October 2011

The Monthly Dirt

A Monthly Newsletter on the California Construction General Permit
By WGR Southwest, Inc.

AB 1210 Vetoed !

We were all curious to see what would happen to the Garrick Assembly Bill 1210. But, no one expected the veto by Governor Jerry Brown on October 9. The bill was originally promulgated by Assemblyman Martin Garrick of San Diego to require only California-registered Professional Civil Engineers to approve Construction SWPPP plans. However, in committee meetings, it was later changed to allow others to be a QSD but not require Civil PEs to obtain the Qualified SWPPP Developer certification required by the Construction General Permit (CGP). The bill in this form passed unanimously through the State Assembly and the State Senate. Meanwhile CASQA and the State Water Resources Control Board stayed ominously silent on the subject. Everyone expected the bill to pass, but then the unexpected happened … it was vetoed. You can view Governor Brown's veto message at http://gov.ca.gov/docs/AB_1210_Veto_Message.pdf. So, this means until further notice, the QSD certification process stands as described in the CGP and in WGR's Got SWPPP classes. A governor's veto can be overridden by a two thirds vote in both houses, so stay tuned. We will let you know if there are any attempts to override the veto.

Averaging pH – Linear or Logarithmic ?

Revised Article - Here's a math problem, what is the average pH if we got a reading of 6, 7, and 8? If you answer "7", you are wrong! … at least according to the State. Why? Well the reason is given as one of the State's Construction General Permit FAQs. The pH values are actually logarithmic, that is to say a pH of 7 has the same value as 10^{-7} (0.0000001) and a pH of 8 has the same value as 10^{-8}. Too much math? Well, think of it this way. If you were averaging these two numbers: 10,000,000 and 1,000,000,000, to which number would the average be closer? The larger number, right? Because it is two orders of magnitude greater than the smaller number; as opposed to the logarithm being just two digits different. Why is this important? If you thought you were below the NAL averaging the three pH values linearly, think again! The logarithmic average for 6, 7, and 8 is 6.43 which puts you below the NAL. But, we know this can be confusing, so to help you out, we have put together an online calculator you can use on your iPhone or Android to calculate pH averages in the field.
Go to http://wgr-sw.com/pH/.

Bret's QSP Chatter …

Stockpiles!!!!! They are an eyesore to our projects and stick out like a sore thumb at every project you drive by. If you can see them from the road, so can the inspector driving up to your site. How do we effectively manage them???? Well, the Construction Permit states we have to "Cover and berm loose stockpiled construction materials that are not actively being used." Actively being used???? Would someone please clarify that!!!!!! From the inspector's point of view, if you aren't adding to or taking away from that stockpile on a daily basis, then it needs to be covered and bermed.

Ok, so what do I do?

Grab a hold of CASQA's BMP Sheet, WM-3 Stockpile Management. It lists a number of potential products to protect your stockpile from the weather and to stay in compliance. Instead of using plastic sheeting, which is unsightly and accelerates run-off, try using a jute mesh or a straw blanket. They are **reusable**, so when you need to get rid of the stockpile, roll them up and take them to the next stockpile. Besides, it keeps our landfills from being over loaded with more plastic and you won't see it flapping in the breeze on a windy day. To berm your stockpile, it boils down to the proper installation of straw wattle, silt fence, gravel bag berm, or a sand bag berm. Until next time……"Keep It Covered"

John's QSD Clatter

Using RUSLE in real life situations

OK, are you like me? You memorize all of the equations and information for the big test, but once you get your CPESC or QSD certificate, you go back to the old way of doing things. But, don't leave your ol' buddy RUSLE in the dust! He can be your best friend when it comes to writing SWPPPs and specifying BMPs. Let's take this real life example. You have a project that will last about a year. On your project there is a 20 % slope that

is 250 feet long and has a base width of approximately 100 feet. You are wondering whether straw wattle will be sufficient or if you should use silt fence to capture the sediment coming off of the slope. Active grading along the slope will last approximately three months (Feb. – Apr.) before the slope is stabilized. What is the maximum amount of sediment your sediment control device placed a foot from the toe of the slope will receive caused by raindrop, sheet, and rill erosion? Which device should you install? For this exercise, we will assume that the soil on the project is "Clear Lake Clay" with a K value of 0.24 and a density of 95 lb/ft^3. Remembering that RUSLE is

$$A = (R)\,(K)\,(LS)\,(C)\,(P)$$

Let's put it together.

"A" is average annual acre tons, but in our case we are going to use an "R" value that is for Feb. 1 – April 30. We look up the "R" value on the EPA's website and we get 9.86. The K we got from the on-line USDA's Websoil Survey and it was 0.24. The LS is 3.57, which we derived from the information about the slope by plugging it into the table provided by the State. The slope is bare so C and P will both be 1. Therefore, the amount of erosion occurring between February 1 and April 30 is 8.45 tons per acre. Our slope has an area of approximately 25,500 ft^2 which is 58.5% of an acre. Therefore, the total estimated erosion for this slope during the three months is 4.94 tons or, applying the density of the clay soil, 104 ft^3. Assuming that the soil will erode evenly along the slope, you could expect to receive 5 inches of sediment buildup within a square foot area along the 250 ft. long silt fence. This would be too much for straw wattle, so in this case, silt fence is your better choice. Next time, don't take a chance by guessing; leave the work to your bud' Rusle!

Upcoming Training …

- Got SWPPP? QSP/QSD Classes
  - ✓ Stockton – Oct. 31 – Nov. 2, 2011
  - ✓ Modesto – Dec. 13 – 15, 2011
  - ✓ Fresno – Jan. 17 – 19, 2012
- Hosting CESSWI and CPESC review classes with David Franklin of Envirotech Services (*We are currently gauging interest and will host another event if there is enough demand. Contact us if you are interested.*)
- Need tutoring to prepare for you CPESC or CESSWI exam? Contact us to set up an appointment.
- Bring a Construction General Permit crash course to your location. We will train your QSP delegated inspectors and samplers.
- Coming in 2012 … RUSLE2 training.

WGR
Not Your Typical Consultant

Please contact us if you have any questions …

The Dirt Newsletter Editor:
John Teravskis, QSD, CPESC, REA-I
jteravskis@wgr-sw.com
(209) 334-5363 ext. 202 or (209) 649-0877

Technical Questions about Environmental Compliance?
Call …
Bret Smith, QSP, CESSWI
bsmith@wgr-sw.com, (209) 642-0181

Bill Senner, QSP, CESSWI
bsenner@wgr-sw.com, (310) 629-5260