

# California Industrial General Permit Qualified Industrial Stormwater Practitioner (QISP) Training Program Overview

IGP WORKSHOPS 2015

## Topics

- When is a QISP needed?
- QISP Prerequisites/Qualifications
- Training Program Development
- Timeline
- Planning Ahead
- Question and Answers

## When is a QISP Needed?

- **Dischargers shall appoint QISP – internal or external for:**
  - **Level 1 status reporting**
  - **Level 2 status reporting and Action Plan**
  - **New Dischargers with 303(d) impaired receiving waters**

## QISP Training Prerequisites

- No established prerequisites
- Training is not intended to cover entire IGP
- Trainees should have a good understanding of the IGP and Clean Water Act (CWA)
- Goal of trainee should be to learn more on how to implement new IGP requirements

## Professional Engineers & Geologists

- California licensed professional civil, industrial, chemical, and mechanical engineers and geologists (CPBELSG)
  - Parallel and streamlined training process
  - No testing for becoming a QISP
- Professional Engineers required for:
  - Inactive Mining SWPPPs, NONA Technical Reports, and Subchapter N calculations

## QISP Training Program Development

## Industrial General Permit Training Team (IGPTT)

- Sept 2012 – May 2013 SWRCB selected IGPTT Members through application process
- 15 IGPTT Members
- 10 – 15 Sub-Committee Seats
- 1-2 year commitment; 10 – 40 hours/month
- Regular meeting attendance
- August 1, 2013 – IGPTT Kickoff

## IGPTT Members

Arthur Deicke	Environmental Pollution Solutions
Brian Currier	OWP-CSUS
Calvin Noling	StormwaterRx LLC
Daniel Apt	RBF Consulting / CASQA
Geoff Brosseau	CASQA
Joan Greenwood	CSC Targhee, Inc
John Teravskis	WGR Southwest Inc
Kathleen Harrison	Geosyntec Consultants
Kelly Doyle	Rick Engineering Company
Larry Sweetser	Rural Counties ESJPA
Laurel Warddrip	State Water Board
Matt Lentz	GSI Environmental Inc/CASQA
Matthew Hoesch	OWP-CSUS
Matthew Zucca	Erler & Kalinowski, Inc
Michele Kinaan	ETIC Engineering Inc
Rich Muhl	RWQCB- 5 Sacramento
Tim Simpson	GSI Environmental Inc

## QISP Training Program

- QISP Training Program (non-CPBELSG)
  - Estimated 16 hours on-line, with quizzes
  - Online exam
  - 1 day classroom taught by Trainer of Record (TOR)
  - No test at completion of classroom
  - Fee for Training
  - QISP ID Number Issued
  - Recertification will likely be required

## QISP Training Program

- Includes photos, videos, outside resource links, quizzes
- Example “Site Scenarios” for practical application
- Completed at QISP candidate’s own pace, but within 2 years of registering

## Classroom Training

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- Review of on-line training material
- Provide opportunity for Q&A /discussion
- Demonstrations
- Case Studies

## QISP Examination

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- Examination will address content covered during training via:
  - General questions regarding IGP
  - Questions using Site Scenarios to test practical understanding
- Examination will also test broader IGP and CWA knowledge

## QISP Training Timeline

- February 27, 2014 - Feedback Forum
- March 2015 – Trainer of Record (TOR)/CGLs RFQ
- June 17-18, 2015 – TOR/CGLs Training
- July 2015 - TORs/CGLs available
- Fall 2015 - Training Rollout
- Winter 2015 - QISP Enrollment



California Industrial General Permit – Significant Changes and Compliance Considerations

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California Industrial General Permit

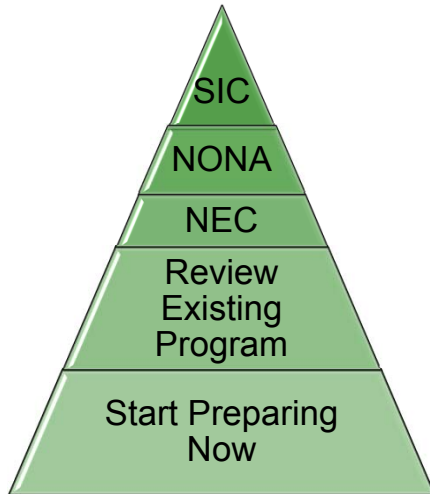


Compliance Strategies

Prepared by:

