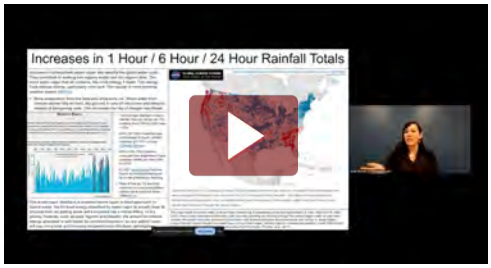
Prepare For Safety

It's October and we've already seen several rain events blow through California dumping some significant rainfall for this time of year. Are you ready for the new rainy season and the sampling that will come with it? Now is the time to plan for safety and prepare for rain so that you're not caught off guard when sampling time rolls around. In this month's edition of **The Rain Events**, we are going to be talking about safety during sampling events. Feel free to forward this newsletter to your team so that they too are prepared and safe this season.

As we've seen over the past several years, heavy rain events or atmospheric rivers can have a pretty drastic impact on your site. Freeways flood and shut down, roads have mild to severe flooding, trees and powerlines come down due to the saturated soils and high winds during storms, and sadly even fatalities can and do occur from fast rising flood waters and hydroplaning vehicles. Intense rain events like these are not something to mess with – especially where people's lives are involved – like at your facility! One of the best safety measures your facility can implement is knowledge and planning ahead. If unsafe conditions appear to be moving in, altering protocols and communicating with workers on site about safety, and about what the Permit says about severe storms and hazardous conditions is the first step in protecting your facility and crew. Heavy rainfall can cause deep gullies in hillsides, mudslides, unstable slopes, widespread flooding, mucky ground, heavy sheet flow, and more. As mentioned above, these storm events can come in all types of sizes and durations – from beneficial to hazardous. The amount of damage and BMP failure at your facility depends on a variety of factors – how wet is the soil? How much rain is expected, over what period of time? Does your facility tend to retain water thereby causing flooding during severe storms? Lately, California storm events have produced anywhere from minor runoff, to runoff you could go boating in. Check out this Storm Water Awareness Week workshop from Sunny Wescott, a chief meteorologist here in the United States, about understanding our current weather situation and what to expect looking at future weather patterns and what is causing these extremes in our



atmosphere.

As an industrial facility who is required to handle storm water – now in larger quantities in shorter periods of time – this means keeping an eye on the forecast to help you prepare for what's coming and get procedures, back up plans, and BMPs in place before the rain begins. It's a good plan to make sure compost socks are properly installed or refreshed in order to remove old trapped pollutants or damaged socks. Clean out drain inlets to prepare for heavy flows. Make sure materials are under cover and won't leak in the case of heavy rain or flooding. Ensure that dumpsters are properly covered so they don't become filled with water or have trash scattered by the wind. Make sure you have your sampling kit prepared and your sampling team is aware of safety protocols. Move equipment and materials to higher ground and away from areas that may flood or have high flow. Position and secure port-a-potties so they will not be inundated or blow over. Rain is coming, so act sooner and not later.

Weather Safety: While all of us are familiar with stormy weather, often these hazardous situations can pop up suddenly and when you least expect it. For example, the rain event starts qualifying at your facility and you need to get out there to sample. You glance at the weather forecast and see that the rain starts to slack off in an hour, so you think to yourself *"I'll be fine"*. However, the weather model was inaccurate, and a

thunderstorm with heavy rain and hail blow in while you're out sampling – not only is it pouring from the big storm cell with flooding starting to spread, but you're also getting hailed on and out in unsafe conditions with lightning strikes occurring nearby. And while that scenario was fictitious, more often now than we've seen in the past, it seems to be the case. Just this past week, the NOAA weather forecast was calling for 0.14" during the course of the rain event, but that's not what happened – just a couple hours into the rain event and the rain

NOAA Weather Forecast Table for 38.145869,-121.294518
Data Captured on 10/02/2025.

Day	Thu Oct 2				Fri Oct 3			
6-Hour Interval	5 AM	11 AM	5 PM	11 PM	5 AM	11 AM	5 PM	11 PM
POP (%)	51	38	33	31	21	9		
QPF (inches)	0.12	0.02	0	0	0	0	0	0
Day	Sat Oct 4				Sun Oct 5			
6-Hour Interval	5 AM	11 AM	5 PM	11 PM	5 AM	11 AM	5 PM	11 PM
POP (%)								
QPF (inches)	0	0	0	0	0	0	0	0

