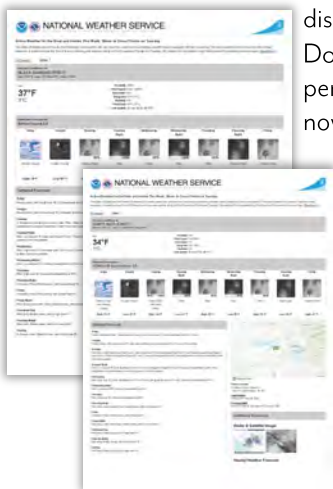




Does your mind jump through too many loops trying to quantify a qualifying rain event?

How do I know what qualifies as a Qualifying Storm Event? Well first of all, there needs to be 48 hours of no discharge between Qualifying Storm Events. This doesn't necessarily mean 48 hours without precipitation – it could drizzle on and off for two days before enough rain falls to cause a discharge, which would trigger the start of the Qualifying Storm Event. Once discharge starts at your facility, the Permit allows a 4-hour window for collecting samples. If the discharge started during non-business hours, the Permit makes allowance for this by allowing facilities to collect samples when business hours begin for the day, provided that 12 hours have not elapsed since the discharge began. Don't forget, permittees are now required to collect storm water samples regardless of the time of year. But what if there aren't four qualifying storm events per reporting year? Are the



Whether you are a newbie to QSEs, or whether you're a seasoned storm event veteran, sometimes trying to ascertain if a rain event is qualifying can twist your brain in knots. To help bring some clarity and clear up some of your most pressing qualifying rain event questions, this month's edition of **The Rain Events** is dedicated to giving you some helpful tips and advice for tackling rain events. Stormy season is coming and our State sure needs the rain. So we hope this article helps prepare you for sampling season!

lack of samples due to the lack of rain going to be a problem for my facility? Absolutely not. If the required number of qualifying storm events did not occur, all you have to do is provide an explanation in your annual report describing the lack of discharge. You can't collect a sample if there's no water!

Does there need to be flow from your facility's outfalls in order to trigger a Qualifying Storm Event? A Qualifying Storm Event is a storm which produces a discharge from at least one drainage area at your facility. Keep in mind that there is not a specified rainfall amount which automatically classifies it as a qualifying storm event. Every industrial site is different, and the same amount of rainfall at two different sites does not necessarily mean both will be discharging. However, for mostly impervious facilities, we usually go by the tenth-of-an-inch rule of thumb – that is, a tenth of an inch of rainfall will generally produce a discharge on impervious surfaces. But again, remember that your facility may be different, so don't rely too heavily on a tenth of an inch.

When do you have to collect samples? As stated in the previous paragraph, the Permit only requires dischargers to collect four samples per year, so there's no need to

run out and collect samples from each Qualifying Storm Event. However, you're definitely going to want to only collect samples during a Qualifying Storm Event that meets all the criteria in Section XI.B of the IGP – a storm event that produces a discharge from at least one drainage area and is preceded by 48 hours with no discharge. There are a few exceptions to this rule. If hazardous conditions are present (flooding, electrical storms, hail, etc.), or if the storm event happens during non-business hours, you are not required to collect storm water samples (see Section XI.C.6). So, when the first Qualifying Storm Event comes along, don't miss the opportunity to collect your samples – but remember that there is a four-hour window to do so. Resist the urge to collect samples as soon as the discharge begins, because the resulting sample will probably not be representative of your facility's overall discharge. Also, don't allow any Qualifying Storm Events to go by with the excuse of "I'm busy; I'll just sample the next storm." You need two samples per 6 months (Jul-Dec & Jan-Jun), if safe to do so, collect your samples if the storm is qualifying. Subsequent qualifying storm events are not guaranteed. Use your best judgment to determine if the conditions are safe enough to

sample – but also, don't stretch the rules just to save some money, or because you don't want to go out in the rain. You will need to explain in your Annual Report why you didn't go out and collect samples, and if the State or a third party doesn't buy your alibi, you could be in big trouble.

How should you prepare for the next Qualifying Storm Event? A good place to start is to make sure that the sample bottle kit you received from your laboratory is complete. It's a good idea to check your sample bottle kit against the Chain of Custody form to make sure everything is there. Next, prepare your sampling equipment. Get your PPE (Personal Protective Equipment) together, along with your raincoat, rubber boots, sample collection devices, and everything else you may need. Don't forget to get a bag of ice or two to keep your samples cold while transporting them to the lab. Once you get everything organized, it's a good idea to store it all in a single location so you can grab it and run at a moment's notice. Finally, keep an eye on the weather forecast – know if there are any rainstorms coming, and be ready to collect your samples. Don't let a Qualifying Storm Event sneak up on you!

RULE OF 4's:

4 Qualified Storm Events samples are required to be collected each monitoring year. Meaning 2 QSE samples need to be collected between July 1-December 31, and 2 QSE samples need to be collected between January 1-June 30.

4-Hour Rule: sample must be collected within 4 hours of the start of discharge during operating hours, or within 4 hours of the start of operating hours provided less than 12

hours have transpired since start of QSE.

