the Rain events

A Monthly Newsletter on the California Industrial General Permit
By WGR Southwest, Inc.

January 2016

LIGHTS, CAMERA, QISP!

So why have members of the Water Board staff, CASQA, Office of Water Programs, and Trainers of Record been appearing this month in a Northern California film studio? To create the Water Board's much-anticipated QISP training program! Last November, the *California Stormwater Quality Association* (CASQA) released a Request for Proposal for creating an online training program for the first portion of the QISP certification process. WGR Southwest (the publisher of the Rain Events Newsletter) was the successful bidder. The proposal called for producing approximately 16 hours of online education for persons interested in becoming a **Qualified Industrial Storm Water Practitioner** – or QISP. A goal of the online training was to leverage technology to enable QISP candidates to do much of their learning at work or at home prior to their interface with a live Trainer of Record. WGR has created a Moodle™-based learning experience that incorporates a variety of learning tools including videos, downloadable materials, links to outside resources and other helpful reference materials. This QISP training program will be very similar to an online college course - in fact, the entire program will be hosted by Cal State Sacramento's Office of Water Programs. This Water Board-mandated training program is being funded and overseen by CASQA, and is scheduled to be released by May 1st of this year.

So what will the on-line classroom look like? The training concept was developed over the last three years by the **Industrial General Permit Training Team**, a group comprised of Water Board staff and a couple dozen storm water consultant volunteers who were selected through an application and vetting process. To make the training as realistic as possible, much of the training is based on fictional industrial sites (which are loosely based on actual sites), representative of three different industry groups. In studying these scenarios, the QISP candidate will both learn and be tested on their knowledge of the Industrial General Permit. The Water Board chose to use site scenarios as the basis of the training program because it allowed QISPs to demonstrate their ability to apply the information in the Permit rather than just to be tested on a collection of IGP trivia questions.

The QISP training incorporates a modern educational approach that is being used with great success in adult education. It is called the "**flipped classroom.**" You may remember from your time in school that a traditional classroom approach was to go to class, listen to the teacher lecture on the material, do the homework, and then take an exam. In the flipped classroom, the QISP candidate will actually start with homework or self-study, take learning quizzes early on in the process, take a mid-term exam, and after passing the exam, will then go to the live instructor. Why this unorthodox approach? Studies have shown that when an adult learner can study on their own and learn much of the material before receiving the formal training, the retention and understanding of the learning concepts are significantly higher. The State Water Board is hoping that this combination of a flipped learning approach, technology, and live training will produce QISPs that are competent and ready to assist industrial dischargers with their complex compliance challenges.

So, who should consider becoming a QISP? The Water Board and Industrial General Permit Training Team makes it very clear in the training's introductory videos that this course is not designed to be a "Storm Water 101" course. The exam questions will range from "challenging to difficult" and the course material has been designed for people who have a good understanding of both the previous and current IGPs, and also have extensive experience in implementing these permits at industrial facilities.

"To Do List" for January:

- Perform the January monthly inspection
- With all the rain that we received, Northern California facilities should already have their third or fourth samples by now. Southern California facilities need to be getting the two second-half-of-the-year samples with the rains predicted for late January and early February.
- Evaluate your facility's NAL performance using the form attached to this newsletter.

the Compliance corner

7 Steps to Becoming a QISP

We have been receiving lots of calls and emails about how to become a QISP. Our answer up until this point has been "the training and process is being developed". We are now telling people that it is almost here. The following are 7 steps that you will need to take to become a QISP and 10 roles the QISP will need to do.

1. Make sure that you have good IGP experience and knowledge
2. Starting on or around May 1, 2016, sign up for the online QISP training at http://www.owp.csus.edu/stormwater-training/ by registering and paying the fee (*amount not yet determined*)
3. Work through the online course (approximately 16 hours) and successfully pass the online "Mid-term Exam"
4. Upon passing the "Mid-term Exam", sign-up through Office of Water Programs for a live in-person class with a Trainer-of-Record at a location and on a date convenient for you.
5. Attend the in-person class.
6. Return to the Office of Water Programs registration portal and take the "Final Exam".
7. Upon passing the "Final Exam", you will be issued by CASQA a QISP certification.

10 QISP Roles

1. May represent one or more facilities but must be able to perform the functions required by the IGP at all times.
2. Assigned to a facility that reaches Level 1 status (and Level 2)
3. More accurately identify discharge locations representative of the facility storm water discharge
4. Select and implement appropriate sampling procedures
5. Evaluate and develop additional BMPs to reduce or prevent pollutants in industrial storm water discharges
6. Assist with the completion of the Level 1 Evaluation and preparation of the Level 1 ERA Report
7. Assist with the completion of the Level 2 ERA requirements and the preparation of the Level 2 Action Plan & Level 2 Technical Reports
8. Assist new dischargers in preparing the SWPPP and monitoring program
9. Provide training to "appropriate team members" for Level 1 facilities.
10. Be informed, responsible, and attentive to the required duties of a QISP; keeping the QISP certification in good standing with the State Water Board and CASQA.

