

Washington's Urban Waters Cleanup and Protection

The Urban Waters Initiative: Lower Duwamish Waterway

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Duwamish River



Current Water Quality Permits in the Lower Duwamish

- **Approximately 92 NPDES Industrial Stormwater General permitted facilities in Lower Duwamish Waterway**
- **2 NPDES Boatyard permits**
- **6 NPDES Sand & Gravel permits**
- **2 Individual NPDES Stormwater permits**



Inspections

October 2010 through July, 2012 - Ecology Water Quality Program conducted approximately 144 Compliance Inspections and/or Site Visits.

- **Compliance, Technical Assistance, Follow-up, Joint Inspections w/ other programs and agencies.**
- **Ecology W.Q. has recently added 1 FTE for inspections; 1/2 NPDES ISGP and 1/2 local source control inspections in the combined sewer areas of LDW**

Current Water Quality Permits in the Lower Duwamish

- **Approximately 16 new permittees since March 2010**
- **Numbers fluctuate; closed down, moved or coverage terminated.**



NPDES Industrial Stormwater General Permit (ISGP)

- **3 Triggers for NPDES ISGP coverage**
- **Covered Industrial Category (SIC/NAICS)**
- **Industrial Activity Exposed to Stormwater**
- **Discharge to Surface Waters**
- **(must have all three)**

NPDES Industrial Stormwater General Permit (ISGP)

- Exemptions:
- No Exposure
- Discharges to Combined Sewer only

Certificate of No-Exposure

- **CNE Minimum Conditions**
- Protection from weather for all areas where industrial materials and activities occur

No exposure applies to entire facility

Discharge has no reasonable potential to cause or contribute to a violation of water quality standards



Current Water Quality Permits in the Lower Duwamish

- **Approximately 55 facilities with a Certificate of No-Exposure permit exemption.**



Significant Contributor

Regulations allow Ecology to Require ISGP coverage as a Significant Contributor of Pollutants to Waters of the State.



Significant Contributors of Pollutants

- Potential of discharge to cause a violation of surface or ground water quality or sediment management standards
- Sensitivity of the receiving water body
- Applicability of industrial stormwater general permit to reduce potential to pollute



Compliance & Enforcement

- **Permit Issuance**
- **Compliance Inspections**
- **Technical Assistance**
- **Notices of Correction**
- **Penalties**
- **Monitoring**
- **Administrative Orders**

Monitoring

- Monthly Inspections
- Quarterly Sampling
- Drives decision making for stormwater management at facility

Inspections

- Monthly
- By qualified personnel
- All areas where stormwater mixes with industrial activity
- Visually inspect discharge points
- Effectiveness of BMPs
- Summarized in reports with certification

Sampling

- Once per Quarter.

Sample of the discharge shall accurately characterize industrial stormwater runoff.

Stormwater discharge from the first fall storm event, after October 1st.

Sampling

- Each distinct point of discharge off-site; except “substantially identical outfalls”.

Within the first 12 hours of stormwater discharge or as soon as practicable after the first 12 hours.

DMRs must be submitted quarterly, even if there was “no-discharge”.



Sampling Challenges

- Representative Location
- Not Sampling Every Quarter
- Sample Collection Techniques

Sampling

Consistent Attainment:

- Requires **eight** consecutive quarterly samples be equal to or less than the benchmark value; or for pH, within the range of 5.0 – 9.0.
- Outfall Specific

Benchmarks – All Facilities

Parameter	Benchmark
Turbidity (NTU)	25
pH (SU)	5.0 – 9.0
Oil & Grease	No Visible Sheen
Zinc ($\mu\text{g/L}$)	117
Copper ($\mu\text{g/L}$)	<u>West WA: 14</u> East WA: 32

Benchmarks – Primary Metals

Parameter	Benchmark
Lead($\mu\text{g/L}$)	81.6
TPH (mg/L)	10



Effluent Limits

- Mandated by Legislature
- Numeric effluent limits apply to facilities with discharges to 303(d)-listed impaired waterbodies
- Compliance schedules (established by Ecology)
- Mostly Total Suspended Solids (TSS) and pH
- About 15 in LDW with Effluent Limits

Effluent Limitations

Some Facilities

Parameter	New Benchmark
Total Suspended Solids (TSS)	30 mg/L
pH (SU)	5.0 – 9.0
Turbidity (NTU)	25
Fecal Coliform	Narrative
Mercury ($\mu\text{g/L}$)	2.1

Visible Sheen





Corrective Actions

2 Benchmark Exceedences in Calendar Year of a Parameter for an Outfall Triggers Level 2 Corrective Actions (Structural Source Control BMPs).

3 or 4 Benchmark Exceedences in Calendar Year of a Parameter for an Outfall Triggers Level 3 Corrective Actions (Treatment BMPs).

Treatment

- Permit Definition:

Treatment BMPs means BMPs that are intended to remove pollutants from stormwater.

Passive Treatment

Cartridge

Insert and oil
absorbent



Passive Treatment

Cartridge



Insert and oil absorbent



Filter Media



Filter Media



Filtration

Amended Sand Filter -
Passive



Sand filter - Active



Filtration



Chemical Treatment



Electrocoagulation



Formal Enforcement Actions

6 Penalties ranging from 8,000 to 20,000 dollars

Approximately 20 Administrative Orders

QUESTIONS?





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Links

Industrial Stormwater Webpage:

- <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>

Frequently Asked Questions:

- <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/permitdocs/iswgppfaq.pdf>