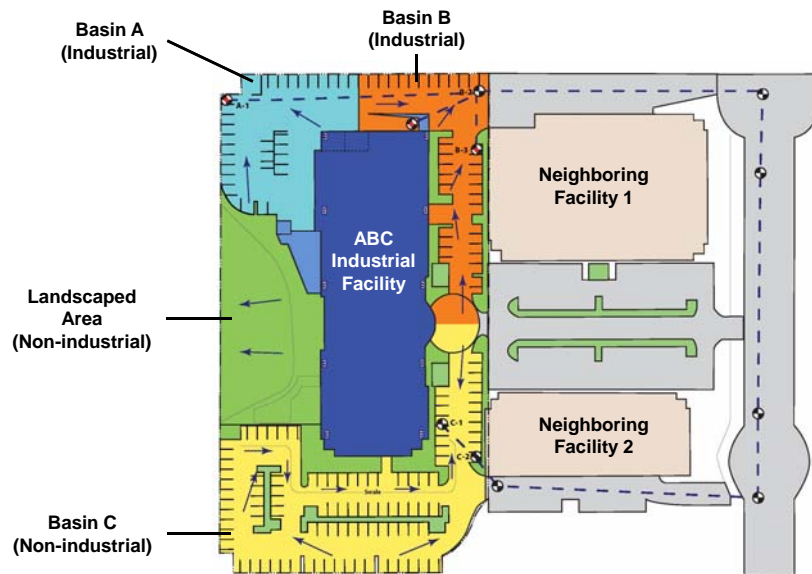
Ed Othmer, PE, CPESC, CPSWQ, QSP/D, ToR  
Jeremy Bauer

## Hierarchy of Strategies



- Confirm Permit Applicability
  - Is the SIC Code covered?
  - Does facility discharge?
  - Does facility qualify for no exposure certification?
- Review existing program
  - Compare historical data to NALs
  - Identify potential sources
  - Assess BMP effectiveness
  - Identify data gaps
- Start Preparing now
  - Minimize number of applicable drainage areas
  - Anticipate Level 1 and 2 Assessment questions
  - Revise sampling program now to answer them
  - Train staff now

## ABC Manufacturing, Inc.





## Permit Applicability – Who’s IN?

- ◆ Facilities Subject to Storm Water Effluent Limitations Guidelines, New Source Performance Standards, or Toxic Pollutant Effluent Standards (40 Code of Federal Regulations (CFR) Subchapter N)
  - Cement manufacturing
  - Coal mining
  - Feedlots
  - Mineral mining and processing
  - Fertilizer manufacturing
  - Ore mining and dressing
  - Petroleum refining
  - Asphalt emulsion
  - Phosphate manufacturing
  - Landfills
  - Steam electric
  - Airport deicing
- ◆ Manufacturing Facilities (SICs 20XX-39XX, 4221-4225)
- ◆ Oil And Gas/Mining Facilities (SICs 10XX-14XX)
- ◆ Hazardous Waste Treatment, Storage, Or Disposal Facilities
- ◆ Landfills, Land Application Sites, And Open Dumps
- ◆ Recycling Facilities (SICs 5015-5093)
- ◆ Steam Electric Power Generating Facilities
- ◆ Transportation Facilities (SICs 40XX-45XX (except 4221-25) and 5171)
- ◆ Sewage or Wastewater Treatment Works

Source: Permit Section I.A and Attachment A

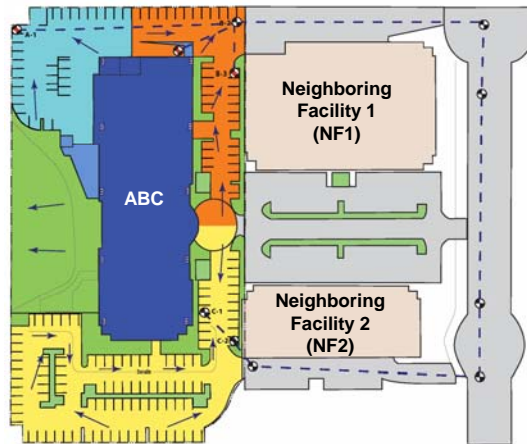


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## Permit Applicability: SIC Code

- ✓ ABC is a manufacturing plant
- ✗ NF1 is a research and development facility
- 💡 NF2 is a warehouse
- What if NF2 were a:
  - ✓ Recycling facility?
  - ✗ Auto maintenance facility?
  - ✗ Gasoline service station?
  - 💡 90 day hazmat storage site?
  - ✓ Permitted RCRA site?



