

Preemptive Insurance

Storm Water Containment and Discharge Reduction BMPs

Acquiring storm water preemptive insurance.

According to the Industrial General Permit, storm water containment and discharge reduction BMPs include, “BMPs that divert, infiltrate, reuse, contain, retain, or reduce the volume of storm water runoff. Dischargers are encouraged to utilize BMPs that infiltrate or reuse storm water where feasible.” (IGP X.H.2.b.ii) Think ponds, retention basins, culverts, etc. And while these advanced BMPs aren’t necessarily required for your facility, the Water Board recommends and encourages using them. We here at the Rain Events

No one wants to pay for insurance. Let’s face it, it’s expensive and sometimes appears unnecessary – what are the chances of something bad actually happening? But in the case of an emergency occurring, having insurance will definitely make a difference to the bottom line. In this month’s edition of **The Rain Events**, we’re going to explore some preemptive actions you can take that will act like insurance – which may seem expensive now but potentially can save you if your business receives a lawsuit. And what exactly might that insurance be, you ask? The answer: containment and discharge reduction BMPs.

second that recommendation since these advanced BMPs act as insurance for your facility from numeric action level (NAL) exceedances, non-governmental organization (NGO) threatened and realized litigation, and more.

By nature, storm water containment and discharge reduction BMPs help capture storm water and during typical wet seasons, prevent a discharge from occurring or reduce the overall number of discharges. Often, the initial discharge from a storm event will have the highest

concentration of pollutants. So by installing containment and discharge reduction BMPs (even if your containment can only capture and contain the smallest storms) it can help prevent NAL exceedances, reduce the number of discharges your facility has, and save you storm water analytical costs. But, you can’t just capture and forget about it. When it comes to these advanced BMPs, documenting why your facility doesn’t have to sample is an important step in avoiding threatened lawsuits or fending off realized lawsuits from NGOs. Doing some hydrology studies, figuring out impound capacity, and documenting your facility’s impound status of a rain event during business hours will act as preemptive insurance for your facility.

DRAINAGE STUDY: Do you know where the water at your facility goes? *Really* know where it goes? When it rains, and runoff occurs, can you prove that it is completely captured by your retention pond or leaves your property where your SWPPP says it does? If the answer to those questions is “no”, think about having a hydrology or drainage study done to prove exactly where the runoff from your facility is going. Having documented proof of where storm water goes once it’s on your site is a great form of insurance against NGOs since it clears up



doubt and suspicion. Sometimes facilities can be surprised by the results of the drainage study, when they find out they have a point of discharge (outfall) they weren't aware of! A drainage study often includes dye tests, pond capacity and infiltration rate analysis, a water flow study, and more. To do this adequately, we recommend having a professional engineer with experience in hydrology perform this type of study. And while you can do it yourself, it's better to have an engineer handle this documentation so it will have the authoritative certification of a professional.

IMPOUND CAPACITY: Impounding storm water in a retention pond (or something similar), is a wonderful discharge reduction option for your facility. Containment BMPs will keep you from either discharging storm water completely, or having less frequent discharges (in the case of a smaller pond or a larger storm event). Whether you already have a pond at your facility or if you are thinking of adding one, getting the specs on these ponds and documenting those in your SWPPP is crucial. You need to be able to identify what the impound capacity is, know where it discharges, and show that the pond is actually an effective BMP. In order for retention ponds to be considered a "Treatment Control" advanced BMP as outlined in the Permit, they must meet the 85th percentile 24-hour storm design standard. Who knows, your current pond might already meet that design standard! But you won't know until you have the retention pond's impound capacity assessed by a professional engineer. Which, if you are wondering, an 85th percentile 24-hour storm is *"the depth of rainfall at which*

85% of all the 24-hour storms on record (historical rainfall data) are equal to or smaller." If you are unsure of the capacity of your pond, hire a professional engineer to run those calculations for you. While there is a cost involved in doing so, think of it as insurance – saving you money in the long run. Be sure to include these calculations in your facility's SWPPP for record keeping purposes. And even if you're sure the retention pond already at your facility doesn't meet the newer design standards, get the calculations done anyways. This will help you know what the pond is capable of containing, and give you a good monitoring starting place so you can keep a close eye on it when a storm threatens to surpass the impound capacity during regularly scheduled operating hours. Plus, it gives you authoritative reasons for not sampling, since you can prove that your pond had the capacity to capture the runoff from any storm event in question.

RAIN GAUGES: Just because it's raining at one location, doesn't mean it's raining at a nearby location. Having a rain gauge at your facility, which keeps historical record of all rainfall received at your exact location, is an absolute must if you are looking to safeguard your facility from litigators. While NOAA is a very accurate source, the NOAA weather station nearest your facility might not have collected the same data as your facility. It may have poured at your facility and not where the weather station is or vice versa. Invest in a rain gauge which records historical data to a cloud storage system or some kind of onsite storage device to help provide proof of what happened at your facility on any given day. When selecting a

rain gauge, choose one that can be monitored remotely. In today's COVID-19 world, being able to do things remotely and keep an eye on your facility is important. Plus, if the personnel responsible for weather tracking and reports works at a corporate office or another offsite location, having a system they can access over the web is helpful. Note: we do not recommend having your rain gauge or collected data accessible to the general public.

DOCUMENT EVERYTHING: We have observed that NGOs tend to go after facilities who say they don't have to sample since they did not have a discharge during business hours but do not have documented impound capacities outlined in their SWPPPs. These litigators seize the opportunity and accuse a facility for having a discharge during a storm event knowing, more often than not, the facility can't prove they had no discharge. And while the Permit does not obligate a facility to collect and perform observations during off hours, an NGO might try to make a case out of it. To avoid these issues, document the status and capacity of your pond during heavy rain days when the capacity might be reached or exceeded during operating hours. Take pictures at the end of the business day (if the rain is likely to continue through the night), or when the rain stops. Document what the pond looks like when it does reach capacity and starts discharging during a storm water discharge sampling event. Keep these photos and documentation on file for a minimum of 5 years. They may come in handy when faced with an NGO 60-Day threatened to sue letter or court case.

Before anything happens, consider investing in some preemptive insurance for your facility. It will pay off in the end. **RE**

¹Definition courtesy of Steven Pechin, R.C.E. at Baumbach & Piazza, Inc.

The Rain Events

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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. Last month's contest question was:

Name some of the things a storm-resistant shelter is not needed for in order to comply with NEC coverage!

Congratulations to Jamie who answered our contest question - *"Outdoor storage of tightly sealed containers; Adequately maintained vehicles; Temporary shelters for remodeling and construction purposes."* Jamie, we hope you enjoy a nice coffee break on us!

...This Month's Contest

What is an 85th percentile 24-hour storm?

We need industrial storm water sleuths to help us with this month's question. Submit your answers by Friday, March 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 *Home Depot*.

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