



1200-Z CORRECTIVE ACTION OVERVIEW

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NEBC Managing Stormwater in Oregon



- Full-service environmental and engineering firm
- 90+ offices and 2200+ employees worldwide
 - 9 offices and 200+ staff in the PNW branch
- Principal areas of practice:
 - Contaminated site assessment and cleanup
 - Environmental planning and management
 - Building health evaluations and rehabilitation
 - Air quality management and air pollution control
 - Water and natural resources assessment, management, and restoration
 - Water and wastewater system planning, engineering, and design
 - Civil site engineering and design
 - Geotechnical and geological analysis, modeling, and engineering

1200-Z PERMIT REQUIREMENTS

- Schedule A: Effluent limitations and permit compliance
 - Narrative Technology-Based Effluent Limits (TBELs)
 - Water Quality-Based Effluent Limits (WQBELs)
 - Stormwater Pollution Control Plans (SWPCPs)
 - **Corrective Actions**
- Schedule B: Monitoring Requirements
 - **Monitoring Requirements**
 - Monthly Inspections
 - Reporting
- Schedule E: Sector-Specific Requirements
 - Sector-Specific Requirements

MONITORING REQUIREMENTS

- Sample from monitoring point as identified in SWPCP
- First 12 hours of a discharge event, during business hours
- *Minimum frequency* four times per year
 - Twice between 1 January and 30 June
 - Twice between 1 July and 31 December
 - You CAN take more than 4 samples!
- Samples must be taken at least 14 days apart
- Grab or composite samples
 - Can't switch mid-year

MONITORING REQUIREMENTS

- Representative samples
 - Choose your monitoring point wisely
 - Avoid backwater, groundwater, run-on from off other properties
 - Make sure location is obvious, easy to locate, easy to access
 - Use appropriate methods
 - Sample directly into lab bottles, or decontaminate your equipment
 - Don't disturb settled sediment
 - Don't disturb working BMPs
 - WA department of Ecology has a great guidance document
 - Make sure your samplers are trained and knowledgeable
 - Able to identify things that aren't normal
 - Able to obtain sample using appropriate methods

STATEWIDE BENCHMARKS

- Tier 1 triggered by single exceedance of:
 - Statewide benchmark
 - Sector-specific benchmark
 - Visual monitoring parameter
- Tier 2 triggered if:
 - Geomean of all qualifying samples within monitoring year exceed statewide benchmark
 - 50% or more of pH samples over 2 years are outside range

Georegion	pH	Total Copper (mg/L)	Total Lead (mg/L)	Total Zinc (mg/L)	TSS (mg/L)	BOD (mg/L)	Total Phosphorus (mg/L)	E. Coli (organism / 100 mL)
Columbia Slough	5.5 – 9.0	0.017	0.10	0.24	30	24	0.16	406
Portland Harbor	5.5 – 9.0	0.015	0.24	0.24	30			
Cascades	5.5 – 9.0	0.016	0.018	0.068	100			
Coastal	5.5 – 9.0	0.017	0.039	0.086	100			
Columbia River	6.0 – 9.0	0.023	0.21	0.35	100			
Eastern	5.5 – 9.0	0.031	0.077	0.16	100			
Willamette Valley	5.5 – 9.0	0.015	0.11	0.14	100			
Marine	5.5 – 9.0	0.025	1.10	0.46	100			

TIER 1 REQUIRED ACTIONS

- Investigate cause
 - Conduct, commence, or plan for pollutant source tracing
 - Review SWPCP
 - Evaluate existing treatment measures
 - Submit a Tier 1 report
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- Implement before next storm, if possible, but no later than 30 days after receiving results
 - *Applies to triggered outfall and all substantially similar outfalls*

Relatively simple to implement

Typically done in-house

Short-term project

Relatively inexpensive

TIER 2 REQUIRED ACTIONS

- Install appropriately sized active or passive treatment for substantially similar outfalls
 - Tier 2 report, stamped by PE
 - Specific timeline for reporting, construction completion
- After triggering Tier 2, must sample substantially similar discharge parameters that triggered Tier 2
- Alternatives to treatment: mass reduction waiver, background waiver
- Can only trigger a Tier 2 once per permit cycle for a specific pollutant and outfall
 - Can trigger for a different pollutant at the same outfall
 - Can trigger for the same pollutant at a different outfall
 - Tier 1s still apply

Can be complicated
Typically done with a consultant
Longer-term project
Relatively expensive