10831 NW Laurinda Ct.
Portland, OR 97229

10/22/12

State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Dear California State Water Resources Control Board,

I am writing to you as a consulting stormwater scientist regarding the 2012 Draft General Permit for Storm Water Discharges Associated with Industrial Activities (2012 Draft).

Over the last decade my work has been dedicated to the evaluation of stormwater treatment devices in both municipal and industrial settings. In particular, I have focused on the challenging task of flow-weighted composite sample collection to support product performance evaluations under protocols such as the existing WA TAPE, the now defunct TARP, the Sacramento Stormwater Quality Partnership. I have also provided stormwater sampling and data analysis services for industrial clients in OR, WA, and CA. I have extensive experience with the design of performance evaluation projects for treatment devices and the resulting reduction and statistical analysis of the resulting data. Based upon this experience, I humbly submit the following comments:

1. **Explicit permission for voluntary samples is requested**
   - While it is clear that the 2012 Draft calls for quarterly sampling, it is vague as to whether additional samples are permitted for incorporation into the annual average for comparison with the Annual NAL. Given the potential cost of an exceedance, it may in some cases be in the best interest of a permittee to invest in more that the minimum of 4 event grab samples so as to minimize the potential impact of an outlier results, especially if the permittee has reason to believe that they may be close to the Annual NAL. It is very well known to stormwater professionals that stormwater quality can fluctuate over the course of an event, and the use of 4 grab samples to characterize an annual discharge is scientifically ridiculous—yet at the same time understandable—given the effort that goes into the program and the associated costs. Permittees should be allowed to voluntarily collect more than the minimum number of samples should they desire to increase accuracy.

2. **Flow-weighted composite samples should be a permissible option**
   - It is common knowledge that flow-weighted composite samples are superior to a single grab sample with respect to characterizing stormwater pollutant discharge. I always recommend flow-weighted composite samples to allow my clients to make an informed decision with regard to the characterization of their stormwater discharge or the performance of a stormwater treatment BMP. Though the argument could be made that grab samples and composite samples cannot be compared and that therefore composite samples should not be allowed, this argument lacks merit given that the random nature of stormwater grab samples should make them incomparable amongst themselves. As with the first comment, permittees should be allowed to voluntarily collect flow-weighted
composite samples when accuracy is desired.

3. **In the interest of fairness and water quality, Total Copper should be added to the list of Additional Analytical Parameters for SIC 5093 in Table 4**
   - Total Copper should be included for SIC 5093 in Table 4. Due to its salvage value, Copper is almost assuredly present in stormwater runoff from SIC 5093 sites. The 2012 Draft Permit currently allows a Discharger to select additional, applicable parameters such as Copper. However, allowing the Discharger to make such a decision could adversely affect healthy competition between businesses falling into this category given the low Annual NAL and the potential costs of an ERA--Dischargers that choose not to recognize the potential for Copper exposure at their facilities will enjoy lower operating costs than those that do.
   - Copper exhibits acute aquatic toxicity at low concentrations yet is not prohibitively expensive or complex to sample, analyze, or treat. In fact, samples for other total metals are already required for SIC 5093 and will thus no special additional sampling labor would be required. The additional analytical cost to permittees of adding this parameter would be marginal.

4. **Section IX Training Qualifications adds unnecessary complexity and cost and should be removed**
   - The QISP requirements will unnecessarily increase complexity and compliance costs for everyone. Just as registered engineers charge a premium for their services, QISP will also be justified in passing on the cost of QISP training and certification. Likewise, taxpayer dollars and/or permittee fees will be required to support the creation and operation of a QISP training and certification program.
   - Additionally, PE/RG/EG registration does not guarantee stormwater experience or expertise, and therefore professional registration should not substitute for QISP I, II, or III certification. In fact, part of the rationale for the Training Qualifications as explained in section II.H of the "Industrial General Permit DRAFT Fact Sheet" was that the use of professionals under the previous permit did not improve the certainty that work was properly done. Thus if the training associated with QISP certification is so substantial so as to be deemed necessary for the function of the permit, the QISP training requirement should be universal. However, PE/RG/EG registrations should naturally still be required where hydraulic, structural, or other calculations impacting safety and/or property are involved.

Thank you for taking the time to consider these comments.

Respectfully

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Scott A. de Ridder, CPSWQ
Manager