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Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: John Stufflebean

**SUBJECT: STATUS REPORT ON THE
NPDES CONSTRUCTION
GENERAL PERMIT**

DATE: September 10, 2009

Approved:

Date:

9/11/09

COUNCIL DISTRICT: City-Wide

INFORMATION

The purpose of this memo is to report on the adoption of a revised National Pollutant Discharge Elimination System (NPDES) General Construction Permit.

Background

The NPDES General Construction Permit (Construction Permit) implements Federal Clean Water Act controls of stormwater discharges from construction sites. The permit regulates discharges of surface water from any construction activity that disturbs one acre or greater total land area. Coverage under the Construction Permit authorizes stormwater discharges if the dischargers implement best available pollutant control technology to reduce or eliminate pollutants in stormwater runoff. This permit is separate from and in addition to the NPDES permit for the City's storm sewer system, which includes requirements for the City to inspect construction sites for implementation of proper best management practices. This permit governs construction activities at large (construction activity disturbing one acre or more) public and private sites throughout the State.

On September 2, 2009, the State Water Resources Control Board (Board) adopted a revised General Construction Permit. This permit replaces the previous permit (Water Quality Order 99-08-DWQ), which expired August 19, 2004, and was administratively extended by the Board pending development of the new permit. The new permit marks a significant shift in the way construction sites are regulated and comes after a three-year regulatory process to revise the permit. San Jose was one of the few municipalities in the State actively involved in this process.

In previous permits, stormwater has been primarily regulated through requirements to implement best management practices rather than using numerical limits as is common with single process dischargers like wastewater treatment plants or oil refineries. In 2006, Board staff convened a

panel of stormwater experts to examine the feasibility of implementing numeric effluent limits (NELs) in stormwater permits. Numeric effluent limits supported by Board staff include turbidity levels and pH for stormwater discharges from construction sites. The panel concluded that while NELs are technically feasible and effective, the cost to collect this data may be prohibitive for many projects. In addition, the panel presented thirteen primary reservations and concerns regarding the feasibility of implementing NELs in a Construction Permit. The Board staff has since issued one preliminary and two formal drafts of the Construction Permit - in March 2007, March 2008, and most recently in April 2009 - all of which included numeric limits for projects with a perceived high risk of sediment discharge to sensitive waterways. City staff coordinated with regional stakeholders, including other municipalities, and provided formal comments to the Board during the public review processes for all drafts of the Permit.

The adopted Construction Permit includes considerable improvements over the earlier drafts, but retains provisions that fundamentally change the way construction projects demonstrate compliance, and will present significant challenges to the City's capital projects and private development projects as implementation nears. While the Permit still requires the implementation of best management practices to protect storm runoff quality from a construction site, additional requirements in the new Permit include:

- **Risk Level Determination** – All covered projects will be required to calculate their sediment risk and receiving water risk during periods of soil exposure (grading and site stabilization) and use the calculated risks to determine a Risk Level (1, 2 or 3 with 3 being the highest risk) using the methodology included in the Permit. Each Risk Level has progressively more requirements for monitoring and reporting. Based on preliminary calculations performed by a consultant for the City, it is anticipated that the majority of the projects constructed in the City will be at least a Risk Level 2 with many falling into Risk Level 3 and very few in Risk Level 1.
- **Water Quality Monitoring** – In addition to site inspections, covered projects will be required to test the stormwater discharge from a project site for turbidity (an indicator for sediment discharge) and pH (an indicator of the acid or alkaline condition of water) during storm events. These tests are conducted in the field and provide instant feedback on the discharge.
- **Numeric Action Levels** – All covered projects must be evaluated for the risk of discharge of sediment and other pollutants to sensitive waterways. For medium and high risk projects (Risk Levels 2 and 3), if the testing shows an exceedance of established numeric action levels (NALs) this would prompt a change or escalation in the implementation of best management practices at a construction site.
- **Numeric Effluent Limits** – For high risk projects, if test data show an exceedance of established numerical effluent limits (NELs), this would result in a violation of the permit, would prompt corrective action and additional testing, and would be subject to potential fines (not to exceed \$37,500 per calendar day of subject violation) and penalties from the Board.
- **Monitoring in the Receiving Waters** – For high risk projects that exceed the NELs, the project owner must also monitor the waterway to which the project discharges. Large projects (>30 acres) must also conduct bioassessments, a more complex evaluation of the

receiving river or creek, if an NEL is exceeded.

- **Reporting** – Projects will be required to submit more documentation to the Board than is currently required, including monitoring results. This information will be submitted through an online database system and will be available for public review.
- **Training Qualifications Certification Requirements** – City staff will be required to obtain certification as qualified Storm Water Pollution Prevention Plan developers and practitioners.

Private Development Coordination

This new Permit will ultimately add additional costs to municipal capital improvement projects, but will also have an identical impact on private development projects. During the Permit formulation process, drafts of the permits were shared with local developers, planners, and engineers. The State Building Industry Association offered extensive comments on all drafts, and additional comments were offered by the State Chamber of Commerce, the Association of General Contractors, and many other development, construction and engineering organizations.

Next Steps

The permit will become effective on July 1, 2010. City staff expects the new Permit to significantly increase the cost of managing construction stormwater on municipal and private development projects greater than one acre in size, primarily due to greatly expanded monitoring and reporting requirements. Additional costs may also be incurred due to expanded implementation of best management practices at construction sites to remain in compliance. As San José continues to be a leader in sustainability and advance bold initiatives such as the Green Vision and the Green Building Policy, staff will strive to ensure the City successfully and cost-effectively adheres to the new Construction Permit.

Public Works and Environmental Services will collaborate to develop a Permit implementation strategy to help ensure capital improvement projects subject to the new Permit plan and budget accordingly. San José staff will also coordinate with regional partners to offer ample training opportunities for City staff responsible for implementing the new Permit and for our private development partners who are also subject to these regulations.



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