

LIKES & DISLIKES

of the new permit

The Monthly Dirt

a monthly newsletter on the California Construction General Permit
by WGR Southwest, Inc.



Last month, the State Water Board released its preliminary staff draft of the Statewide Construction Stormwater General Permit. Since then, the editors of **The Monthly Dirt** have had an opportunity to review the proposed draft permit. There were some things we liked, and, well, we had some dislikes too. In this edition of **The Monthly Dirt**, we will outline some of our more significant “likes” and “dislikes”. Please bear in mind we are currently in an informal comment period for the draft permit. There will be a formal notice and written comment period for the official draft Statewide Construction Stormwater General Permit reissuance, as well as a State Water Board hearing to receive oral comments, at a to-be-determined date. But, it is not too early to be formulating your “likes” and “dislikes”.

Likes ☺:

- ☺ No more REAPs—We discussed this a little bit in last month’s newsletter, and it does look like they will be a thing of the past. We felt that the REAP exercise wasn’t living up to its original expectations as far as value to the project or water quality. But, before you rejoice about this too much, most of the REAP tasks and documentation (including weather reports) were moved over to pre-storm inspections that now must be performed by a QSP and not delegated (sound familiar?).
- ☺ The draft permit provides better definitions to mandatory BMPs such as:
 - ➡ For stockpiles it says “*apply appropriate BMPs ...*” which may not always include fiber rolls and plastic sheeting.
 - ➡ For vehicle wash water, “*wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge*”, which improves the very confusing language in the current permit.
 - ➡ “*Stabilize exposed soils disturbed by construction activities by designing, installing, and maintaining BMPs that minimize erosion. Temporary or permanent BMPs shall be applied within 14 days of completing earthwork in a specific area or prior to a precipitation event forecasted with greater than 50 percent probability whichever is sooner*”. We actually dedicated a whole newsletter ([Oct. 2019](#)) to address the confusion about the previous wording for this section.
 - ➡ Linear sediment controls are “*per QSD specifications for 0 to 20:1 slopes*”. We applaud the discretionary allowance for QSDs and the expanded tiers.
- ☺ Posting of WDID and Waiver Identification Numbers. Good idea! It will help make non-filers more visible; assuming anyone is actually looking for, or can read, their posted numbers (in 4 pt. font).

- ☺ We are excited about inactive sites having reduced inspection and sampling requirements. How many times have we been inspecting a site and feeling silly looking at all the lush green vegetation and no construction activities?
- ☺ QSD inspections are required before approving NOTs; and there is greater QSD involvement including mandated QSD inspections within 30 days of construction activities commencing, a change in QSDs, within 14 days of starting a new construction phase, within 14 days of a NAL exceedance, and when requested by the Water Board. We like the idea of requiring a QSD inspection at the beginning and end of the project. But, starting a new phase of construction is not always a well defined milestone and may be open to much debate if not better defined by the Water Board. For instance, it is common for a subdivision under a single WDID# to have multiple grading, roadwork, vertical, and landscaping phases starting throughout the project duration. Does the QSD come out for just the first start of vertical, or every time a new home or tract is started?
- ☺ The Water Board provides a clearer definition of “no discharge” non-applicable projects (NONAs) and larger common plan projects.
- ☺ We love the idea of alternate underlying State Water Board-approved prerequisite courses. It was time to open these up to competition and allow local organizations to provide them.

Dislikes ☹:

- ☹ Erosivity waiver will not be available for projects that discharge to a watershed having a water body with cold, spawn, and migratory beneficial uses. **This will eliminate most of the waivers in Northern California.** Is that really necessary?
- ☹ NAL exceedances were changed from site wide daily averages to the result of **one single sample**. Ouch! This removes the

incentive to take immediate action to try to average down the value for the site on that day. The old system of using daily site-wide averages as NALs was working. It provided the discharger the opportunity and incentive to quickly rectify the situation and avoid an NAL exceedance. It was a positive behavioral incentive. Slapping a single high (or low) number with the label of an NAL exceedance is not only a negative behavioral incentive but it removes the incentive to take immediate action. We suggest the Water Board rethink this one!

