

Regulatory Refresher

The Municipal Regional Permit


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Commercial/Industrial Stormwater Inspector Training
Workshop
April 17, 2014



Regulatory Refresher

- Stormwater Regulations 101
- Municipal Regional Permit Requirements
 - C.4 Industrial/Commercial Site Controls
 - C.12 PCBs Controls
 - C.13 Copper Controls
- State Industrial Activities General Permit
- SMCWPPP Resources



Stormwater Regulations 101



The Clean Water Act

- Requires a Permit to discharge into Waters of the State from Point Sources
 - Wastewater Treatment Plants
 - Industrial Facilities
- NPDES (National Pollutant Discharge Elimination System) Permits

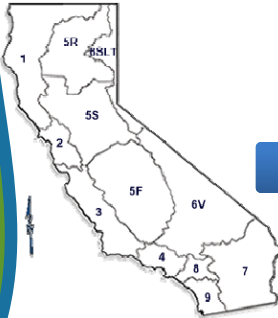


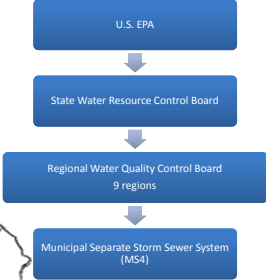

1986 Amendments: Stormwater Nonpoint Source


- Requires **permits to discharge stormwater** from:
 - Municipal Separate Storm Drains (MS4)
 - Industrial Facilities
 - Construction Sites
- NPDES **Municipal Stormwater** Permits
- Larger municipalities' permits called Phase 1 and smaller ones Phase 2

Municipal NPDES Permitting Authority









Stormwater Permits

- Individual NPDES Stormwater Permits – issued by Regional Board
 - Municipal Regional Permit (MRP)
- Statewide NPDES General Stormwater Permits – issued by State Board
 - Industrial General Permit (IGP)
 - Construction General Permit (CGP)
 - Phase II MS4 General Permit

What is the Municipal Regional Permit (MRP)?

- Regional permit regulating municipal stormwater systems
 - Adopted by Regional Water Board
 - Effective date: December 1, 2009
 - Permit renewed every 5 years
- Applies to cities, counties, and districts in:
 - San Mateo, Alameda, Contra Costa, and Santa Clara Counties
 - Fairfield and Suisun City (Solano County)
 - Vallejo (Solano County)



Permit Provisions

- C1 – Compliance with Discharge Prohibitions
- C2 – Municipal Maintenance
- C3 – New Development and Redevelopment
- C4 – Industrial and Commercial Discharge
- C5 – Illicit Discharge Detection and Elimination
- C6 – Construction Inspection
- C7 – Public Information and Outreach
- C8 – Water Quality Monitoring
- C9 – Pesticide Toxicity Control
- C10 – Trash Reduction
- C11 – Mercury Load Reduction
- C12 – PCBs
- C13 – Copper
- C14 – PBDE and Legacy Pesticides
- C15 – Exempted & Conditionally Exempted Discharges
- C16 – Reporting



Commercial/Industrial Inspection Requirements in the MRP

- Provision C.4
- Implement commercial & industrial site inspection & control program
 - at all sites that could cause or contribute to pollution of SW runoff
- Implement with inspections, effective follow-up and enforcement
- Prevent discharges of pollutants and impacts on receiving waters



Commercial/Industrial Inspection Requirements in the MRP

- Legal Authority
 - to inspect sites;
 - require compliance; and
 - require sites have appropriate and effective BMPs
- Staff Training
 - Focused training annually



Commercial/Industrial Inspection Requirements in the MRP

- Business Inspection Plan
 - Identify facilities for inspection;
 - Prioritize inspections;
 - Inspection frequency;
 - Recordkeeping & Annual Reports – Facility Lists;



Business Inspection Plan (BIP)

- Identify facilities by 8 activity areas
 - Outdoor process and manufacturing
 - Outdoor material storage
 - Outdoor waste storage and disposal
 - Outdoor vehicle & equipment storage & maintenance
 - Outdoor wash areas
 - Outdoor drainage from indoor areas
 - Rooftop equipment
 - Other sources determined to have potential to contribute to pollution of SW runoff



Business Inspection Plan (BIP)

- Identify by types of facilities:
 - NOI
 - Vehicle salvage yards
 - Metal and other recycled materials collection facilities, waste transfer facilities
 - Vehicle mechanical repair, maintenance, fueling or cleaning
 - Building trades central facilities or yards, corporation yards
 - Nurseries or greenhouses
 - Building material retailers & storage
 - Plastic manufacturers
 - Other facilities determined to have potential to contribute to pollution of SW runoff



Business Inspection Plan (BIP)

- What if County Environmental Health (CEH) Conducts Stormwater Inspections for your City?
 - City responsible for maintaining Facility List
 - City responsible for inspecting facilities not inspected by CEH



