



Sampling and Reporting: Mid-Year Review with SWRCB

Presented by





INTRO

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Founder of Mapistry

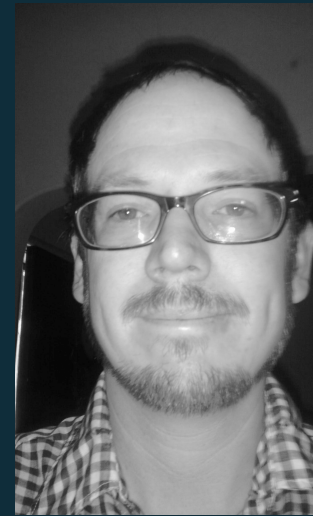
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GUESTS



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Environmental Scientist
CA Water Board



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Water Resources
Control Engineer
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OVERVIEW

- ✓ Sampling review
- ✓ Recordkeeping
- ✓ SMARTS submittal
- ✓ Sampling stats
- ✓ NAL trends
- ✓ Problem areas
- ✓ Questions





SAMPLING AND ANALYSIS

SAMPLING OBSERVATIONS

- ✓ source?
- ✓ corrective action?
- ✓ BMPs?
- ✓ responsible person
- ✓ records



SAMPLING OBSERVATIONS

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Sections

- Inspection Info
- Storm Info
- Sampling Observations**
 - O-1**
- Non-Stormwater Discharge Observations
- Deficiencies
- Notes

Sampling Observations

* Indicates required field

Sampling Location *

Are odors present? *

Floating material present? *

Suspended material present? *

Sheen (oil & grease) present? *

Is the discharge discolored? *

Is the discharge turbid? *

What is the source of any deficiencies?

Chat with us!

CORRECTIVE ACTIONS



SAMPLING PLANNING

- ✓ lab/bottles
- ✓ schedule courier
- ✓ team members (notifications)
- ✓ **sampling kits** - bottles, cooler, ice, COCs, and labels
- ✓ gloves
- ✓ pH meter (calibrated)
- ✓ map for sampling locations

SAMPLING LOCATIONS

- ✓ manholes
- ✓ catch basins
- ✓ outfalls
- ✓ sheet flow
- ✓ ditches

RIGHT LOCATION?



CC Image courtesy of MD Dept of Env

END OF PIPE

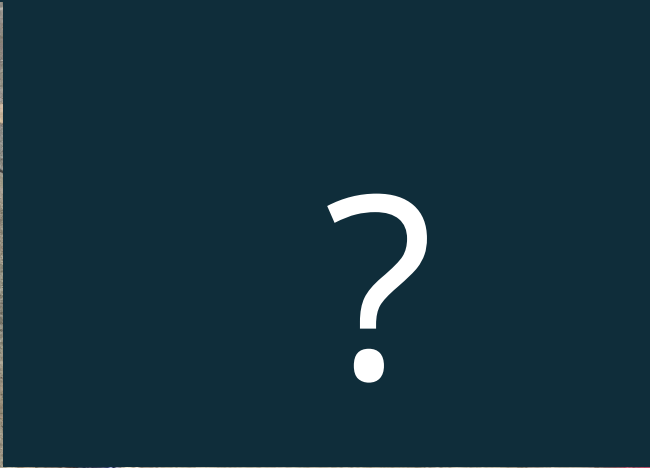


CC Image courtesy of MD Dept of Env

SAMPLE COLLECTION

- ✓ End of pipe
- ✓ Grab samples







SAMPLE KIT

- ✓ gloves
- ✓ pH meter/litmus paper
- ✓ COC and labels
- ✓ containers
- ✓ decon (liquinox and DI water)
- ✓ pole/duct tape
- ✓ marker and pen
- ✓ cooler with ice
- ✓ bucket (carry equipment)
- ✓ map
- ✓ inspection app/forms



ANALYSES

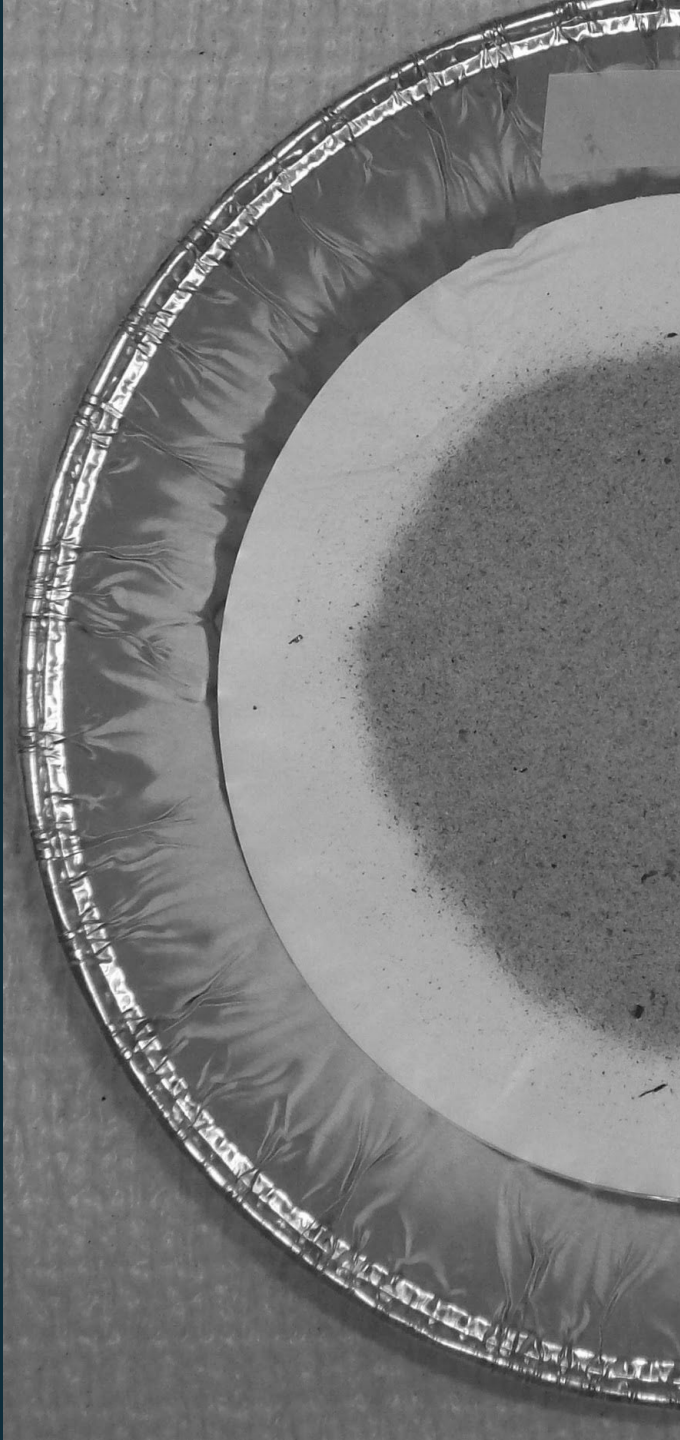
- ✓ CA IGP analyses
 - O&G,
 - TSS, and
 - pH
- ✓ Additional parameters based on SIC code

