



DEQ Industrial Stormwater Permits

Tier II Revised Stormwater Pollution Control Plan Checklist

Instructions: Complete this form and submit with the revised SWPCP and engineered plan or waiver request. Fill in the requested information in the highlighted cells and the appropriate page number(s) indicating the location of information in the revised SWPCP.

Facility Name:

File No.:

Permit Schedule	Requirement					Page #	Comments (for official use only)
A.12.c.ii	Date Revised Plan submitted:						
A.12	Outfall	Parameter	Geometric Mean Exceedance	Units	Percent Reduction in Concentration	Percent of Design Storm Infiltrated or Injected	
A.12.c.i.1	Proposed Tier II Corrective Action Response						
		Design storm in inches					
A.12.c.i.1	Rationale for the selection of the measures						
A.12.c.ii.	Schedule for implementing these measures						
A.12.c.i.2	Stamped by PE or CEG						
Cost of installation							
Treatment system schematic and operational plan							
Operation and maintenance schedule for treatment measures and/or volume reduction measures proposed							

For DEQ or Agent use only					
A.12.c	Revised SWPCP complete and acceptable				
A.12.c.ii	Implementation of treatment measures by June 30th of 4th year of permit				
A.12.c.iii	Tier II Benchmark Exceedance Report submitted to DEQ or Agent				

Notes:



Information Required for Tier II Waiver Application

If applying for a Tier II waiver based on projected volume reduction, please provide the information below *for each drainage basin on your site*. If no infiltration is proposed for a particular drainage basin, simply fill out the first four (bolded) entries in the Tier II Waiver Basin Table. Make additional copies if your site has more than three drainage basins. In addition, fill out the Tier II Waiver Summary Table.

Tier II Waiver Basin Table

	Basin name:		Basin name:		Basin name:	
	Value	Page number	Value	Page number	Value	Page number
Area of drainage basin (ft2)						
Impervious area (ft2)						
Runoff coefficients (unitless)						
Mass (with units) of pollutant discharged based on geometric mean (no infiltration)						
Infiltration rate (gal/day)						
Pond capacity, if applicable (gal)						
Mass (with units) of pollutant discharged based on geometric mean (with assumed infiltration)						
Mass (with units) of pollutant discharged assuming concentration equal to benchmark (no infiltration)						
Approximate depth to groundwater						

Tier II Waiver Summary Table (Combine entries from all basins)

	Value	Page number
Area of site (ft2)		
Total impervious area (ft2)		
Total mass (with units) of pollutant based on geometric mean (no infiltration)		
Total mass (with units) of pollutant based on geometric mean (with assumed infiltration)		
Total mass (with units) of pollutant assuming concentration equal to benchmark (no infiltration)		



Tier II Revised Stormwater Pollution Control Plan Checklist

Instructions

Industrial Stormwater Discharge 1200-Z/COLS Permits

Tier II Parameters

Only exceedances of the geometric mean from statewide benchmarks are subject to Tier II corrective action. Please see the tables below for a list of the statewide parameters and associated benchmarks.

1200-Z Statewide Benchmarks	
<i>Parameter</i>	<i>Benchmark</i>
Total copper	0.020 mg/L
Total lead	0.040 mg/L
Total zinc	0.12 mg/L
pH	5.5 – 9.0 SU
Total Suspended Solids	100 mg/L
Total Oil and Grease	10 mg/L
E. coli*	406 counts/100 ml

*The benchmark for E. coli applies only to active landfills and sewage treatment plants.

1200-COLS Statewide Benchmarks	
<i>Parameter</i>	<i>Benchmark</i>
Total copper	0.036 mg/L
Total lead	0.060 mg/L
Total zinc	0.24 mg/L
pH	5.5 – 8.5 SU
Total Suspended Solids	50 mg/L
Total Oil and Grease	10 mg/L
E. coli	406 counts/100 ml
BOD5	33 mg/L
Total phosphorous	0.16 mg/L

Outfall, Parameter and Corresponding Geometric Mean Exceedance

- Please indicate the outfall, as identified on the Site Plan in your Stormwater Pollution Control Plan and also on your Discharge Monitoring Report.
- Please indicate the parameter, units and geometric mean associated with each outfall exceedance.
- Please note, if you are not sampling all of your stormwater outfalls and your pollution control plan has identified substantially similar effluent based on a site analysis and/or monitoring, then you must install the same treatment on those representative outfalls. The substantially similar outfalls must be a listed in your revised Plan.

Projected Reduction of Pollutant Concentration

Please provide the projected percent reduction in concentration for the proposed treatment measure associated with the corresponding geometric mean exceedance. Regardless if a facility is proposing one treatment system to address more than one geometric mean exceedance or multiple treatment measures with the goal of reaching a single benchmark, please list the percent reduction for each parameter. The projected percent reduction should reduce the pollutant discharged to or below the benchmark.