gauge was already recording 1" of rain. Storm patterns we're used to are not the same as current conditions so being caught off guard and unprepared for the severity of a storm event can be a big safety issue for your site, personnel, and procedures. Being mindful of weather safety will help you be prepared. Be on the lookout for heavy rain events that cause flooding, electrical storms, high winds, falling trees, hail, darker conditions and less visibility due to heavy rain, fog, hail, or lack of sunlight. It is important to note here that if the weather pattern moving through is unsafe, ***you do not have to sample if it puts you in danger***. Never put yourself in a hazardous situation where you could get trapped. Talk with your supervisors if the facility is unsafe or if you feel uncomfortable continuing with work, inspections, or monitoring. Document the facility conditions and weather conditions as proof of why monitoring couldn't be done. According to the Permit, dischargers are not required to conduct visual observation during dangerous weather conditions such as flooding and electrical storms. *"In the event that samples are not collected, or visual observations are not conducted in accordance with Section XI.B.5 due to these exceptions, an explanation shall be included in the Annual Report."* If you feel it is not safe to inspect or sample, follow your instincts!

Pollutant Safety: Along with heavy rain events comes flooding, bigger runoff and sheet flow patterns, water getting into places it doesn't belong, and the storm drain system becoming overwhelmed and backed up. This is a prime situation for pollutants escaping, accumulating, and causing safety issues. Chemicals leaching from facility activities exposed to rain, runoff sneaking into buildings and picking up pollutants, secondary containment areas filling up and overflowing, and hazardous pollutants being picked up from a location offsite of your facility and carried onsite by the runoff. Not to mention pathogens from overwhelmed sewer systems, homeless encampments, or local animal activity. E. coli is not something you want to mess around with, so take into consideration when dealing with your storm water runoff, that it may contain some very nasty pollutants. Also, things like biohazardous – depending on your location, may be of concern. We've had sampling locations with biohazards like blood, human bodily fluids, and hypodermic needles present. Although storm water may look innocent at times, there is a possibility for it to contain unsafe substances which you will need to be aware of and practice safe exposure and handling procedures.

Personal Safety: As a storm water inspector who has to go out during rain events and collect samples, there's a lot of things you need to implement for personal safety. Storms cause low visibility – it's darker outside due to the cloud cover, precipitation tends to notably lower visibility, and varying warm and cold temperatures and moisture can cause fog even during a rain event *(when cold rain hits warm pavement and concrete it can cause steam or fog-like conditions)*. Because you're out in these conditions trying to collect your required samples, be sure you are making yourself as visible as possible. Reflective and visible rain gear (that means no black or dark blue rain jackets!), cones, utilizing hazard lights or a flashing light bar installed on your vehicle will help make you more visible and safe in areas with traffic where drivers or facility workers may not be aware someone is collecting storm water samples at that location. Wearing appropriate PPE like gloves and safety glasses will help keep you safe from potential pollutants in the water. Boots with good traction will keep you sure footed in slippery areas. For those having to sample in treacherous terrain (like along a waterway or in a waterway) or in unsafe locations, it might be a good idea to have a buddy system for sampling and not do it by yourself. Sampling often includes traveling to the sampling location in bad weather, so personal safety would include your vehicle too. Do your vehicle tires have good traction? Have you replaced your windshield wipers recently and treated your windshield with Rain-X? Are you familiar with the best driving procedures for wet and slippery streets, flooded roads, and high winds?

Procedural Safety: It's raining, and the only reason you are out in the rain is to collect samples. So, when sampling, there's procedural safety things you are going to want to follow to make sure you are sampling correctly and representatively, as well as safely. Check out these sampling videos to get a better understanding of procedures to keep you safe as a sampler and keep your facility safe as a discharger.

The Rain Events

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COMPLIANCE

STORM WATER AWARENESS WEEK 2025

15,043
REGISTRATIONS

2,769
UNIQUE ATTENDEES

1,821
VIDEO VIEWS

50
STATES

48
COUNTRIES

54
WORKSHOPS

THANK YOU FOR ATTENDING STORM WATER AWARENESS WEEK 2025

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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.

What are the 4 Tiers of the Winery Discharge Requirements?

Congratulations to Trisha who answered for our August newsletter contest, *"Tier 1 - Wineries producing over 10,000 gallons of process water per year; Tier 2 - Wineries producing up to 300,00 gallons of process water per year; Tier 3 - Wineries producing up to 1,000,000 gallons of process water per year; Tier 4 - Wineries producing up to 15 million gallons of process water per year."* We hope you enjoy your next treat from Starbucks!

...This Month's Contest

Are you required to sample every storm event, no matter what?

We need industrial storm water sleuths to help us with this month's question. Submit your answers by Friday, November 7th. 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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