

Revised Washington Industrial Stormwater General Permit: Implications and Solutions



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Introduction

- What am I going to talk about?
- Why should you care?



Who is Covered by This Permit?

- Standard Industrial Classification (SIC)
- Some important examples considering this conference (all covered by General permit):
 - **Hazardous waste treatment, storage, or disposal facilities**
 - **Landfills, land application sites, and open dumps** that receive or have received any industrial wastes
 - **Recycling facilities** classified as SIC 5015 and 5093



Industrial Permit Summary

- SWPPPs and BMPs
- Inspections and monitoring
- Corrective actions (Level 1, 2, and 3)
- Reporting/recordkeeping
- Permit due for revision
May 2008



Quick Summary of Existing Permit

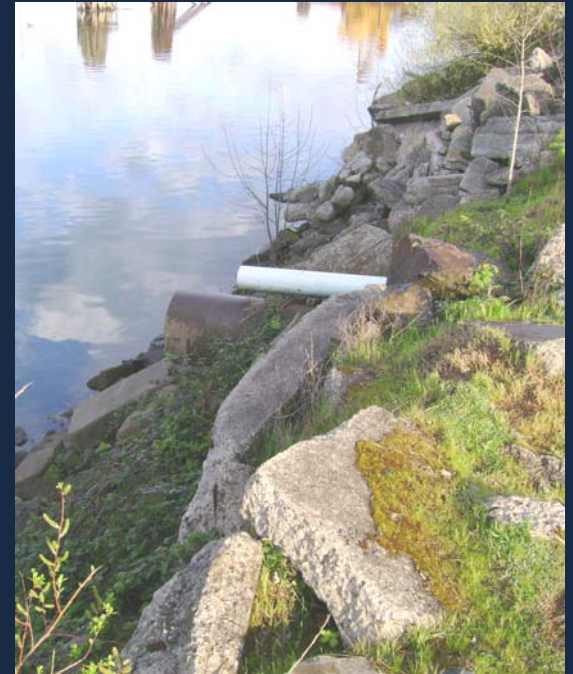
- Quarterly sampling is required for Level 1, 2, and 3 Responses for exceedances of action levels.
- Examples of some action levels:

Parameter	Action Level
Total lead	159 µg/L
Total copper	149 µg/L
Total zinc	372 µg/L
pH	Outside 5-10
Turbidity	50 NTU
Petroleum oil and grease	30 µg/L
303(d) listed waterbody parameters	Twice the benchmark

- SWPPP is required to be updated on a regular basis

Industrial Permit Schedule

- Current permit was scheduled to expire September 2007.
- First draft issued in February 2007—lots of comments! (Check out the website.)
- Second draft issues in November 2007 – even more comments!
- Existing permit expires May 31, 2008.
- New permit should have been released already. Ecology website says there is a delay: “Ecology expects to issue the final general permit in late spring of 2008 after considering all public comments and undergoing deliberations.”



Important Changes in New Permit (at least the draft)

- Hazardous waste treatment, storage, disposal, and hazardous waste recycling facilities must apply for coverage under the new permit (this is an expected new federal requirement that has not yet been finalized)
- Coverage for closed, stabilized landfills is removed
- New, more stringent benchmarks
- New tiered responses to exceedances
- Sampling during wet season only



New Benchmarks

- New, more stringent benchmarks will affect facilities, which were in compliance with the last permit:

Parameter	Benchmark
Total copper	20 µg/L
Total Lead	10.9 µg/L
Total zinc	115 µg/L
pH	Outside 6-9
Turbidity	25 NTU
Petroleum oil and grease	15 µg/L

- Any discharge 10 times the threshold triggers immediate response to Ecology

- **Responses are Modified**

- Level 1 will not be in a Step
- Level 2 is converted to Step A
 - Permittees are required to investigate source control and treatment BMPs in Step A
- Level 3 is converted to Step B
 - Permittees are required to prepare an engineering report to verify compliance with the limits and the adaptive management strategy (\$\$)

What is the Deal with Zinc?

- *A Survey of Zinc Concentrations in Industrial Stormwater Runoff – Ecology Study*
- Every quarter approximately 50 percent of reporting facilities have shown concentrations exceeding the current 117 $\mu\text{g}/\text{L}$ benchmark
- Every quarter about 20 percent of reporting facilities statewide have shown concentrations exceeding the 372 $\mu\text{g}/\text{L}$ action level



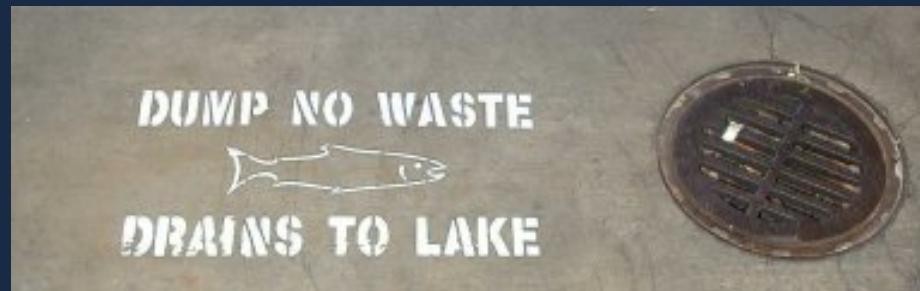
What is the BIG Deal with Copper?

