

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Christine Boschen)
MEETING DATE: May 12, 2010

ITEM NO. 8

SUBJECT: **Storm Water Construction Program – Riding the “Next Big Wave”** – Information Item

Big changes are about to come washing through the Bay Area this summer in the form of the updated statewide Storm Water Construction General Permit (General Permit), newly reissued by the State Water Board. Despite our historical leadership in the field of controlling erosion and sediment runoff from construction sites, General Permit compliance in this region has slipped in recent years. The updated General Permit becomes effective in July and will give us an improved regulatory tool to bring construction sites into compliance and, therefore, to protect our local waterways.

Our earlier efforts hit home

In the mid 1990s to early 2000s, we made sure the regulated community followed General Permit requirements. With an effective combination of outreach, inspections, and enforcement, we saw construction site storm water protection improve dramatically.

Average Water Board construction program output: mid ‘90s and early ‘00s

- ~300 inspections per year
- 1998 – 1st publication of “Erosion and Sediment Control Field Manual” (3 revised editions published later)
- Annual seminars given in multiple Bay Area counties
- Enforcement: 10-15 ACLs and ~30 Notices to Comply per year

But performance has dropped off

Board staff was less present in the field during the mid 2000s due to staffing reductions and a shift in priorities; between 2005 and 2008, we conducted less than ten inspections per year. While we have continued to give erosion control seminars, the audience has shifted from what used to be a mix of builders and municipal staff to predominantly municipal inspectors. It appears that the message has not been getting out to those required to implement best management practices at construction sites.

We have recently increased our field presence. In the past two years, we conducted over 220 construction site inspections. Despite the General Permit being in place for more than 15 years and our significant efforts in outreach, we find a poor state of performance at construction sites throughout the Bay Area. Through our recent inspections, we have noted that many management practices are inadequate. There is a general lack of erosion control, with most sites relying solely on sediment controls (i.e., silt fences or straw wattles), such that water quality is not being protected from adverse construction impacts. While our field presence supports and increases

Erosion control is the key to protecting water quality.

Erosion control – keep your dirt in place
Sediment control – once the dirt is already moving, stop it from moving into receiving waters

involvement from municipal inspectors (this helps), we need to “up the ante” with the building community to improve their performance. The updated General Permit is the right tool at the right time to do this.

The updated General Permit gives strong, clear requirements

Requirements of the updated General Permit include: 1) specifying risk levels based on sensitivity of receiving waters and erosion potential, 2) establishing numeric action levels for medium-risk sites and effluent limits for high-risk sites, 3) requiring state-certified training for the people who prepare and implement construction storm water pollution prevention plans, and 4) requiring different actions based on construction phase. Highlights of the permit are posted at http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

The General Permit now recognizes that not all sites have the same risk to water quality and, therefore, tiers permit requirements according to three risk levels. Risk level is determined by soil type, site slope, rainfall, receiving water sensitivity, and timing of grading. All risk levels have required minimum best management practices, which makes it easier to call out violations in the field and more quickly bring recalcitrant sites into compliance. The medium and high-risk level sites will now be collecting water quality samples. For medium-risk sites, pH or turbidity results outside or above action levels will mean site operators need to examine and improve their best management practices. For high-risk sites, pH or turbidity results outside or above effluent limitations will be permit violations.

The General Permit also now recognizes that the nature of potential storm water pollution changes as a construction project progresses. Permit requirements now change along with the four stages of construction (grading, streets/utilities, vertical, and post construction).

One of our struggles with the regulated community has been its general lack of knowledge about what constitutes sufficient water quality protection. Our erosion control seminars and outreach materials have attempted to address this, and, as noted in the February 2010 Executive Officer’s Report, our five seminars this past year focused on performance required by the updated General Permit. However, the General Permit now places the burden of using properly trained erosion and sediment control specialists directly on site operators.

Lastly, our storm water program database has also been updated to meet the changes in the updated General Permit. We will now be able to identify sites by their risk level and focus our inspection resources accordingly.

We are ready to ride the next wave

We are poised to bring the regulated community into compliance with the updated General Permit’s requirements. With the new requirements backing us, we are eager to work with the building community to improve their performance.

RECOMMEN-
DATION:

No Board action – information item.