

Stormwater Regulations and Impacts on Industry

Integrated Regional Water Management Regional Advisory Committee (RAC) Meeting #45

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INDUSTRIAL ENVIRONMENTAL ASSOCIATION
Protecting Industry and
Protecting the Environment

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Agenda

- ◆ New Dawn of NPDES Permitting
- ◆ Receiving Water Limitations
- ◆ Industrial Stormwater Permit
- ◆ Municipal Stormwater Permit
- ◆ Increased Permit Fees

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New Dawn of NPDES Permitting

2002

EPA expected that most QBELs for NPDES-regulated industrial and small construction stormwater discharges will be in the form of WQBELs that numeric limitations will be used only in rare instances.

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Source: U.S. Environmental Protection Agency Memorandum, Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs, November 22, 2002

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New Dawn of NPDES Permitting

2010

EPA now recognizes that where... discharges have the reasonable potential to cause or contribute to water quality standards excursions, permits for MS4s and/or small construction stormwater discharges should contain numeric effluent limitations where feasible to do so.

Source: U.S. Environmental Protection Agency Memorandum, Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs", November 12, 2010

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Receiving Water Limitations

Overriding Permit Provisions

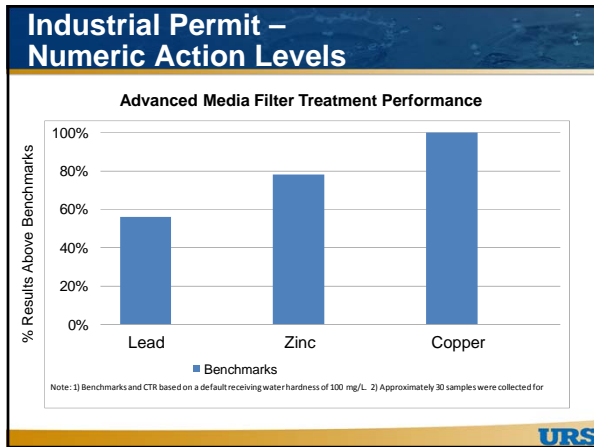
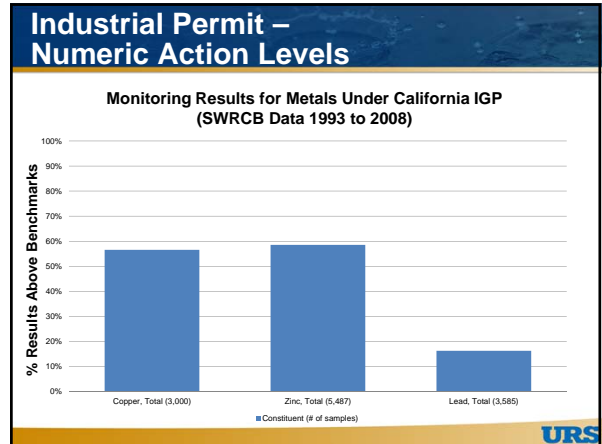
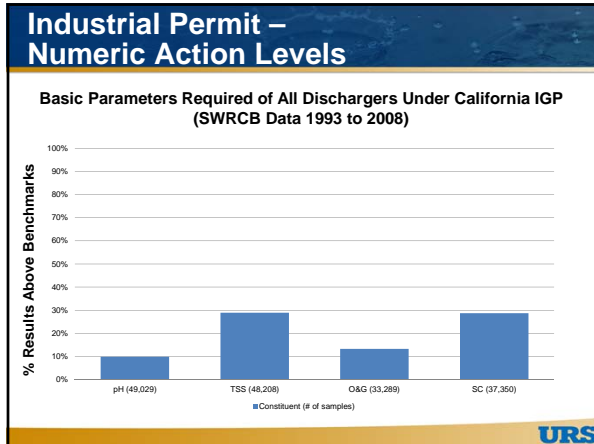
- ◆ Do not contain pollutants that cause or contribute to an exceedance of any applicable WQS
- ◆ Do not adversely affect human health or the environment
- ◆ Do not contain pollutants in quantities that threaten to cause pollution or a public nuisance
- ◆ Comply with approved TMDLs

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Industrial Permit – Numeric Action Levels