Having NAL Exceedances? Need Help?
Give us a call at (209) 334-5363, ext. 114

Behind the Scenes

To watch the behind the scenes video, click on the image above or go to:
https://www.youtube.com/watch?v=K_sW6Ty_aQg

We Are Still Learning this Permit

In the November Rain Events issue on NALs, we stated that pH would be averaged using a logarithmic method. While that is true for the Construction General Permit, in the Industrial General Permit averaging pH is not even a factor. This is because only instantaneous NALs apply to pH and no averaging is done. If two pH results for the same monitoring year area are over the NAL, that facility has exceeded the instantaneous NAL for that drainage area.

Also we made a mistake in the December issue by stating that records must be kept for at least 3 years. Again, that was our default to the Construction General Permit. The Industrial General Permit requires that all records, including calibration records, be maintained for at least **5 years**.

Please contact us if you have any questions ...

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

Technical Questions about Environmental Compliance?

Call ...

Aaron Ortiz, QISP, ToR, aortiz@wgr-sw.com
(209) 334-5363 ext. 114

Steve Teravskis, steravskis@wgr-sw.com
(209) 334-5363 ext. 115

Chelsea Dreyer, cdreyer@wgr-sw.com
(562) 799-8510 ext. 1003

NAL Evaluation Worksheet

Drainage Area:

Discharge Point Name: Discharge Point #1

Note that all discharge points are to be averaged together to determine if the Annual NAL was exceeded. Refer to the Annual NAL Summary Sheet.

Note that exceedances of instantaneous NALs are summed up for all discharge points and if the sum is greater than or equal to 2, the instantaneous NAL has been exceeded. Refer to the Annual NAL Summary Sheet.

Parameter	Units	Annual NAL[1]	Instantaneous NAL[2]	First Storm	Second Storm	Third Storm	Fourth Storm	Average	Annual NAL Exceeded for this Discharge Point? (Yes/No)	Instantaneous NAL Exceeded for this Drainage Point? (Yes/No)
			Date:							
pH	pH units	N/A	Less than 6.0 Greater than 9.0	8	7	9	7	7.75		No
Suspended Solids (TSS), Total	mg/L	100	400	30	50	5	5	22.5	No	No
Oil & Grease (O&G), Total	mg/L	15	25	26	5	2	27	15	No	Yes

Parameter	Units	Annual NAL	First Storm	Second Storm	Third Storm	Fourth Storm	Average	Annual NAL Exceeded? (Yes/No)
Zinc, Total	mg/L	0.26	0.12	0.17	0.25	0.45	0.2475	No
Copper, Total	mg/L	0.0332					#DIV/0!	#DIV/0!
Cyanide, Total	mg/L	0.022					#DIV/0!	#DIV/0!
Lead, Total	mg/L	0.262					#DIV/0!	#DIV/0!
Chemical Oxygen Demand (COD)	mg/L	120	150	110	105	95	115	No
Aluminum, Total	mg/L	0.75					#DIV/0!	#DIV/0!
Iron, Total	mg/L	1					#DIV/0!	#DIV/0!
Nitrate + Nitrite Nitrogen	mg/L as N	0.68	0.45	0.36	1.1	0.85	0.69	Yes
Total Phosphorus	mg/L as P	2					#DIV/0!	#DIV/0!
Ammonia (as N)	mg/L	2.14					#DIV/0!	#DIV/0!
Magnesium, total	mg/L	0.064					#DIV/0!	#DIV/0!
Arsenic, Total	mg/L	0.15					#DIV/0!	#DIV/0!
Cadmium, Total	mg/L	0.0053					#DIV/0!	#DIV/0!
Nickel, Total	mg/l	1.02					#DIV/0!	#DIV/0!
Mercury, Total	mg/L	0.0014					#DIV/0!	#DIV/0!
Selenium, Total	mg/L	0.005					#DIV/0!	#DIV/0!
Silver, Total	mg/L	0.0183					#DIV/0!	#DIV/0!
Biochemical Oxygen Demand (BOD)	mg/L	30	15	25	50	15	26.25	No

Notes:

1. An annual NAL is exceeded when the average of all results for a specific parameter for all drainage areas are above the annual NAL value. It is permissible to collect more than four samples per year to lower the average.

2. An instantaneous NAL is exceeded when two analytical results for a facility exceed the instantaneous value in one reporting year.

COME SEE OUR SHOWROOM!
11780 N. HWY 99,
Lodi CA 95220

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"

BMP
bmpoutlet.com

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″

Check out our website!
shop.bmpoutlet.com

BMP Outlet • sales@bmpoutlet.com • (916) 918-0408

Storm Water Contest...

Each month, we invite our readers to participate in a contest to test their knowledge of the Industrial General Permit and 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.

How long are you required to maintain your pH meter calibration logs?

Congratulations, Wendy Johnson - you won! But while we said 3 years in the article, we stand corrected - **the IGP requires dischargers to maintain records for 5 years.**

Wendy wins $25 to Amazon.com!

This Month's Contest Question:

A facility has 3 discharge points. The first one had Total Suspended Solids (TSS) concentrations of 100, 110, 75, and 45 mg/l. The second had TSS concentrations of 500, 125, 350, and 225. The third discharge point had TSS concentrations of 335, 250, 95, and 405. Did the facility have an instantaneous NAL exceedance?

By February 14, 2016, submit your response to the above question by sending an email to jteravskis@wgr-sw.com. All persons submitting the correct answer will be placed in a drawing. The winner will receive a $25 gift cart to Starbucks.