Percent of Design Storm Volume Infiltrated

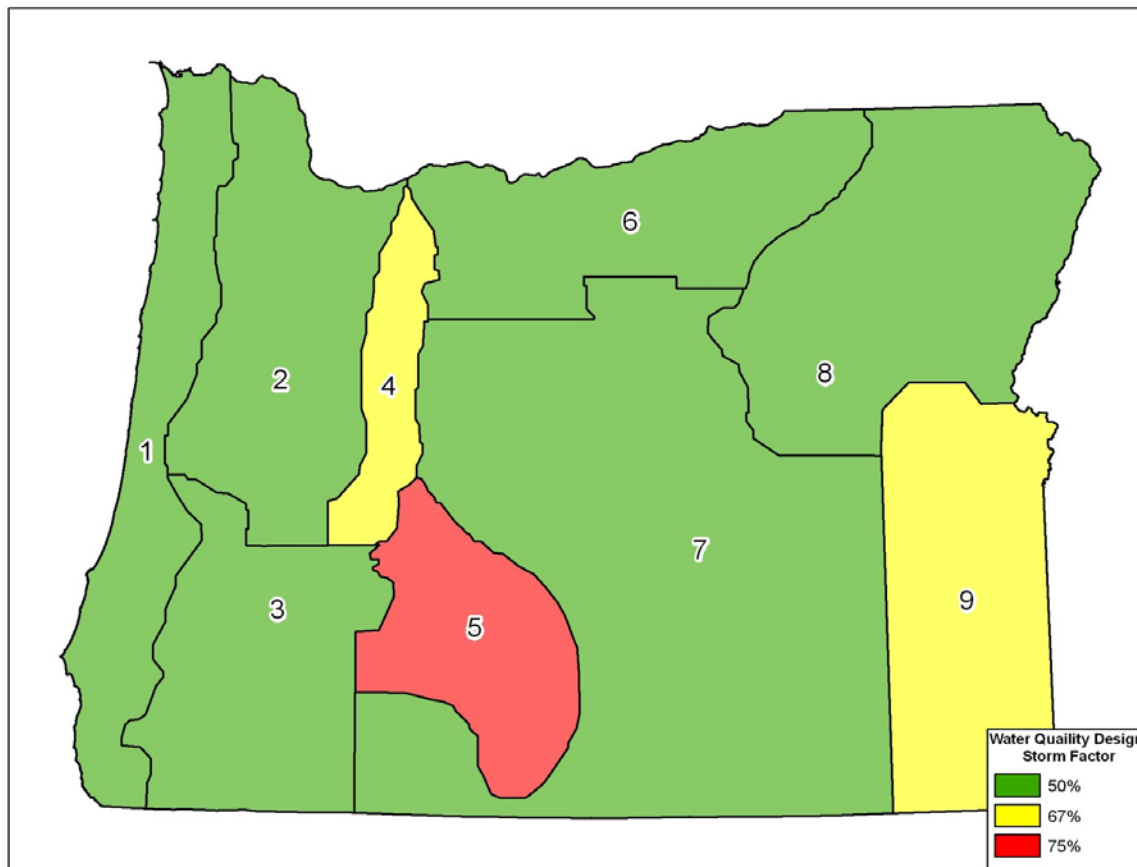
Please provide the calculated percent of the design storm that will be infiltrated for the drainage basin being addressed, if applicable. Facilities choosing to submit a Tier II Waiver request need to evaluate their site and show how the remaining mass load of pollutants discharged are at or below the mass equivalent of the statewide benchmarks. In addition, provide the information requested in the Tier II Waiver table. This calculation may result in discharge above the benchmark values. The revised

Stormwater Pollution Control Plan must provide data and analysis to support this mass load analysis determination, including the detailed description of the measure(s).

Design Storm Criteria

Precipitation Data

1. Determine the 2-year, 24-hour rainfall depth for the facility using latitude and longitude; this information can be found here: <http://www.nws.noaa.gov/ohd/hdsc/noaaatlas2.htm>
2. Determine the Water Quality Design Storm amount by locating your facility's zone on the Oregon Department of Transportation's Water Quality Design Storm Factor map, attached below. Multiply the 2-year, 24-hour storm rainfall depth from Step #1 by the appropriate factor (50%, 67%, or 75%). The majority of the state will use 50% of the 2-year, 24-hour rainfall depth. For example, if the 2-year, 24-hour rainfall depth according to NOAA is 3.0 inches, and the facility is in Zone 6 on the map below, $3.0 \times 50\% = 1.5$ inches. The Design Storm amount is 1.5 inches.
3. Design to a minimum storm size of 0.7 inches in 24- hours in order to capture the first flush of industrial pollutants, even if the calculation from Step #2 is fewer than 0.7 inches.
4. Compare the calculated Water Quality Design Storm to the facility's local jurisdiction's water quality design storm and use whichever is more stringent. If you propose to use a different design storm, provide an explanation of why this is necessary and adequate.



More information is available:

http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/pages/storm_management_program_wqsd.aspx

Please simply indicate the page numbers of the stamped plan or waiver for the following items:

Rationale for the Selection of the Measures

The permits require the revised Stormwater Pollution Control Plan include data and analysis to support the selection of each treatment best management practice or infiltration measure.

Schedule for Implementing Measure

Please include the expected implementation schedule for the proposed measures. The permit deadlines for those registrants in their second monitoring year; July 1, 2013, to June 30, 2014, include:

- Submittal of Tier II Corrective Action Response to DEQ or Agents by Dec. 31, 2014;
- Complete construction and implement treatment or LID measures by June 30, 2016.

Cost of proposed Tier II Response

As part of the rationale in the selection of the measures, the facility must consider cost. In order to meet the implementation schedule, it is highly recommended that all proprietary, capital investment, permitting, operational and maintenance, as well as energy costs are evaluated.

Treatment System Schematic

Please include design and site location information for proposed treatment measures. Registrants are responsible for meeting water quality standards, including assurance that any chemical treatment is nontoxic to aquatic organisms. Any state approved program may be cited, such as Technologies Assessment Protocol - Ecology (TAPE).

Operation and Maintenance Schedule

All Tier II responses will require some maintenance overtime to optimize pollutant removal and manage break-through. Although each facility maintenance schedule will vary based on loading, this is an important component of the revised Stormwater Pollution Control Plan. Schedule B.10.b outlines maintenance and repairs must be recorded and available for review upon request of DEQ, Agents or a local municipality. The revised Plan must include a projected maintenance schedule. DEQ recognizes this may vary once installation is complete. Please ensure any changes are submitted to DEQ or Agents within 30 days.

DEQ Stormwater Contact Information	
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