


Industrial General Permit

October 17, 2012 Hearing

State Water Resources Control Board
Division of Water Quality
Industrial/Construction Storm Water
Unit



Presentation Outline

- Summary of Changes
- History of Permit Reissuance
- Technical highlight on regulatory standards and the overall approach for this and future permit reissuances

Goals

- Performance Based Model
- Improved Data Quality
- Incentives and Flexibility

Proposed Changes to the 2011 Draft (2012 Draft)

2011 Draft (previous draft)	2012 Draft (current draft)
Electronic Filing Requirements	No Change
Numeric Action Levels (NALs) & Numeric Effluent Limitations (NELs)	Revised NALs and Removed NELs
Corrective Actions	Exceedance Response Actions
Certification and Training Requirements (QSD/QSP)	QISP I, II, III & Licensees Exempt
Qualified Storm Event	Modified

Proposed Changes to the 2011 Draft (2012 Draft) - Continued

2011 Draft (previous draft)	2012 Draft (current draft)
Sampling Frequency Requirements	Modified
Daily Average/ Exceedances	Modified
Qualified Combined Samples	Modified
Compliance Storm Event	Modified
Inspection/VO Frequency	Reduced Significantly
Requirements for Facilities with Significant Land Disturbances	Removed

Proposed Changes to the 2011 Draft (2012 Draft) - Continued

2011 Draft (previous draft)	2012 Draft (current draft)
Conditional Exclusion – No Exposure Certification	Updated
Conditional Exclusion – No Discharge Certification	Removed
Conditional Exclusion – Green Storm Water Impact Reduction Technology (G-SIRT)	Removed
TMDL Requirements	Revised

New Additions to the 2012 Draft

New Requirement	Status
ASBS Requirements	New Addition
Compliance Groups	Absent in the 2011 draft, a revised approach has been added

Industrial General Permit (IGP)

Timeline

- 1991 - (modified in 1992) first IGP Order
- April 1997 - Order 97-03-DWQ (Previous permit) Adopted
- 2003-2005 - Prior Draft IGPs
- Winter 2011 - 2011 Draft IGP
- Summer 2012 -2012 Draft IGP, revising the 2011 Draft based on comments
- Early 2013 Adoption (depends on future hearings schedule)



Recent Permit Reissuance History

January 2011 - 2011 Draft Permit released containing NALs and NELs

October 2011 - Senate Select Committee on California Job Creation and Retention Hearing on Storm Water Permits focused on Economic Considerations

Recent Permit Reissuance History

Cost Analysis

IGP Cost Analysis led by WB staff and reviewed by WB economist

Estimates Discharger's cost to comply with the permit

Full report, spreadsheet, and executive summary released with 2012 Draft

Recent Permit Reissuance History

Response to Comments

Response to comments on the 2011 Draft IGP were posted in August 2012

Not required, but produced to help facilitate commenters with navigating the changes between the 2011 Draft IGP and current, 2012 Draft IGP

Recent Permit Reissuance History

Public Outreach

Four, Informal Staff Workshops August -
September 2012

Three were overview of the 2012 Draft IGP
(two traditional workshops and one web-based)

Additional Informal Staff Workshop in
September 2012 on proposed training program
to implement proposed requirements

Recent Permit Reissuance History

Stakeholder Interaction

Met with IGP stakeholders aimed at improving mutual understanding and interests prior to July 2012 (release of 2012 Draft IGP)

Met August - September 2012 to better focus comments on 2012 Draft IGP

Including: WATER Coalition, CASQA, DoD, CA Coastkeeper Alliance, SCADA, and CA State Parks, Rural Counties, etc.

Technical Highlight of Regulatory Standards in IGP

- The 2012 Draft IGP fundamentally requires identical performance / compliance standards as previous IGP(s)
- Some challenges remain before NELs in general storm water permits of this type
- Uses NALs to attempt to bridge over to next generation of permit(s)

WQS, BMPs and NELs

- **Strict compliance with Water Quality Standards (WQS) is achieved through Best Management Practices (BMPs) or Numeric Effluent Limitations (NELs) (CWA 301(b), 402; 40 C.F.R. 122.26, 122.28, 125.3.)**
- **BMPs are required to control or abate the discharge of pollutants when NELs are infeasible (40 C.F.R. section 122.44(k)(4))**
- **It is infeasible to require compliance with NELs at this time.**

Infeasible to Require Compliance with NELs

- Significant Gaps in Following:
 - Regulatory Context for Numerics
 - Daily average vs. instantaneous, etc.
 - Wet weather vs. dry weather
 - Variability and dilution / mixing zone
 - Derivation of Numeric(s)
 - Must match the context, cost info, etc.
- Characterization of Effluent and/or Receiving Water
 - Guidance on how to evaluate compliance





Hypothetical Example

Storm Water (SW) Discharges from an industrial facility to Humboldt Bay

Humboldt Bay

BU:

- REC1
- REC2
- NAV
- WILD
- EST
- MAR
- MIGR
- SPWM
- SHELL

(1) Enforce ELs

SW Effluent Limitations

Technology-based BMPs:

- Covering waste piles
- Sweeping/cleaning of open areas
- Treatment (basins) of solids
- Etc.

(2) Enforce RWLs

Receiving Water Limitations

Numbers – TSS < 100 mg/L
Narrative – “no toxics in toxic amounts”

BAT/BCT Authority

- Industrial Storm Water Dischargers must meet the technology-based standards of:
 - Best Available Technology Economically Achievable (BAT) for toxic and nonconventional pollutants; and
 - Best Conventional Pollutant Control Technology (BCT) for conventional pollutants
- Can be met through technology-based effluent limits (TBELs) or implementation of BMPs (Narrative).