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## Notice of Non-Applicability

### Engineered and Constructed



- Engineered and constructed to contain the max historic event(s) using NOAA or other nearby government data so that no discharge will occur

### Disconnected Basin



- Located in basins or other physical locations that are not hydrologically connected to waters of the U.S.

Requires "No Discharge Technical Report" signed by a California P.E. and submitted via SMARTS

## No Exposure Certification (NEC)

- Next best thing after NONA
- NEC Checklist
  - Special type of SWPPP
  - No exposure BMPs
  - Site map
- No Sampling
- Annual recertification
- NEC for facility basis only
- But achieving "No exposure" for individual drainage areas is still a good strategy



## No Exposure Certification (NEC)

- All unauthorized NSWDS eliminated
- No Exposure:
  1. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment
  2. Materials or residuals on the ground or in storm water inlets from spills/leaks
  3. Materials or products from past industrial activity

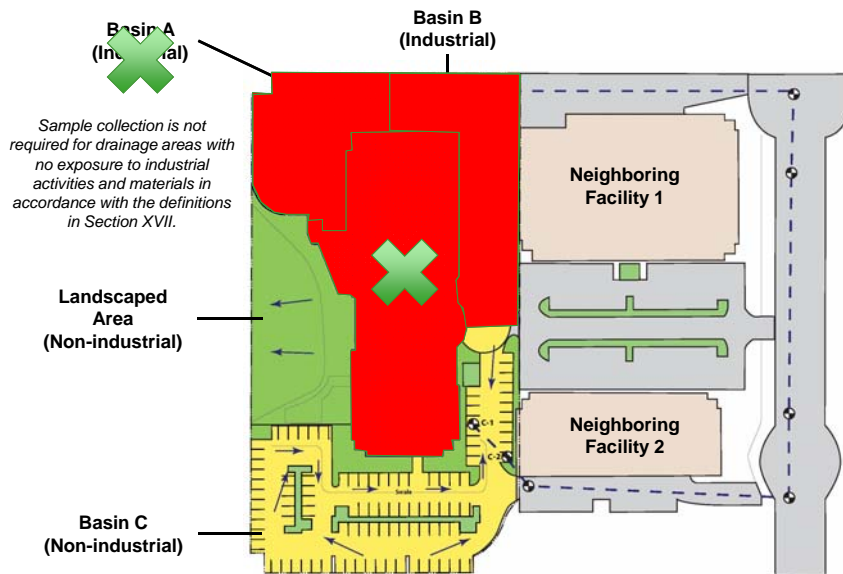
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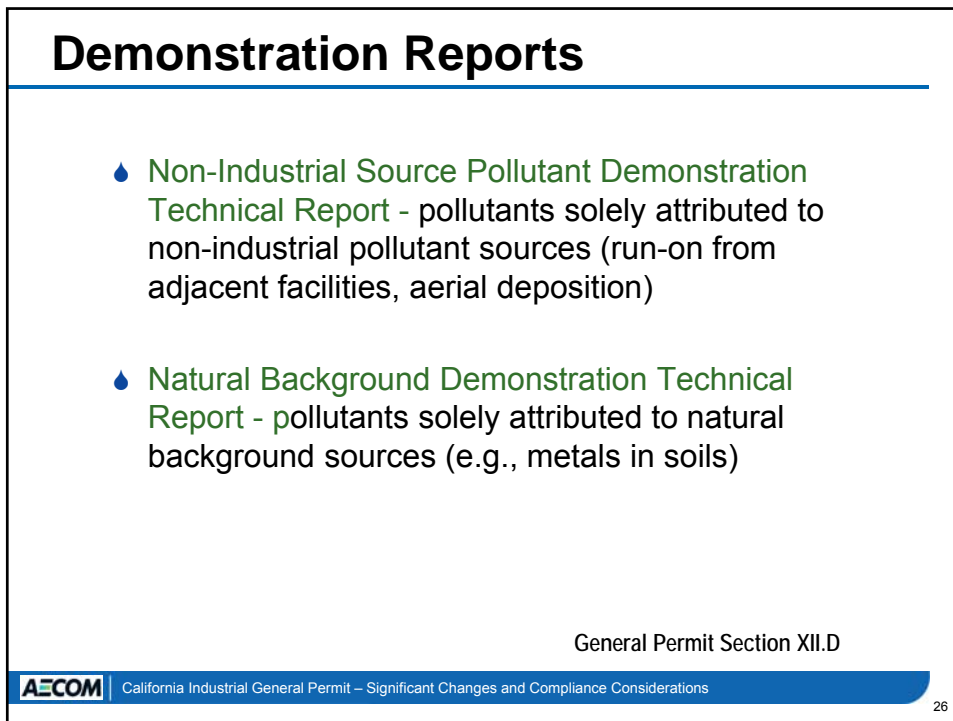
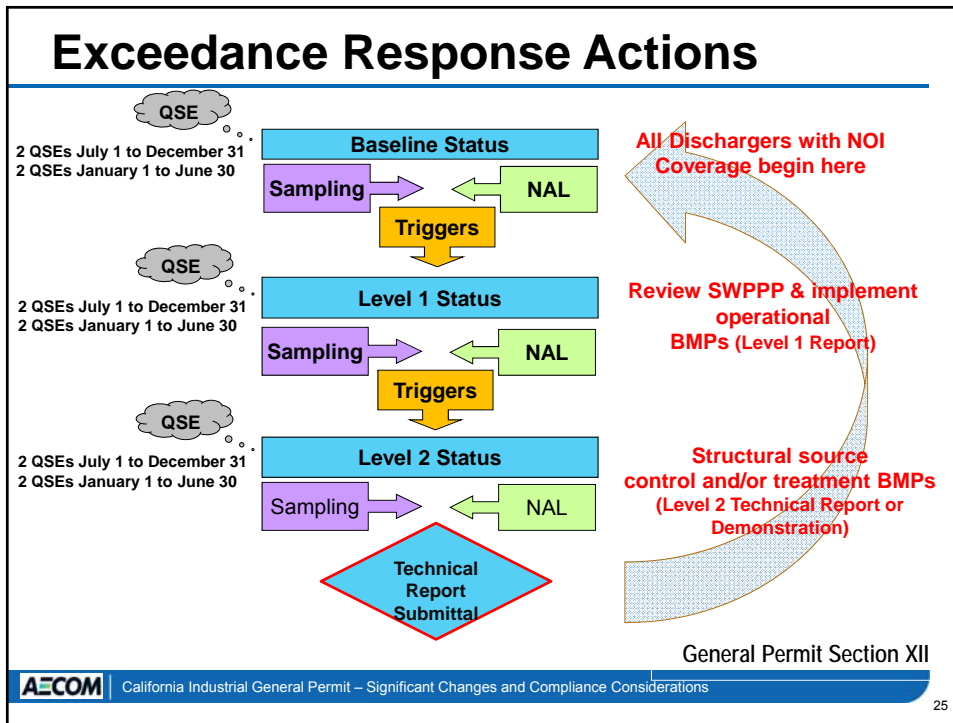
- No Exposure:
  4. Material handling equipment (except adequately maintained vehicles)
  5. Materials or products during loading/unloading or transporting activities
  6. Materials or products stored outdoors (except final products intended for outside use, (e.g., new cars))
  7. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers

## No Exposure Certification (NEC)

- No Exposure:
  8. Materials or products handled/stored on roads or railways owned or maintained by the Discharger
  9. Waste material (except waste in covered, non-leaking containers, i.e., dumpsters)
  10. Application or disposal of processed wastewater (unless already covered by an NPDES permit)
  11. Particulate matter or visible deposits of residuals from roof stacks/vents evident in the storm water outflow

## Segregating Industrial Activity





## Demonstration Reports

- ◆ **Industrial Activity BMPs Demonstration** - BMPs designed, installed, and implemented in compliance with BAT/BCT
  - ◆ Description/evaluation of relevant pollutant sources
    - BMPs to comply with applicable effluent limitations (BAT/BCT, ELGs and/or TMDLs)
    - BMPs required to prevent future NAL exceedances or, if not implemented, provide rationale and cost
  - ◆ BMPs sized to design storm standards

General Permit Section XII.D



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## What does your existing program tell you?

- Where do you stand?
- Do you know where the exceedances are coming from?
- Are they coming from off-site or non-industrial sources?
- Do you have the information you need for demonstration?
- Are you already implementing BMPs?
- How well are they working?
- Can you demonstrate that you're already implementing BAT/BCT?
- Do your BMPs meet minimum design standards?



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### Review Historic Monitoring Results

Sampling Point	Storm Event	Pollutant Concentration		
		TSS (mg/L)	O&G (mg/L)	pH
A-1	1	420	26	7.13
	2	18	12	6.75
B-1	1	120	11	8.10
	2	20	10	7.12
B-2	1	110	8	9.12
	2	13	5	9.20
Annual Average		116.83	12	N/A
Annual NAL		100	15	N/A
Instantaneous Maximum NAL		400	25	<6.0 or >9.0

**Question: Is the Annual NAL exceeded?**  
 Yes, Annual NAL exceeded for TSS.  
**Is the Instantaneous Maximum exceeded?**  
 Yes for pH but No for O&G.