- 👉 Reliance on RUSLE2. Believe me, we have tried using this tool multiple times and have almost always found it a waste of time. This tool does not have enough precision and does not produce practical useable results. In lieu of this somewhat frustrating modeling tool, we would suggest just using manually derived RUSLE or MUSLE equations. After all, isn't that why we got our CPESC certifications?
- 👉 We found that there was still too much reliance or emphasis on paper copies and wet signatures in this permit. The industry needs to be able to accomplish the same through electronic means. The permit, on one hand, seems to encourage electronic documentation, but then turns around and requests paper copies and signatures in the SWPPP binder. LRP signatures (and possibly QSD signatures) on SMARTS should be good enough and should not be needed on a physical document.
- 👉 Concrete washout areas should not have to be covered at the end of every business day if there is no rain forecasted. Nor should trash containers for that matter! (Although, we might concede they should be covered during windy conditions.) We oppose mandatory BMPs that are unnecessary or will inevitably be ignored.
- 👉 The new RL2&3 Preserve Existing Topsoil requirement ... nice idea, but impractical to define, verify, and enforce. In regard to preserving and stockpiling topsoil, who defines "to the extent feasible" and "when feasible"? Some of these ideas should be left to education and professional expertise, not regulated. Same with the new requirement "control peak flowrates and total volume of stormwater and authorized non-stormwater discharges to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points." These requirements should either be better defined to remove the ambiguity or removed from the permit. In the past, we have seen similar ambiguous permit language applied to projects by inspectors in a way we do not believe was intended by the permit writers.
- 👉 The sampling requirement was modified to 3 samples per day, with the first sample within the first 2 hours of the storm event, and, then, sampling separated by 2 hours for the remainder of the day. For many sites, this means someone (and possibly more than one person) will need to be dedicated to sampling and standing by all day at the site to wait for the black cloud to arrive. This adds a significant expense and logistical headache to projects. If the Water Board feels it necessary to require this type of sampling, then maybe they should consider reducing the daily requirement and make it for one time per storm event or a maximum frequency of weekly. We also question the value of more than one sample per day per point of discharge unless there has been a breach or malfunction of a BMP.
- 👉 Beware! Non-visible pollutant sampling has been given a new twist! Now, not only do breaches, leaks, spills, or failures trigger the sampling; but non-visible pollutants associated with construction activities which could cause or contribute to a water quality objective exceedance are required to be sampled three times a day. There is no apparent off-ramp for this monitoring; as long as the potential pollutant is present, it will need to be sampled three times per day of discharge and sent to a laboratory.
- 👉 Removal of the 0.5" qualifying rain event—we expected this to change but not to have no minimum amount at all for a qualifying rain event. This means if a point is discharging, it needs to be sampled. A site can be "discharging" but not have enough volume to be able to effectively grab a sample. The writers of the previous permit understood this and that is why they included a Qualifying Rain Event (QRE) definition. We suggest a compromise that is based on monitoring sites for the past 10+ years, let's make it 0.25". Also, if the Water Board goes this direction, we suggest the permit language be clarified to clearly state when sampling begins during a QRE; on the first day, or when 0.25" of precipitation has occurred.

Now it's your turn to formulate your own likes and dislikes. But, don't keep them to yourself, please share them in form of a comment to the Water Board. You can direct your informal input at this time to Brandon Roosenboom at the Water Board at Brandon.Roosenboom@waterboards.ca.gov . MD

TRAINING OPPORTUNITIES

Upcoming Live Online Events:

Jan. 26 - 28, 2021: Online QSP/QSD Class

Hurry, there are only a couple spots left!

Register at <https://secure.wgr-sw.com/training/live-courses/>



Need to get some PDHs?
See what's new on FORGE!