BAT/BCT Effluent Limitations

- When developing TBELS, the permit writer must apply criteria outlined in 40 CFR 125.3(d)
- BAT/BCT Technical Criteria
 - Age of equipment and facilities involved
 - Process(es) employed
 - Engineering aspects of the application of various types of control techniques
 - Process changes
 - Non-water quality environmental impact including energy requirements

NALs & BAT/BCT

- NALs in Permit are not linked to BAT/BCT
- Most of the NALs are used as guides to determine BMP effectiveness and aim towards BAT/BCT
- Given NALs are not NELs, permit needs to allow Dischargers options to chasing NALs (otherwise, defacto NELs)
- Level 2 Demonstration Technical Reports provide off-ramps to "chasing NALs" route:
 - BAT/BCT
 - Natural Background; and
 - Non-Industrial Source

Numeric Action Levels (NALs)

- **Annual NAL exceedance**
The average of all the analytical results for a parameter from samples taken within a reporting year exceeds an annual NAL value for that parameter
- **Instantaneous maximum NAL exceedance**
Two or more analytical results for TSS, O&G, or pH from samples taken within a reporting year exceed the instantaneous maximum NAL value (or is outside the NAL pH range).

NALs, cont.

- NALs exceedances do not apply first year (until July 1, 2014, as drafted currently)
- Annual NAL exceedance values are based 100% on US EPA benchmarks
- Instantaneous maximum NAL exceedance values only for pH, TSS or O&G are based on a percentile approach

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Exceedance Response Actions (ERA) Process

Baseline Status

- Narrative Effluent Standards
- Numeric Action Levels
- Minimum BMPs
- Inspection, Maintenance & Repair
- Visual Monitoring
- Sample 1 qualified storm event per quarter



NAL Exceedances



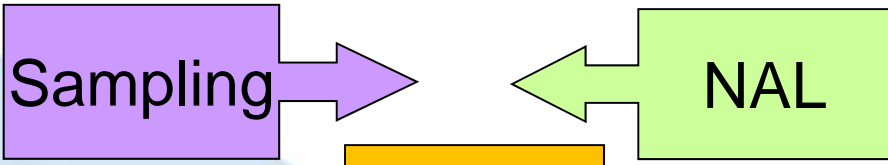
Trigger

1. Annual Average exceeds the annual NAL values (within a reporting year)
2. Any two or more samples for a single parameter exceed the NAL values in a reporting year (TSS, O&G, or pH)

Exceedance Response Actions

QSE
1 QSE per quarter

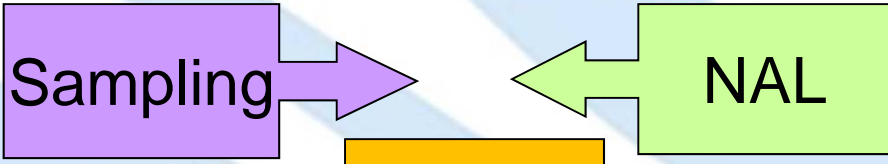
Baseline Status



All Dischargers with NOI Coverage begin here

QSE
1 QSE per quarter

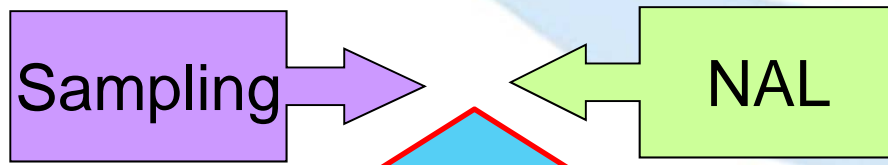
Level 1 Status



Review SWPPP & implement operational BMPs (Level 1 Report)

QSE
1 QSE per quarter

Level 2 Status



Structural source control and/or treatment BMPs (Level 2 Technical Report or Demonstration)



ERA Reporting

- Level 1 ERA Report (QISP I or II prepared)
- Level 2 ERA Technical Report (QISP III prepared)
- ERA Level 2 Demonstrations

ERA Level 2 Demonstrations

At any time in Level 2 status the Discharger's QISP III may evaluate pollutant sources and submit one of the following:

- **BAT/BCT Compliance Demonstration Technical Report** (Receiving Water Limitations still apply)
- **Non-Industrial Source Pollutant Demonstration Technical Report** (BAT/BCT and Receiving Water Limitations still apply)
- **Natural Background Demonstration Technical Report**

BAT/BCT Demonstration

- Discharger believes they are already meeting BAT/BCT at their site.
- Only relieves Discharger from meeting Permit NAL and lets Discharger establish an NAL based on technology present at the site.
- Does not definitively define BAT/BCT for the site, still responsible for the narrative standard of BAT/BCT and Receiving Water Limitations.
- Demonstration can be rejected at anytime by State or Regional Water Board

Natural Background Demonstration

- Discharger believes pollutant occurs naturally and is not part of the industrial operations
- Only relieves Discharger from meeting Permit NAL for that pollutant
- Still responsible for the narrative standard of BAT/BCT and Receiving Water Limitations for all other pollutants
- Demonstration can be rejected at anytime by State or Regional Water Board

Non-Industrial Source Demonstration

- Discharger believes pollutant is from another source besides their industrial operations.
- Only relieves Discharger from meeting Permit NAL for that pollutant.
- Still responsible for the narrative standard of BAT/BCT and Receiving Water Limitations for all other pollutants.
- Demonstration can be rejected at anytime by State or Regional Water Board

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