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Annual NAL		100	15	N/A
Instantaneous Maximum NAL		400	25	<6.0 or >9.0

     Exceeds Annual NAL (annual average for all samples)  
     Above Instantaneous Maximum NAL (but 2 or more samples must exceed NAL to result in a status change)

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## Proactive Assessment

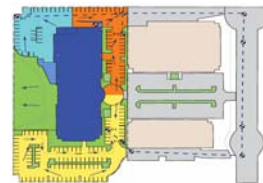
Identify the source of exceedances:

- Address hot spots
  - Drive the average below the NAL
  - Avoid exceeding instantaneous NAL
- Document non-industrial sources with data
  - Neighboring sites
  - Roadways
  - Non-industrial portions of facility
- Anticipate data needs
- Start now



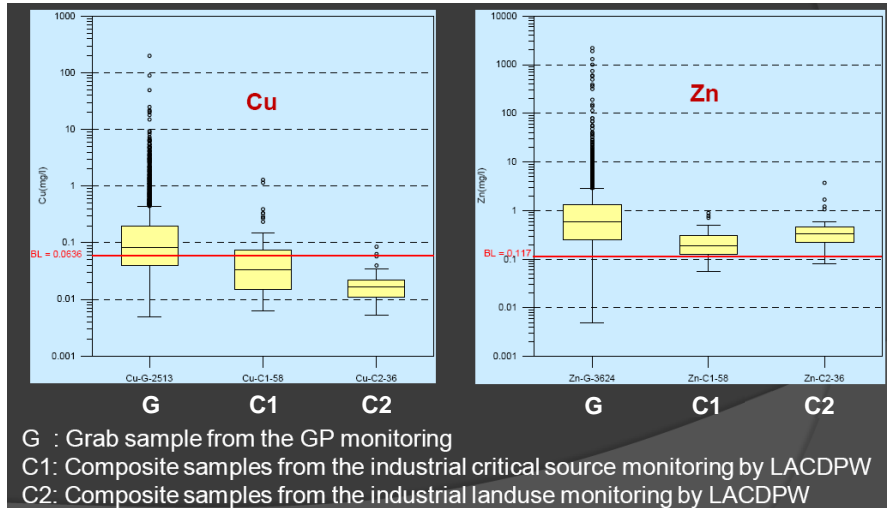
## Monitoring Strategies

- Location considerations
  - Avoid non-industrial sources (non-industrial areas of site, roads, etc.)
  - unless documentation of cross-contamination is required to demonstrate that these sources are the origin of exceedances
- Infiltrate first flush – then sample
  - The initial flush usually has the highest concentration
- Consider flow-weighted to improve representativeness and reduce noisy data





## Grab Sample Variability



Comparison of Grab samples to composite samples (Dr. Mike Stenstrom, UCLA)

## Streamlining Opportunities

- ◆ Evaluate opportunities for no exposure
  - ◆ NEC
  - ◆ Drainage areas: No sampling at discharge locations that have no exposure of industrial activities or materials
- ◆ Sampling frequency reduction
- ◆ Compliance Groups
  - ◆ Reduced monitoring requirements
  - ◆ Consolidated Level 1 ERA Reports
- ◆ Qualified Combined samples
- ◆ Representative Sample Reduction



## Planning Ahead is Key!

- Review SWPPP and historical analytical results
- Evaluate areas for improvement
- Perform Level 1 ERA
- Implement improvements now to avoid ERA process
  - Avoid exposure
  - Avoid discharge
  - Implement minimum BMPs
  - Review sampling techniques and modify, if needed
  - Evaluate/Eliminate pollutant sources (run on, aerial deposition)

## Planning Ahead

- Get comfortable with electronic reporting
- Identify your team players
- Train facility staff
- Seek help!
  - Resources are available to help, not just penalize!


# Contacting the Board

## Storm Water Program

**Program Information**

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- Construction: [Hot News!](#) | [Construction Program Page](#)
- Industrial: [Hot News!](#) | [Industrial Program Page](#)
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- Caltrans
- Construction
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- Industrial



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- [Storm Water Films Page](#)

**CONTACT INFORMATION**

- General Inquiries: [stormwater@waterboards.ca.gov](mailto:stormwater@waterboards.ca.gov)
- Telephone Toll Free - 1-866-563-3107
- Fax - (916) 341-5543

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