Hey QSDs! Have you used the above USEPA calculator since October 2020? If so, and your project was longer than 1 year, you are required by the Water Board to **recalculate** the erosivity R value. Apparently the USEPA changed the programming of their website to only calculate an R value for a maximum of 12 months. Projects going longer than that will need to run the calculator two times or more and sum up the totals for each 12-month period and partial-year period. The Water Board has prepared guidance on how to calculate the R value and it is attached to this newsletter.

**Tired of getting wet?
Call us to do your QSP work.**

Please contact us if you have any questions ...

The Monthly Dirt Newsletter Editor:
John Teravskis, OSP/QSD, CPESC, WPCM, QISP, ToR
jteravskis@wgr-sw.com
(209) 334-5363 ext. 110 or (209) 649-0877

Technical Questions about Environmental Compliance?

Call ...

Mike Lewis, OSP, WPCM, CESSWI (Northern California)
mlewis@wgr-sw.com, (209) 334-5363 ext. 116
Gray Martz, OSP/QSD, PG (Southern California)
jgmartz@wgr-sw.com, (562) 799-8510 ext. 1002

NEW

CALTRANS WPCM 8 HOUR TRAINING CLASS



On January 21 2020, Caltrans issued a Revised Standard Specification (RSS) 13-1.01D, detailing the requirements for Water Pollution Control Managers (WPCM) to complete required training prior to working on Caltrans projects. All projects awarded after July 5, 2020 include this RSS.

To become a WPC manager, alternate WPC manager, or Assistant manager for Caltrans construction projects, you must submit a certificate of completion of an 8-hour Water Pollution Control Manager training course.

▶ **SIGN UP TODAY** ◀
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Click on "Book Training Class" to sign up.

Please call or email Bob Shults for additional details or to request a class in your facility or area.

 info@veruxinc.com

 916.850.5758

Even with current COVID protocols, safe in-person training is available at the Verux training facility. Alternatively, please contact Bob Shults about traveling to your location.



Best storm water class I have attended. Bob knows Caltrans and kept us engaged for eight hours, which is tough to do!

—Dave Cox, Estimator/Project Manager
George Reed, Inc.

Bob's WPCM training course is exceptional! Bob is very engaging and his extensive experience in construction storm water management resonates with our engineers.

—Candice Longnecker
Valley Region Environmental Manager, Granite Construction

Bob Shults integrates 20+ years of construction management and storm water consulting experience into this training. Hands on exercises and real world examples add value to the class throughout.



Bob Shults, PE,
QSD, CGP ToR, Caltrans WPCM Trainer



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PRODUCT SPOTLIGHT

The Hornet's Nest Drain Inlet Filter is a unique, under-grate storm drain filter, perfect for locations looking for basic drain protection with a clean appearance. The oversized base allows the filter to be used with many different sizes and shapes of drain inlets. Simply insert the filter, replace the grate, and trim the excess material for a custom fit and clean appearance. The yellow webbing secures the filter to the grate and doubles as lifting straps allowing for quick and easy removal of the filter and grate. The sediment collection cone has four overflow portals to ease congestion during heavy storm events.

Product Specifications:

- Material: 8-ounce non-woven geotextile
- Strapping: Weather resistant 2" polypropylene webbing
- Flow Rate: 90 GPM/foot
- Dimensions: 48" x 36"



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(bag only)

\$66.00
(with oil pillow)



BMP Outlet is a supply house for affordable erosion control products, drain inlet protection, sorbents, spill containment, and field instruments.

We have a large inventory of many different types of product, and can order whatever you need for your project.

Elima-Drip Pads

Eliminate drips underneath your vehicles and equipment with Elima-Drip drip containment pads. Elima-Drip pads are weighted absorbent pouches contained in heavy-duty vinyl sleeves, which protect the spill pads from accidental movement. The 50"x20" pad is capable of containing up to 50 ounces of oil, and the 30"x20" pad can contain up to 29 ounces. Best of all, these pads are reusable! Simply replace the pouch inside the vinyl sleeve.