- Research has shown that copper levels as low as 2 $\mu\text{g}/\text{L}$ (2 parts per billion) can be harmful to salmon—this is driving permits
- New copper benchmark in draft permit—proposed to be lowered from 149 $\mu\text{g}/\text{L}$ action level to 20 $\mu\text{g}/\text{L}$



Contaminant Sources

- **Zinc** - tires, galvanized metals (roofs or buildings), and air deposition
- **Copper** – oils, paints, brakes, soil, and air deposition
- **Turbidity/TSS** – wind blown, tracked in dirt, adjacent unpaved areas, broken pavement, and operations



How to Reduce Concentrations

- Sampling activities
- Source control and “living” SWPPP
- Treatment



Operational BMPs

- Sweeping/vacuuming
- Maintenance activities
- Covering pollution sources
- Employee training (very important to document)



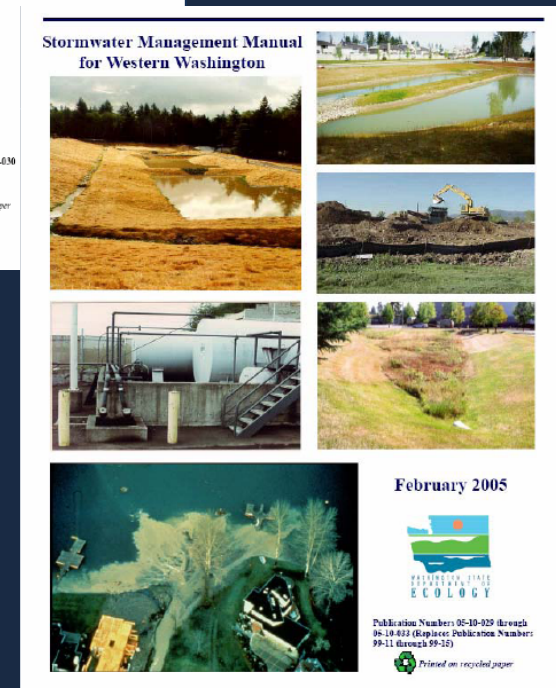
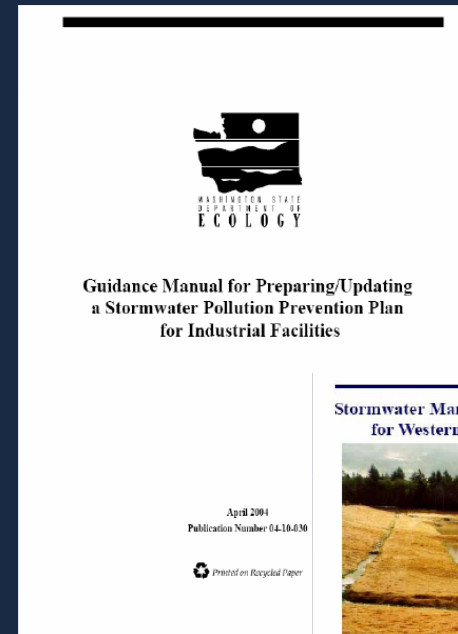
Traditional BMPs

- Catch basin filters
- Oil absorbent socks



SWPPP

- Most important thing to remember: keep it updated (Sampling and Inspection Reports)
- Identify sources of pollution
- Authorized signatory
- BMP reference
- New BMPs?



Treatment

- Oil/Water Separators
- Ponds/bioswales
- Infiltration
- Hydrodynamic separators
- Filters
- Chemical treatment
 - Boatyard pilot study



Take Home Message

- The cost of compliance is cheaper than the cost of citizen lawsuits
- Stay apprised of the requirements, especially when the new permit comes out
- Think ahead on how to effectively manage impacts to operations
- Stay on top of the easy things – BMP's are cheaper than large scale capital improvements

Web Resources

- www.ecy.wa.gov/program/wq/stormwater/index.html
 - TAPE (test protocol) database
 - SWPPP template
 - Monitoring guidance
 - Inspection checklist
 - Training video

Questions/Comments?

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