

State of Oregon
Department of Environmental Quality

**Industrial Stormwater Advisory Committee
Meeting 14 - February 15, 2011**

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Subject: Recommended Corrective Actions

Background:

At the 11th Advisory Committee meeting in September 2010, DEQ shared with the committee a draft approach for the monitoring and corrective action requirements for the new permits. At that time, DEQ explained that it would not finalize the approach until the water quality modeling for the metals benchmarks and the BMP effectiveness evaluation were completed. With the completion of that work, DEQ is seeking input from the committee on its recommended approach for corrective action requirements in the new permits.

Recommended Approach:

A description of the recommended corrective action requirements are shown in Table 1. The objectives of the requirements are:

- Develop a two tiered approach that focuses on those facilities that have consistently failed to meet the benchmarks (i.e., Corrective Action Response 2) and requires that these facilities install the best available technology to reduce the pollutants below benchmarks.
- Streamline the corrective action requirements to reduce paperwork submitted to DEQ. In the new permits, facilities will submit Annual Reports documenting corrective actions taken during the year.
- Promote the use of low impact development practices to reduce stormwater flow and control the mass load of pollutants that enter the receiving stream.
- Improve the quality of industrial stormwater discharge over time. Promote innovations in stormwater management that result in improved water quality and the reduction of industrial stormwater pollution.

Table 1. Comparison of Corrective Actions 1 and 2

	Corrective Action 1	Corrective Action 2
Trigger Level	<ul style="list-style-type: none"> Annual assessment One or more samples exceeds benchmarks at any outfall (except substantially similar outfalls) Impairment pollutant present in discharge above water quality criteria at any outfall (except substantially similar outfalls) 	<ul style="list-style-type: none"> Facilities operating under current permits: Exceed benchmarks based 4th year geometric mean evaluation Facilities operating under new permits: Exceed statewide benchmarks based on 2nd year geometric evaluation (based on maximum of 8 samples collected)¹
BMP evaluation	<ul style="list-style-type: none"> Traditional adaptive management approach Investigate the cause of the elevated pollutant concentrations. Focus on eliminating pollutant sources first, if possible, and then evaluate other control measures. Review the stormwater plan and determine if additional BMPs are necessary to eliminate or control the pollutants. 	<ul style="list-style-type: none"> More rigorous approach Conduct a comprehensive review of BMPs and select the best available technology to eliminate or reduce pollutants to meet benchmark(s) in the new permit. <ul style="list-style-type: none"> Exception for facilities that document that their pollutant mass load is at or below mass equivalent of the benchmark(s).² A licensed professional engineer or certified engineering geologist will stamp the BMP evaluation or mass load analysis.
Documentation	<ul style="list-style-type: none"> Within 14 days of receiving the monitoring results, document the results of review and corrective actions that were/will be taken. At the end of the monitoring year, submit annual report summarizing the corrections actions taken to control the pollutants 	<ul style="list-style-type: none"> Facilities operating under the current permits: Submit updated plan as part of the permit renewal process Facilities operating under the new permits: Submit report within six months (by December 31st of subsequent year).
BMP implementation	<ul style="list-style-type: none"> Implement BMPs according to timeline identified in annual report 	<ul style="list-style-type: none"> Implement BMPs within two years (by end of 4th year of permit coverage) If facilities can not install BMPs by this deadline, DEQ will evaluate if permit coverage is appropriate for the next iteration of the general permits.

¹ Statewide benchmarks for 1200-Z permit: copper, lead, zinc, total suspended solids, oil and grease, E.coli (where applicable). Statewide benchmarks for 1200-COLS permit: copper, lead, zinc, total suspended solids, oil and grease, E.coli, phosphorus and biological oxygen demand (BOD5).

² Facilities will need to conduct a mass load analysis and convert the benchmark into a mass based on stormwater runoff volume. DEQ will develop a methodology for a mass load calculation that will be included either in the permit evaluation report or guidance.

Summary of changes since September 2010 meeting:

DEQ is proposing the following changes to the corrective action requirements presented to the committee in September 2010:

- The types of situations that will necessitate Corrective Action 2 response does not include exceedances related to EPA sector specific benchmarks or impairment pollutants. Facilities that exceed EPA sector specific benchmarks or have impairment pollutants present in discharge in concentrations above the water quality criteria will be required to conduct the Corrective Action 1 requirements. Given that DEQ is proposing new monitoring requirements for these pollutants; these facilities have not evaluated if these pollutants are present in their discharge and whether there are technologically achievable BMPs to control the pollutants, DEQ is not requiring these facilities to meet the more rigorous Corrective Action 2 requirements in the new permit. The facilities that will be required to meet the Corrective Action 2 requirements have monitored for the statewide pollutant parameters for many years and there are technologically achievable BMPs available to reduce these pollutants to the proposed benchmark concentrations.
- To promote the use of low impact development practices, DEQ is proposing that facilities that trigger the Corrective Action Response 2 can conduct an analysis to show that the mass load of pollutants in their discharge are at or below the mass equivalent of the benchmark(s). Facilities will need to conduct a mass load analysis and convert the benchmark into a mass based on stormwater runoff volume. A registered professional engineer or certified engineering geologist must stamp the analysis. DEQ will develop a methodology for a mass load calculation that will be included either in the permit evaluation report or guidance.

Feedback requested:

- Is the Corrective Action Response 1 for impairment pollutants appropriate?
- Are there any additional changes that committee suggests for the corrective action requirements for the new permits?