construction permit to regulate the post-construction condition. For these projects, the design requirements mandated *at the construction rather than during the planning phase*, require project builders to construct projects with features that reduce runoff volume (*not peak volume, but total volume*) sufficiently to assure that in the post-development, impervious condition, runoff from the site "replicates" the pre-project water balance (defined by the Draft Permit as the "amount of rainfall that ends up as runoff") for the smallest storms up to the 85th percentile storm event. In addition, for those construction projects that disturb greater than two acres, the discharger is required to "preserve the pre-construction drainage density for all drainage areas serving a first-order stream or larger stream." It appears from the Draft Permit that this standard may mean that pre-development drainage patterns of construction sites with first order streams must be preserved intact despite grading operations and development of impervious surface. In addition, the discharger must design volume reduction measures and storm drain facilities to "ensure that the post-project time of runoff concentration is equal or greater than pre-project time of concentration." Public and private projects subject to these hydromodification standards, but already approved by municipalities, will be forced to into re-design during the construction phase to meet these post-construction requirements because the Draft Permit contains no "grandfathering clause" to exempt projects approved prior to adoption of the new standards from compliance.

➢ *Individual Permits and Disingenuous "Risk-Based Approach."* The Draft Permit adopts a four-tiered, risk-based system for permitting of construction stormwater discharges, with the projects falling within the first and lowest three categories of sites receiving coverage under

the Draft Permit, and each project falling within the highest risk category (risk level 4) being required to submit an individual Report of Waste Discharge and obtain individual NPDES Permits and Waste Discharge Requirements from the Regional Board. The risk categorization for a construction project is based on a complex formula that involves a number of factors, including receiving water characteristics, soils types, and erosivity of the site. While risk of discharge if properly calculated is an appropriate way to determine water quality control requirements that should apply to a construction site, current trial runs applying the risk calculation formulas indicate the vast majority of Southern California sites will fall in the highest two risk categories (risk levels 3 and 4), mandating either (a) compliance with the most stringent permit and monitoring requirements and implementation of Advanced Treatment Systems, discussed further below, (for risk level three sites), or (b) requiring an individual NPDES Permit and Waste Discharge Requirements issued by the Regional Board (for risk level four sites). These risk assessment formulas and categories will determine compliance requirements for both municipal and private construction projects. In addition, municipalities will likely have to assess the appropriateness of the risk assessment prepared by construction sites in their jurisdiction in conducting compliance inspections and enforcement activities at those sites.

➢ *Numeric Effluent Limits ("NELs").* The Draft Permit contains NELs that, if exceeded, result in a violation of the Draft Permit that must be reported to the Regional Board within 48 hours. Specification of NELs in the Draft Permit represents a significant shift in construction site runoff water quality management, from an approach that emphasizes implementation of BMPs to control water quality, to an approach driven by monitoring construction site discharges to determine if numeric limits are exceeded. Under the Draft Permit, a specific set of Best Management Practice (BMP) categories must be implemented on each construction site based upon construction phase and risk category, *and, in addition,* monitoring of all discharges must show compliance with NELs. NELs can be very difficult to meet for stormwater because stormwater discharges are naturally characterized by extremely variable pollutant concentrations. In addition, enforcement of NELs may result in prosecution of a violation even when the discharge of sediment or other pollutants in construction site runoff does not adversely affect the environment because the pollutant levels do not exceed the pollutant levels found in background stormwater runoff or receiving waters. Municipal and public works projects must abide by these NELs, and municipalities will have to conduct stormwater compliance inspection and enforcement activities based on the NEL approach.

➢ *Numeric Effluent Limits "(NELs") for pH.* A lower pH NEL of 6.0 and upper pH NEL of 9.0 is mandated by the Draft Permit, though stormwater itself often has a pH outside of this range.