Industrial/Commercial Inspection Requirements in the MRP

- Enforcement Response Plan
 - Implemented by April 1, 2010
 - Enforcement Actions
 - Timely correction of violations
 - Before next rain event
 - ≤ 10 business days
 - Provide rationale if > 10 business days needed
 - Referral & coordination with Water Board



Industrial/Commercial Inspection Requirements in the MRP

- Recordkeeping
 - Electronic database or table*
 - Facility
 - Inspection date
 - Industrial General Permit coverage required
 - Compliance status
 - Type of enforcement
 - Type of activity or pollutant source
 - Specific problems
 - Problem resolution
 - Comments
 - Annual Report – summary numbers should match tabular data
- * RB has required permittees submit tracking tables



PCBs Controls

- Provision C.12.a
- Polychlorinated Biphenyls (PCBs)
- Incorporate PCBs & PCB-containing equipment identification in existing industrial inspections
 - Document incidents
 - Refer to appropriate agency
 - Training*

*BASMMAA Pollutant of Concern (POC) training materials



Identification of PCB-Containing Equipment

- Equipment will be marked
- Older equipment (manufacturing of PCBs stopped in 1977)

Large PCB Mark (M)

CAUTION
PCBs

A toxic environmental contaminant requiring special handling and disposal as regulated by the U.S. Environmental Protection Agency. Regulations are found in 40 CFR Part 761. For more information, contact the U.S. EPA Office of Environmental Response, 401 M Street, Washington, DC 20460. For more information, contact the U.S. EPA Office of Environmental Response, 401 M Street, Washington, DC 20460.

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Sources of PCBs

From BASMAA Inspector's Guidance Manual

Use	Comments
Transformers	Authorized use at any concentration though restrictions and regulatory requirements increase with higher PCB concentration thresholds.
Railroad transformers	Transformers used in locomotives and self-propelled railcars. Authorized use at < 1,000 ppm; < 50 ppm if transformer coil is removed at any time.
Heat transfer systems, hydraulic systems, mining equipment	Authorized use at < 50 ppm
Natural gas pipelines	Authorized at < 50 ppm, or at < 10 ppm with additional requirements. PCBs may be present in natural gas compressors, scrubbers, filters, and in condensate.
Research & Development	Authorized primarily for purposes relating to environmental analysis, management, and disposal of PCBs. R&D for PCB products is prohibited.
Scientific Instruments	Examples include oscillatory flow birefringence & viscoelasticity instruments for the study of the physical properties of polymers; microscopy mounting fluids; microscopy immersion oil; and optical liquids.
Carbonless copy paper	User of existing carbonless copy paper is permitted; manufacturing of new carbonless copy paper is not authorized.
Electromagnets, switches, voltage regulators, circuit breakers, reclosers, cables	No restrictions on existing use; restrictions on PCB concentrations if serviced and oil is removed or replaced.
Porous surfaces	EPA considers building materials, such as concrete, porous with respect to PCB leaks and spills. Porous building materials may be left in place following spills provided various conditions are met. Older industrial machinery often was designed to slowly leak (PCB-containing) hydraulic oil as a lubricant.

Source: EPA (2002)

Copper Controls

- Provision C.13.d
- Industrial Sources
 - Identify & include in inspection program facilities likely to use copper or have sources of copper
 - Consider roof runoff that might accumulate copper deposits from ventilation systems on-site
 - Ensure proper BMPs
 - Inspector training*

*BASMAA Pollutant of Concern (POC) training materials

Sources of Copper

From BASMAA Inspector's Guidance Manual

SIC Code	Industrial/Commercial Facilities Description	Potential Sources
NOI Filter		
3331	Primary Smelting and Refining of Copper	Outdoor storage Outdoor processes Ventilation/Roof runoff
3341	Secondary Smelting and Refining of Non Ferrous Metals	Outdoor storage Outdoor processes Ventilation/Roof runoff
3351	Rolling, Drawing, and Extruding of Copper	Outdoor storage Outdoor processes Ventilation/Roof runoff
3471	Electroplating, Plating, Polishing, Anodizing & Coloring	Outdoor storage Outdoor processes Ventilation/Roof runoff
3674	Semiconductor manufacturing	Outdoor storage Outdoor processes Ventilation/Roof runoff
4493 & 4499	Boat Yards/Marinas with on-land maintenance yards	Outdoor storage Outdoor processes Ventilation/Roof runoff Copper based anti-fouling coatings
5015	Motor Vehicle Parts, Used	Outdoor storage
5093-4953	Scrap & Waste Materials (including e-waste recyclers)	Outdoor storage
NOI Not Required		
7542	Car Washes	Wash water
7549	Automotive Services, except Repair and Carwashes	Radiator repair Flushing operations Dipping vehicles Outdoor storage Outdoor operations

IS YOUR ROOF RUNOFF POLLUTED?