Parameter	Units	Annual NAL (instantaneous in parentheses)	Drinking Water Standard (Public Health Goal [PHG] in parentheses)
pH	pH units	NA (<6.0, >9.0)	6.5-8.5
TSS	mg/L	100 (400)	--
OSG	mg/L	15 (25)	--
Zinc, Total (H)	mg/L	0.25	5
Copper, Total (H)	mg/L	0.0332	1.3 (0.3)
Cyanide, Total	mg/L	0.022	0.15 (0.15)
Lead, Total (H)	mg/L	0.252	0.015 (0.0002)
COD	mg/L	120	--
Aluminum, Total	mg/L	0.75	1 (0.6)
Iron, Total	mg/L	1.0	0.3
Nitrate + Nitrite N	mg/L as N	0.68	10 (10)
Total Phosphorus	mg/L as P	2.0	--
Ammonia (as N)	mg/L	2.14	--
Magnesium, total	mg/L	0.064	--
Arsenic, Total	mg/L	0.15	0.010 (0.00004)
Cadmium, Total (H)	mg/L	0.0053	0.005 (0.00004)
Nickel, Total (H)	mg/L	1.02	0.1 (0.012)
Mercury, Total (H)	mg/L	0.0014	0.002 (0.0012)
Selenium, Total	mg/L	0.005	0.05 (0.03)
Silver, Total (H)	mg/L	0.0183	0.1 (secondary)
BOD	mg/L	30	--

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- ### Industrial Stormwater Permit
- Recommended changes
- Flow-weighted averaging for calculating compliance with annual average
 - Reduced monitoring frequency for non-Level 1 and 2 drainage areas
 - Reduced analysis of pollutants below NAL
 - Focus on drainage areas exceeding NALs
 - Alternative monitoring strategy consistent with SD RWQCB framework

- ### Industrial Stormwater Permit
- Recommended changes
- Change effective date to July 2015
 - LRP should include "any other person who performs similar policy- or decision-making functions for the corporation"
 - TMDLs - definition of new discharger should not include
 - Renewing dischargers
 - Existing facilities that were previously exempt (NEC facilities)
 - New owners of existing facilities



Municipal Stormwater Permit – Watershed Management Area Analysis

- ◆ Optional in WQIPs
- ◆ Develop Watershed-Specific Requirements for Structural BMP Implementation
- ◆ Linked With Alternative Compliance
 - Stream or riparian rehab
 - Retrofit infrastructure to incorporate retention or treatment
 - Regional BMPs
 - Groundwater recharge
 - Water supply augmentation
 - Land purchase to preserve floodplains

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Municipal Stormwater Permit - Change in PDP Areas

- ◆ Residential >10-units → 10,000sf
- ◆ Commercial >1 acre → 10,000sf
- ◆ Industrial >1 acre → 10,000sf
- ◆ Driveways → 5,000sf

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Municipal Stormwater Permit – New Retention Standard for PDPs

- ◆ Retain 85th Percentile Storm Event (~0.65")
 - Retain by: Intercept, Store, Infiltrate, Evaporate
 - Or: Biofiltrate: Treat 1.5X or Hold 0.75X Volume
 - Or: Treat and Use Alternative Compliance



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Municipal Stormwater Permit – Prohibition of Non-Stormwater Discharges

- ◆ Non-storm water discharges into MS4s are to be effectively prohibited, through the implementation of Provision E.2, unless such discharges are authorized by a separate NPDES permit.
- ◆ Dewatering Permits
 - uncontaminated pumped ground water
 - discharges from foundation drains
 - water from crawl space pumps
 - water from footing drains
- ◆ Hydrostatic Test Water Permit
 - water line flushing
 - water line breaks

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Municipal Stormwater Permit – Prohibition of Non-Stormwater Discharges

- ◆ Illicit Discharges to MS4 if not controlled by ordinance, etc.
 - AC condensate
 - Individual residential vehicle washing
 - Dechlorinated swimming pool discharges
- ◆ Illicit Discharges to MS4 if significant source of pollutants to receiving waters
 - Building fire suppression system maintenance discharges
 - Non-emergency fire fighting discharges
 - Emergency fire fighting discharges if BMPs not developed and encouraged to be used

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Municipal Stormwater Permit – Prohibition of Non-Stormwater Discharges

- ◆ Illicit Discharges to MS4 if significant source of pollutants to receiving waters
 - Diverted stream flows
 - Rising groundwater
 - Uncontaminated groundwater infiltration to MS4
 - Springs
 - Flows from riparian habitat and wetlands
 - Discharges from potable water sources
 - Discharges from foundation drains
 - Discharges from footing drains

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Municipal Stormwater Permit – Prohibition of Non-Stormwater Discharges

◆ Illicit Discharges to MS4

- Street wash water
- Landscape irrigation
- Irrigation water
- Lawn watering



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Increase Permit Fees

- ◆ 27.5% Increase in storm water fees
- ◆ No increase of service provided by SWRCB/RWQCB
- ◆ SWRCB has positive balance for last 9 FYs
- ◆ Increase was rushed with emergency regulations...little acknowledgment to comments

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Q&A

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