➢ *Advanced Treatment Systems and Numeric Effluent Limits for sediment.* An Advanced Treatment System ("ATS") is a mini-treatment plant designed to capture runoff from the construction site, treat it with chemicals that flocculate sediment, and then filter or settle the runoff to remove flocculated sediment prior to discharge. ATS facilities are difficult to design and construct, especially if they must be sized to capture all runoff from a particular

construction site, as currently contemplated by the Draft Permit. They are also expensive to implement because they require careful addition of chemicals to runoff, and constant monitoring of the resulting chemical reaction, and discharged effluent. Current test applications of the risk assessment formulas indicate that the Draft Permit results in a *de facto* mandate requiring use of ATS for the majority of Southern California construction sites. If ATS is used, runoff discharged from construction sites must meet an NEL of 10 NTU (which is clearer than green tea) for daily average or 20 NTU for single samples. In all other cases, a NEL of 1000 NTU applies to the discharge, which is relatively high, but is lower than sediment levels in most natural alluvial southern California streams. Also, as discussed below, the Draft Permit further requires development by each construction operator of site-specific Numeric Action Levels ("NALs") for turbidity, with 1000 NTU providing the ceiling for the limit. Public as well as private construction must implement ATS and sediment NELs as specified in the Draft Permit, and municipalities must monitor and enforce the ATS requirements, including stringent operational limitations and requirements for ATS facilities, in conducting stormwater compliance inspections and enforcement activities.

➢ *Numeric Action Levels ("NALs") for pH and turbidity.* The Draft Permit contains a lower NAL of 6.5 and upper NAL of 8.5 for pH. The NAL for turbidity is site-specific and is to be calculated pursuant to a very complex formula set forth in Attachment C to the Draft Permit. If the calculated NAL exceeds 1000 NTU, the NAL is required to be set at 1000 NTU. Exceedances of NALs trigger the responsibility to conduct an investigation and implement corrective actions. NALs will apply to public and private projects, and must be enforced in municipal stormwater compliance inspections and enforcement actions for construction sites.

➢ *Expanded, Expensive and Duplicative Monitoring and Inspection Requirements.* The Draft Permit contains expanded monitoring and inspection requirements, including development and implementation of a Construction Site Monitoring Program ("CSMP"). The CSMP is to be a part of the SWPPP, but it is required to contain elements that go beyond typical SWPPP requirements. Most municipalities currently conduct significant stormwater monitoring under public storm drain system permits (known as MS4 Permits). In addition, currently, construction sites are required to monitor discharges for sediment only if the site discharges directly to waterbodies listed as impaired under Section 303(d) of the Clean Water Act, and sites must monitor for non-visible pollutants only if BMPs for materials containing non-visible pollutants fail. Under the Draft Permit, almost all construction sites will be required to monitor construction site discharges for sediment (both total suspended sediment and turbidity), pH, and non-visible pollutants, and in addition, the vast majority of Southern California sites must conduct bioassessment monitoring of receiving waters, which duplicates MS4 permit stormwater monitoring programs. In addition, the Draft Permit requires a larger number of monitoring/sampling events. Rather than sampling only when a site either directly discharges to a 303(d) listed waterbody or experiences a BMP failure, under the Draft Permit sampling must be conducted at least daily during every rain event, at any time a BMP fails, and sites must conduct baseline receiving water monitoring, run-on monitoring, monitoring of all non-stormwater discharges (line testing, groundwater dewatering), and monitoring of all releases of any trapped/captured storm water. Further,

the Draft Permit mandates monitoring of discharges at a minimum of one discharge point per onsite "drainage area," resulting in multiple monitoring locations for larger sites regardless of whether all drainage areas are tributary to the same ultimate receiving waterbody. As a result, monitoring costs will be exorbitant. These requirements will apply to both public and private construction projects, and municipalities will have to take monitoring requirements into account in conducting compliance inspections and enforcement activities for construction sites within their jurisdictions.

The City of Escondido appreciates the State Board's considering our comments and looks forward to working with the Board and other environmental partners to implement measures and programs that are effective as well as economically feasible.

Sincerely,

Edward Domingue
Director of Engineering Services

Cheryl Filar
Environmental Programs Manager

cc: Clay Phillips, City Manager
Charles Grimm, Assistant City Manager
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