pH ANALYSIS

- ✓ indicator parameter of acidic and alkaline pollutants
- ✓ clean container with **no preservative**
- ✓ analyze within 15 minutes (CA IGP requirement)
- ✓ field pH meter (calibrated)
- ✓ litmus paper

TOTAL SUSPENDED SOLIDS (TSS)

- ✓ via **SM 2540D** (gravimetric)
- ✓ measure of **undissolved material**



O&G SAMPLING

- ✓ collect via **grab sample**
- ✓ container with preservative
- ✓ adheres to automatic sampler
- ✓ measure of **non-volatile hydrocarbons** (animal fats, vegetable oil, etc.)

MONITORING RECORDS

- ✓ date, location and time of sampling
- ✓ date of analyses
- ✓ individual performing analysis
- ✓ analytical techniques/methods
- ✓ analytical results

SWRCB Perspective

- ✓ Facilities in SMARTS
- ✓ Sampling results to date
- ✓ Exceedances
- ✓ Facilities not sampling (or not submitting results)

SWRCB SMARTS STATS

- ✓ NOI – 8,678
- ✓ NEC – 1,779
- ✓ NONA – 134
- ✓ Total: 10,591

SMARTS TO DATE

- ✓ 8,678 NOI
- ✓ ~1,200 Facilities with sample data

~14% of facilities sampled

SWRCB SMARTS STATS

Parameter	Average NAL (aNAL) mg/L	Instaneous NAL (iNAL) mg/L	Samples	Facilities	# Samples Over NAL	Over NAL
pH	NA	6 to 9	4,457	~1,200	iNAL 169 under 6.0 53 over 9.0	3.8% 1.2%
TSS	100	400	4,400	~1,200	aNAL - 745 iNAL - 168	16.9% 3.8%
O&G	15	25	3,401	~1,200	aNAL - 151 iNAL - 81	4.4% 2.4%

SWRCB SMARTS STATS

Parameter	Average NAL (aNAL) mg/L	Samples	Facilities	# Samples Over NAL	Over NAL
Al	0.75	945	~300	407	43%
Cu	0.0332	639	~170	290	45%
Fe	1.0	1,317	~360	679	52%
Pb	0.262	690	~210	18	2.6%
Zn	0.26	1,191	~350	557	47%

SOME COMMON QUESTIONS

???????

ERA Level 1

I exceeded the instantaneous NAL for TSS on two occasions

Questions

- ✓ Who are the QISPs?
- ✓ Where can I find a list of QISPs?

Sampling

- ✓ What do I do if some of my discharge locations do not have enough flow to sample?
- ✓ Do I need 4 QSEs from every discharge location or if I only sample 1 of 2 locations does that count as 1 QSE?

Sampling

- ✓ How should I collect samples from sheet flow on concrete or pavement? Can I use a dust pan?
- ✓ Can I use a container on a pole to collect samples from a catch basin? Is that a problem with O&G?

Non Compliance

- ✓ Is it too late to file a Notice of Intent (NOI)?
- ✓ What will the Water Board do?

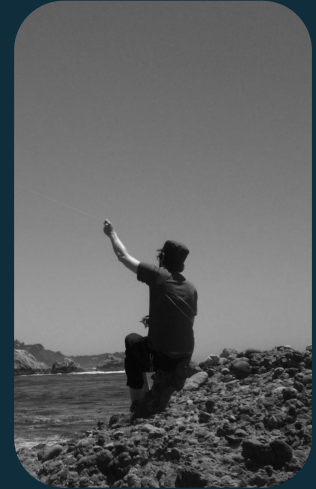
Non Compliance

- ✓ What happens if I did not sample 2 Qualified Storm Events (QSE)s in July to December?
- ✓ Should I sample 4 QSEs during January to June?

Annual Report

- ✓ When do I have to file the annual report?
- ✓ Do I have to submit my inspection forms?
- ✓ Do I need a QISP to file my annual report?

QUESTIONS?



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