Product Specifications:

Outside Material: Heavy-duty vinyl sleeve

Spill Containment Media: Absorbent pads

Dimensions: 50"x20" or 30"x20"



\$48.00
(30"x20")

\$58.00
(50"x20")



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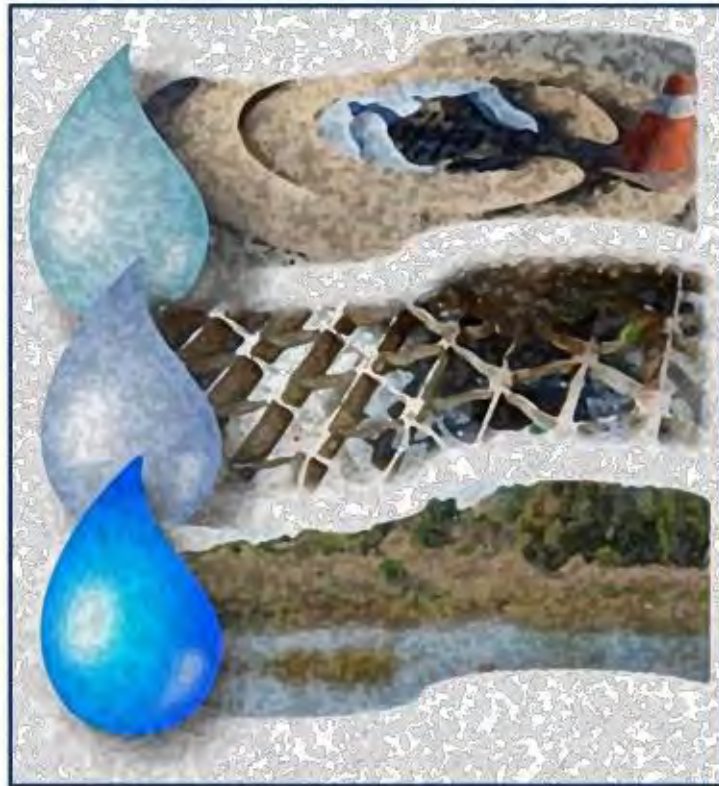
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STATEWIDE CONSTRUCTION STORMWATER GENERAL PERMIT

DISCHARGER'S GUIDE

**RAINFALL EROSIONITY
(R) FACTOR CALCULATOR**



Last Revised: December 30, 2020

Rainfall Erosivity (R) Factor Calculator:

The California [Construction Stormwater General Permit](#) requires construction stormwater dischargers to determine each construction site's overall risk to water quality, which is separated into two elements – sediment risk and receiving water risk. The site sediment risk is determined by multiplying the rainfall erosivity (R), soil erodibility (K), and length-slope (LS) factors from the Revised Universal Soil Loss Equation to obtain an estimate of site-related soil loss.

The Construction Stormwater General Permit requires dischargers to use the United States Environmental Protection Agency (EPA) [Rainfall Erosivity Factor Calculator](https://lew.epa.gov/) (<https://lew.epa.gov/>) to determine a construction site's site-specific R factor. In November 2020, California Water Board staff was notified that the Rainfall Erosivity Factor Calculator only calculates an R factor for up to one year of construction activity due to recent EPA changes to the calculator. Therefore, recent use of the EPA Rainfall Erosivity Calculator will result in an incorrect output for a site's sediment risk for multi-year construction projects.

The following guidance demonstrates how a site's R factor can be correctly calculated using the current version of the EPA's Rainfall Erosivity Calculator.

