ualitying rain events in a nutshell

The rain season has officially returned to California, and many parts of the State have already received their first rain events. It's been a while since we've had rain, so it might be a good idea to refresh our memory on what is a **Qualifying Storm Event**, when samples should be collected, how to prepare for the next Qualifying Storm Event, and review some sampling tips and tricks.

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 permitting facilities to collect samples when business hours begin, 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. Thunderstorms in July can now be classified as Qualifying Storm Events if they cause storm water to discharge from your site. The Permit requires dischargers to collect a total of <u>four</u> samples per reporting year: **two** during July-December, and **two** during January-June.

"A Qualifying Storm Event is a storm that produces a discharge from at least one drainage area at your facility."

Secondly, there needs to be flow from at least one outfall to trigger a Qualifying Storm Event. A Qualifying Storm Event is a storm that produces a discharge from at least one drainage area at your facility. Keep in mind that there is not a specified rainfall amount that automatically classifies it as a qualifying storm event. Each industrial site is different, and the same amount of rainfall at two different sites does not necessarily mean they are both discharging. However, for facilities that are mostly impervious, 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. First of all, only collect samples during a Qualifying Storm Event that meets all the criteria in Section XI.B of the IGP – one that produces a discharge from at least one drainage area, and is preceded by 48 hours with no discharge. But 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), so get them out of the way; but at the same time, be

safe and don't try to sample in dangerous conditions. 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 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 Sometimes there are than average". 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 were 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. RE $\widehat{}$

"To Do List" for December

inspection

Get those Level 1 ERA and Level 2 ERA Action Plans and Technical Reports finished!

December is the last month to get samples for the first half of the 2020-2021 sampling season



BMP Maintenance

QISPs Aaron Ortiz and Bryan Hofmann team up at an auto dismantler to do a make over of the facility's BMPs. Watch these two professionals talk about what you can do at your site.

Watch the video here.



Watch WGR field technician Bryan Williams

talk about how to calibrate a pH pen. Watch the video here.

Please contact us if you have any questions ... The Rain Events

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

Technical Questions about Environmental Compliance? Call ... Aaron Ortiz, QISP, ToR, <u>aortiz@wgr-sw.com</u> (209) 334-5363 ext. 114 Chelsea Dreyer, QISP, <u>cdreyer@wgr-sw.com</u> (562) 799-8510 ext. 1003

I'LL BE HOME FOR CHRISTMA

this year, like never before...

1921

Merry Christmas from the Rain Events! We wish you a very joyful, healthy, and blessed holiday season! May the Prince of Peace fill you with His peace. Isaiah 9:6

THE INTERSECTION OF

Faith & Science

Can you have faith without leaving science at the door? Can you believe in science without compromising your faith? Join instructor John Teravskis for an 8-week class on the intersection of faith and science.

TUESDAY EVENINGS | 6:30 - 8:30 PM PST JANUARY 12 - MARCH 2, 2021 | A FREE EVENT ON ZOOM

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Need Christmas shopping ideas? Check out these awesome finds!

- Waterproof Rainslicker Jacket <u>HIS</u> & <u>HERS</u>
 WGR's Customizable Storm Water Inspection App (contact <u>iteravskis@wgr-sw.com</u> for more information)
 Frogg Toggs Water-Resistant Pants - <u>HIS</u> & <u>HERS</u>
 Free Storm Water Newsletter Subscriptions
 FORGE - Online Learning Subscription
 Flannel Lined Work Jeans - <u>HIS</u> & <u>HERS</u>
 - 7. Rain Boots HIS & HERS
 - 8. Bullard 4 Point Pinlock Suspension Hard Hat

- 9. Leather Briefcase <u>HIS</u> & <u>HERS</u>
- 10. Company Logo Blazer HIS & HERS
- 11. Water/Tea/Cold Brew Coffee Insulated Infuser Bottle
- 12. <u>Safety Vest</u>
- 13. Fleece Lined Flannel Shirt HIS & HERS
- 14. <u>pH Meter</u>
- 15. Rite In The Rain Waterproof Notebook and Pen
- 16. Deerskin Work Gloves
- 17, HydroFlask Insulated Coffee Mug

Verdtech, Inc. VARDEN VERTICAL GARDENS

For the past eight years, we have been designing living walls for restaurants, hotels, and retailers who want to display beautiful ornamental plants in a unique and artistic way.

A few years ago, we noticed a surge in interest in the Varden Living Walls from organic farmers, many in urban areas, who began using our structures to grow leafy greens and herbs on rooftops or small fields. They liked the vertical concept because it saves them precious space and allows them to grow more food, in soil, without more space.