THE GOLDEN RULE OF REPRESENTATIVE SAMPLING:

A "representative sample" is one that reflects the average quality of the storm water leaving your facility. The Golden Rule of Sampling is applied when we collect a sample that is "not cleaner than average and not dirtier than average". Sometimes there are individuals who look for the absolute cleanest part of the discharge to sample even if it only represents 1% of the total amount that leaves the property. However, there are also individuals who believe that the most environmentally responsible thing to do is to sample the dirtiest water they can find. Neither of these scenarios reflect the Golden Rule of Sampling. There are times when there is really no choice in the matter, such as getting a sample from a discharge pipe. Open bottle, fill bottle, close bottle ... you don't have to think about where to get the sample. But there are other times, such as with sheet flow and drain inlets, where a decision is needed on where exactly to collect the sample. Which side of the driveway or storm water catch basin should the sample be collected? It is in these situations when discretion and best professional judgement need to be applied. Remembering "not cleaner than average, not dirtier than average" will help determine the most representative place to grab or perform the field measurement of the sample.

SAMPLING TIPS:

Oil & Grease Sampling – the O & G sample bottle must be filled directly from the water flow. So, typically look for places where the water is deep enough (usually a

depressed location that is receiving flow—avoid puddles) or where it is flowing into a storm water catch basin. You may need to construct a location to facilitate collection.

Sampling Around BMPs – Sampling before BMPs will not collect a representative sample and show the effectiveness of the BMP installed. However, moving the BMP to properly collect the required sample will disturb the pollutants and sediment that have been trapped within the BMP and re-expose them to the storm water discharge.

QISP Assistance – In order to collect a representative sample from your site, it is helpful to have a Qualified Industrial Stormwater Practitioner (QISP) evaluate your facility's sampling locations. The QISP will be able to determine the most ideal spots and methods for collecting a representative sample.

Don't muddy the waters - When collecting a sample, never use the bottle or other device to "scoop up" storm water or scrape the surface. It's best to avoid stirring up sediment and other pollutants that aren't representative of your discharge.

Don't use intermediate containers to collect O&G samples – the oil will stick to the sides of the intermediate container which can cause the analytical results to be inaccurate.

Analyze pH in flowing water – if at all possible, try to measure pH in flowing water. We have found this gets the most accurate and representative results.

Record pH results on the COC Form – after sampling for pH, it's helpful to write the results for pH on the chain of custody form which will go to the lab with all your samples. It will ensure your samples are properly documented and that little pieces of information don't go missing in the shuffle of data and analytes.

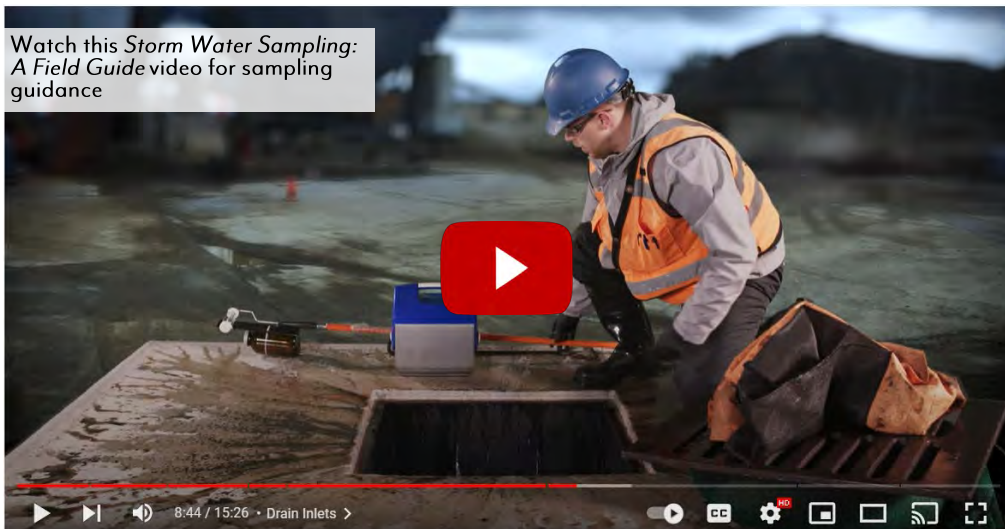
TNALs and TNELs – these don't apply to all facilities in California, but to some sites they're either already required or soon will be! Check your local permit requirements to see what your facility must be on the lookout for!

The Rain Events

Lead Editor: John Teravskis
QSD/QSP, QISP, CPESC, ToR, IGPTT Participant
jteravskis@wgr-sw.com
(209) 334-5363 ext. 110 or (209) 649-0877

Supporting Editors:

Aaron Ortiz, QISP, ToR, aortiz@wgr-sw.com
(209) 334-5363 ext. 114
Chelsea Dreyer, QISP, cdreyer@wgr-sw.com
(562) 799-8510 ext. 1003





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THANK YOU

storm water awareness week 2022

3,010 Registrations | 29 States | 5 Countries

this year was a huge success. thank you for participating in Storm Water Awareness Week and helping us have our best event yet. you can still watch all our keynotes and workshops at stormwaterawareness.org

Storm Water Contest...

Each month, we invite our readers to participate in a contest to test their knowledge of the Industrial General Permit and show their storm water compliance program. We enter all submittals to our monthly newsletter question into a drawing and one person is selected at random to receive a \$25 gift card. Last month's contest question was:

What are PFAS found in?

Congratulations to Nida who replied *"PFAS are found in plastic and metal manufacturing processes, soil and water, food wrappers, cosmetics, fire retardants, pharmaceuticals, paper manufacturing, cooking pots and pans, filtered water, and even our bodies."* to our contest question from last month! Nida, we hope you enjoy your next trip to Panera Bread!

...This Month's Contest

What is a qualifying storm event?

We need industrial storm water sleuths to help us with this month's question. Submit your answers by Friday, November 11th. Email your answer to jteravskis@wgr-sw.com. One winner will be selected by a random drawing to receive a \$25 gift card to Bass Pro.

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