Facilities covered under the State NPDES Industrial Activities Storm Water General Permit should include roof runoff in their assessment of potential pollutant sources.

Roof runoff in industrial areas can be a significant source of pollutants to stormwater. Early studies of roof runoff have shown that galvanized metal roofs are sources of zinc at concentrations two to twenty times greater than other urban source areas, and other products that exceed acute toxicity for aquatic life. Materials, paints, and coatings associated with roofing are also suspected of being significant sources of copper and lead.

Local Studies Findings

Studies conducted by the City of San Jose and Sunnyvale show that metal flashing and electrifying processes contributed

BMPs TO CONSIDER

- Installation of vent covers and drip pans where there are roofs.
- Provide leads to pipeworks and condensate vessels with routine inspections.
- Dispose of condensate from ventilation properly, or treat it.
- Provide condensation within piping containers, such as using chiller coils.
- Check that your scrubber solution is appropriate for the chemistry of the fumes.
- Look for chemical deposition around vents, pipes and other surfaces.

Statewide General Permits

- NPDES authority issues one permit
- Used to cover same or similar operations
- Facilities/municipality applies for coverage
- Facilities/municipality submits Intent (NOI)

Statewide Industrial Activities General Permit

- Permit reissued by State Board April 1, 2014
- Implementation date: July 1, 2015
- Previous version of Permit in effect since 1997
- Applies to specific types of facilities:
 - 40 CFR Subchapter N
 - Manufacturing facilities
 - Oil & Gas/Mining facilities
 - Hazardous waste treatment, storage or disposal facilities
 - Landfills, Land Application Sites and Open Dumps
 - Recycling facilities
 - Steam Electric Power Generating Facilities
 - Transportation facilities
 - Sewage or Wastewater Treatment works



Statewide Industrial Activities General Permit

- Contains requirements for
 - Minimum BMPs
 - inspections
 - sampling
 - Stormwater Pollution Prevention Plan (SWPPP)
 - reporting
- Compliance inspections & enforcement by Regional Water Board staff



IGP Highlights

- Same industrial categories / activities
- Change to No Exposure Option
- No Group Monitoring – now Compliance Groups
- More Prescriptive BMPs
- Monitoring Requirements
- Numeric Action Levels (NALs)
- Qualified Industrial Stormwater Practitioner (QISP)
- Reporting in SMARTS



Monitoring Requirements

- Monthly Visual Observations
- Sample Two Storm Events / half year (four events per year)
- Compliance Group Participants – one event/half year



Exceedance Response Actions (ERAs)

- Numeric Actions Levels (NALs)
 - Annual Average NALs
 - TSS, O&G, site specific parameters
 - Instantaneous Maximum NALs
 - TSS, O&G, pH
- Discharger Status Levels
 - Baseline Status
 - Level 1 Status
 - Level 2 Status
- ERA evaluation & action plans by QISP



QISP

- Qualified Industrial Stormwater Practitioner
 - Complete State Board approved Training
 - Register on SMARTS
 - Required for Level 1 and 2 status work
 - Required for Compliance Group Leader



SMARTS

Stormwater **M**ultiple **A**pplication **R**eporting and **T**racking **S**ystem

- Permit Registration Documents
- Annual Reports
- Level 1 and 2 ERA Reports



What do you need to know about the Industrial General Permit?

- Include facilities in your Business Inspection Plan for inspection
 - Find list on State Board webpage



What do you need to know about the Industrial General Permit?

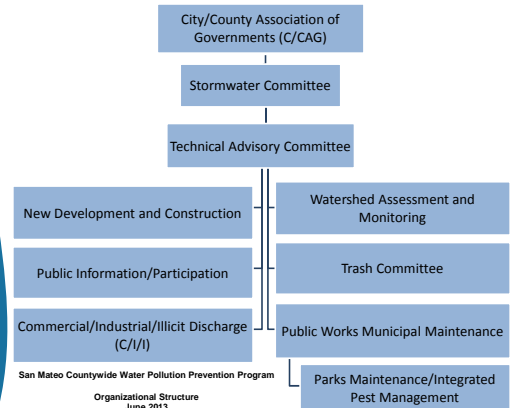
- Facilities required to have coverage but have not filed a NOI are reported in your Annual Report
- MRP Inspections: looking at SWPPP, inspection records, sampling results, etc. may help inform your inspection

What do you need to know about the Industrial General Permit?

- Overall site compliance reflects on your inspection program
 - You inspect for compliance with local SW ordinance
 - Regional Board staff inspects for compliance with IGP

SMCWPPP Assistance

- CII Subcommittee Meetings
- CII Training Workgroup Meetings
- SMCWPPP Orientation Training materials
- BASMAA Pollutants of Concern (POC) training materials for PCBs and Copper
- Website: www.flowstobay.org



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