Seeing urban farmers' innovative use of our product inspired us. With the sustainability and local produce movement, we've become convinced that our focus should be on food. Knowing that nutritious, clean, food access and equality are problems in need of solutions now.

We began tweaking the Varden system to be the best *Vertical Garden* that everyone can use to start growing their own food even if short on space. We are there!

For more information, visit our websites or shoot us an email!

info@verdtech.com

vardening.com verdtech.com



OUTDOOR VARDEN KIT

Vertical gardening kit at 2' wide x 3' tall each and ships in a fun, informative and re-usable box. Complete with all components needed for outdoor install. Includes wire panel cut to size, 6 pieces of empty Vardensok mesh for filling with garden soil, cardboard tube for easy sock filling, 12 Varden trays, pre-cut irrigation supply line with fittings, 6 drip lines with fittings attached and 4 wire mounting cleats for easy attachment to walls, fences, posts, etc.



INDOOR VARDEN KIT

We now offer an indoor version of the Varden Kit. 2' wide x 3' tall, which includes an aluminum sealed basin, a pump for the irrigation system, an interior wall moisture barrier, aluminum side trim and top trim, light mount bars and a 2 ft wide grow light. Can be mounted in places that don't have direct access to natural light. All components made in the USA!



COME SEE OUR SHOWROOM! 11730 N. HWY 99, Lodi CA 95220

PRODUCT SPOTLIGHT The Hornet's Nest Drain Inlet Filter is a unique, under-grate storm

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"



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"



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State Water Resources Control Board

October 20, 2020

TO: INDUSTRIAL STORMWATER DISCHARGERS IN AREAS IDENTIFIED IN AN EMERGENCY PROCLAMATION THAT ARE IMPACTED BY WILDFIRES

The State Water Resources Control Board (State Water Board) recognizes the public health and environmental impacts within counties identified in Governor-declared state of emergency proclamations¹ due to wildfires. This letter provides the following guidance for regulatory compliance with the Statewide Industrial Stormwater General Permit² (Permit) for industrial facilities damaged and/or negatively impacted by wildfires within counties identified in a state of emergency proclamation. Negative wildfire impacts on industrial facilities may include higher levels of pollutant in the facility's stormwater discharges that are unrelated to the facility's industrial activities.

1. Sampling and Analysis Requirements

A. Samples Not Representative of Facility Activities

Per Permit Section XI.B, industrial facility owners (Dischargers) are required to collect, analyze, and report industrial stormwater runoff sampling results even if those results are potentially not representative of their facility's industrial activities and operations. Dischargers may claim their industrial stormwater runoff sampling is not representative of their facility operations by:

- Identifying and reporting the stormwater samples impacted by wildfire conditions (including post-wildfire conditions),
- Collecting and reporting photographic documentation, and
- Reporting the basis for why the industrial activity area runoff samples are not representative of the facility activities and operations.

The following are example factors that may be applicable to a Discharger's basis for runoff samples not representing the facility activities and operations:

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

1001 | Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

¹ <u>Current Office of Governor State of Emergency Proclamation</u> https://www.gov.ca.gov/category/proclamations

² <u>General Permit for Stormwater Discharges Associated with Industrial Activities;</u> https://www.waterboards.ca.gov/water_issues/programs/stormwater/igp_20140057dw q.html

- Discharge location(s) conditions,
- Photographs of facility, discharge locations, and surrounding lands impacted by wildfires,
- Facility operation status and condition,
- Areas of high erosion and areas with high collection of ash deposits
- Information on any facility observations prior to a rain event,
- Best management practices currently implemented to manage runoff of industrial pollutants and to manage wildfire-related impacts at the facility,
- Best management practices planned for implementation to manage runoff of industrial pollutants and to restore wildfire-related impacts at the facility, and
- Comparisons of historical facility sampling results from drainage areas to the sampling results collected post-wildfires.

Reported documentation must comply with the required sample event visual observations in Permit Section XI.A.2. Additionally, per Permit Section XI.B.11.a., Dischargers must submit the analyzed sampling results in the Stormwater Multiple Application and Report Tracking System (SMARTS) as an Ad Hoc monitoring report within 30 days of obtaining results from the analytical laboratory. Dischargers must include information in the Ad Hoc monitoring report for all reported sampling results that are not representative of industry activities and operations due to wildfire damage and impacts, as provided by the above guidance.

B. Sampling Not Completed Due to Unsafe Conditions

Dischargers are required to conduct sample collection and visual observations during scheduled facility operating hours, when weather or other conditions do not pose a safety hazard for site access and sampling (Section XI.C.6). The State Water Board emphasizes safety as high priority; therefore, Dischargers are not required to conduct permit-required monitoring in wildfire-impacted areas:

- With unsafe conditions,
- Closed by a government agency, or
- With high potential for mudslides during or after a precipitation event.