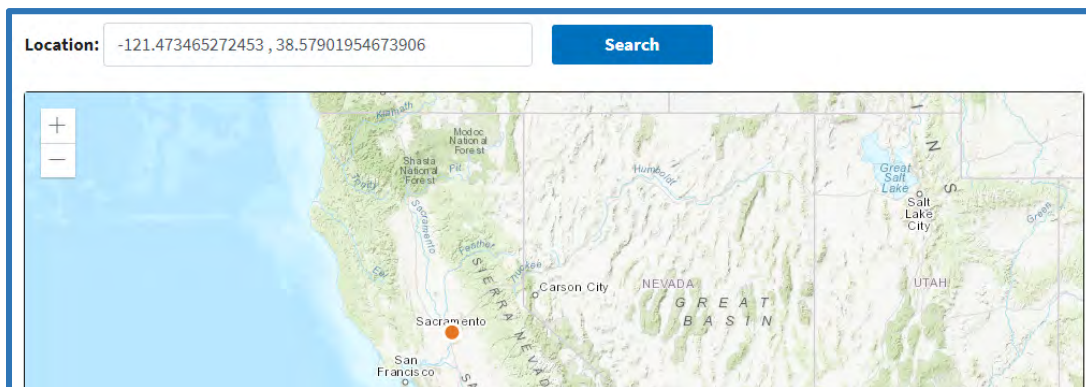
For sites with construction activities spanning one year or less:

1. Input the estimated start and end dates of construction in "mm/dd/yyyy" format. (For construction projects that span multiple years, perform separate R factor calculations for each year of planned construction activities, as demonstrated further in this guidance document.)

Note: The period of construction activity begins at initial earth disturbance, including the vertical build, and ends with final stabilization of the site.

Start Date:	<input type="text" value="11/01/2020"/>		End Date:	<input type="text" value="10/31/2021"/>	
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2. Locate the construction site by entering the address or latitude and longitude into the Location box; or use the map to zoom in and click on site location.



3. Click the “Calculate R Factor” button to calculate an R factor for the construction site.



4. The R-factor output will display as shown below.

Facility Information

Start Date: 11/01/2020	Latitude: 38.5790
End Date: 10/31/2021	Longitude: -121.4735

Calculation Results

Rainfall erosivity factor (R Factor) = **45.49**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

For sites with construction activities spanning multiple years:

1. For construction projects that span multiple years, repeat the R factor calculation for each additional year (or portion of a year) that construction activities are planned to occur. An example is provided on page 3.

Note: For leap years, such as 2020, the Rainfall Erosivity Factor Calculator’s calendar year ends on December 30 and will fail to calculate an R factor if December 31 is used. Non-leap years still end on December 31.

2. To determine the site’s overall R factor, sum the separate R factors (see example on page 3). The site’s overall R factor is used to determine the project sediment risk to be included in the Notice of Intent that the discharger submits into the Stormwater Multiple Application and Report Tracking System.

For example, a project that starts construction activity on November 1, 2020 and completes final stabilization on December 28, 2022 would be separated into the following construction periods:

Start Date: 11/01/2020	End Date: 10/31/2021
Start Date: 11/01/2021	End Date: 10/31/2022
Start Date: 11/01/2022	End Date: 12/28/2022

Each period results in the following R factor outputs:

Facility Information

Start Date: 11/01/2020	Latitude: 38.5790
End Date: 10/31/2021	Longitude: -121.4735

Calculation Results

Rainfall erosivity factor (R Factor) = **45.49**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

Facility Information

Start Date: 11/01/2021	Latitude: 38.5790
End Date: 10/31/2022	Longitude: -121.4735

Calculation Results

Rainfall erosivity factor (R Factor) = **45.49**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

Facility Information

Start Date: 11/01/2022	Latitude: 38.5790
End Date: 12/28/2022	Longitude: -121.4735

Calculation Results

Rainfall erosivity factor (R Factor) = **14.16**

A rainfall erosivity factor of 5.0 or greater has been calculated for your site's period of construction.

Therefore, the site's overall R factor between November 1, 2020 and December 28, 2022 would be:

$$\text{Overall R Factor} = 45.49 + 45.49 + 14.16 = 105.14$$

Input 105.14 for the R factor in the Notice of Intent.