Dischargers are required to include an explanation in the facility's Stormwater Pollution Prevention Plan and Annual Report for all not completed sample collection and visual observations, including wildfire-specific information related to missed sampling events and visual observations.

C. Non-qualifying Storm Events

Dischargers that perform an analysis of collected sample results and determine the discharge is not representative of the industrial activities and materials at the facility may submit the results and analysis in SMARTS as a non-qualifying storm event. Non-qualifying storm event results will not be included in the Numeric Action Level exceedance calculation.

D. Number of Qualifying Storm Events

The State Water Board recognizes that it may not be feasible for all Dischargers to obtain four qualifying storm events in a reporting year due to qualifying storm events not occurring with that year. Therefore, a Discharger that attempts but is unable to obtain and analyze stormwater samples from two qualifying storm events in each half of a reporting year per discharge location due to a lack of qualifying storm events is not in violation of Permit Section XI.B.2.

The corresponding Regional Water Quality Control Board Executive Officer has the authority to require the Discharger to revise and resubmit Ad Hoc monitoring reports determined to be inaccurate (Permit Section XIX.).

2. Temporary Suspension of Industrial Activities

Per Permit Section X.H.3, Dischargers planning to temporarily suspend industrial activities for ten (10) or more consecutive calendar days may request to temporarily suspend visual observations, sampling, and analysis if:

- Conducting visual observations, sampling and analysis is infeasible while industrial activities are suspended (e.g. unstaffed, remote, or inaccessible), and/or,
- Best management practices are currently implemented to properly manage stormwater runoff for industrial activity areas.

The Discharger shall upload a Change of Information in SMARTS at least seven (7) days prior to the planned temporary suspension of industrial activities to:

- Revise the Stormwater Pollution Prevention Plan addressing the facility stabilization best management practices,
- Justify why monitoring is infeasible at the facility during the period of temporary suspension of industrial activities,
- Provide the date the facility is fully stabilized for temporary suspension of industrial activities, and
- Provide the projected date that industrial activities will resume at the facility.

Regional Water Quality Control Board staff may review the submitted information pertaining to the temporary suspension of industrial activities, and may request revisions or deny the Discharger's Request to temporarily suspend monitoring.

For further information regarding Permit requirements, please visit our <u>State Water</u> <u>Board Industrial Stormwater webpage</u> at

https://www.waterboards.ca.gov/industrialstormwater.

If you have general questions regarding this letter, please contact the State Water Board, Stormwater Help Desk at <u>stormwater@waterboards.ca.gov</u>. If you have industrial facility-specific questions, please contact your local Regional Water Quality Control Board staff at:

North Coast Region: <u>r1_stormwater@waterboards.ca.gov</u> or (707) 576-2220 San Francisco Bay Region: <u>r2stormwater@waterboards.ca.gov</u> or (510) 622-2402 Central Coast Region: <u>r3_stormwater@waterboards.ca.gov</u> or (805) 549-3147 Los Angeles Region: <u>r4_stormwater@waterboards.ca.gov</u> or (213) 576-6600 Central Valley Region:

- Fresno Office: <u>r5f_stormwater@waterboards.ca.gov</u> or (559) 445-5116
- Redding Office: <u>r5r_stormwater@waterboards.ca.gov</u> or (530) 224-4845

• Sacramento Office: <u>r5s_stormwater@waterboards.ca.gov</u> or (916) 464-3291 Lahontan Region:

• South Lake Tahoe Office: <u>r6a_stormwater@waterboards.ca.gov</u> or (530) 542-5400

• Victorville Office: <u>r6b_stormwater@waterboards.ca.gov</u> or (760) 241-6583 Colorado River Region: <u>r7_stormwater@waterboards.ca.gov</u> or (760) 346-7491 Santa Ana Region: <u>r8_stormwater@waterboards.ca.gov</u> or (951) 782-4130 San Diego Region: <u>r9_stormwater@waterboards.ca.gov</u> or (619) 516-1990

Sincerely,

men Mog

Karen Mogus, Deputy Director Division of Water Quality

cc: (see next page)

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 didn't receive any entries, so we randomly selected a winner from those who responded to our newsletter!

Congratulations Martin on winning the \$25 gift card, we hope you enjoy some delicious holiday goodies from The Honeybaked Ham Company!

... This Month's Contest

Is there a specified amount of rainfall that automatically classifies a storm as qualifying? Does the same amount of rainfall at two different sites make it a qualifying storm for both locations?

We need industrial storm water sleuths to help us with this month's question. Submit your answers by Friday, January 8th. Email your answer to jteravskis@wgr-sw.com. One winner will be selected by a random drawing to receive a \$25 gift card to *Chipotle*.

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