

State of Oregon
Department of Environmental Quality

**Industrial Stormwater Advisory Committee
Meeting 4- October 20, 2009**

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Subject: Draft Tiered Monitoring Approach

This memorandum will provide the advisory committee with a draft tiered monitoring approach for sources covered by the 1200-Z and 1200-COLS permits. The draft tiers also include escalating responses to benchmark exceedances. DEQ consulted with advisory committee members and DEQ regional managers in drafting this approach. Given there are many overlapping issues that the committee will be discussing in the coming months (e.g., response to benchmark exceedance, discharges to impaired waterbodies), this approach is a working draft.

Background:

Industrial stormwater general permits are based on an adaptive management approach that requires facilities to monitor benchmark parameters and if they fail to meet the benchmark concentrations, they must evaluate their Best Management Practices (BMPs) and take corrective actions. Benchmarks serve as screening levels that require facilities to conduct further evaluation if they fail to meet them. Failing to meet the benchmarks in and of itself is not a permit violation or a violation of water quality standards. Further analysis of the discharge and/or receiving stream is necessary to determine if a facility's discharge is violating instream water quality standards.

DEQ has agreed to seek feedback from the advisory committee on developing permit requirements for facilities that repeatedly fail to meet benchmarks (see 7.b of settlement agreement). DEQ's current permits require facilities during the 4th year of permit coverage to evaluate the last four samples collected at each outfall. If the geometric mean of these 4 samples exceeds benchmark(s), the department will require an individual permit with site specific numeric effluent limits. DEQ is evaluating whether to retain or modify the current approach for benchmark exceedances. Because EPA's benchmark values are more stringent than DEQ's benchmark values, there will likely be an increase in the number of facilities that will be required to obtain an individual permit if DEQ retains this requirement. DEQ does not have the resources to issue a large amount of new individual permits to these sources.

The draft tiered approach discussed below provides DEQ with more information about these discharges under the context of general permits and requires the facilities to implement specific BMPs to reduce the pollutants in their discharge, which will result in improvements to water quality.

Draft Approach

The draft monitoring approach has tiered responses where the level of monitoring correlates to whether facilities are meeting the benchmarks. As a result, certain facilities will be required to further evaluate how to control the pollutants in their discharge (e.g., installing more

sophisticated treatment BMPs) and ensure that the discharge does not adversely affect water quality.

DEQ considered the following information when developing the draft approach:

- Other states' industrial stormwater general permits that have tiered responses for benchmark exceedances (e.g., Washington and North Carolina).
- The need to improve the clarity of the corrective action requirements in DEQ's current permits. DEQ is proposing that a facility conduct a feasibility study to determine the appropriate technologies to control pollutants in discharge. The facility will evaluate the available technologies on the market and the rationale for choosing certain BMPs and submit the proposal for DEQ approval.
- Due to the variability of grab sampling, there is a need to conduct more intensive monitoring to better evaluate the reason for the elevated pollutant loads in stormwater discharges and the potential affects to the receiving stream.

Tiers:

DEQ will use the data compiled in the Industrial Stormwater database to evaluate past benchmark history and a facility's potential risk level. The database contains about 2 to 3 years of monitoring data depending when the facilities obtained coverage under the new permits. At the November 2009 meeting, the department will have an estimate of the number/nature of facilities that will fall into each tier below.

DEQ has not completely fleshed out the timing and triggering event for when a facility must submit a feasibility study and when the facilities are required to implement the specific BMPs.

Tier I: Low risk facilities that regularly meet the benchmarks, but may exceed benchmark(s) one time during the monitoring year. This determination will be based on data collected during one monitoring year.

- Collect four grab samples per year.
- Review the stormwater plan and ensure that it is in full compliance with permit. Implement additional operational BMPs.
- Complete a Tier 1 corrective actions report and submit it annually with the Discharge Monitoring Report.

Tier II: Medium risk facilities that exceed benchmarks(s) at any outfall two times during a monitoring year. This determination will be based on data collected during one monitoring year.

- Conduct a feasibility study to determine the appropriate structural BMPs to control pollutants in discharge. Complete a Tier II corrective actions report and submit it with the annual Discharge Monitoring Report.
- Collect multiple-grab composite samples four times per year to better characterize the pollutants in discharge. A multiple-grab composite sample consists of a minimum of three grab samples collected during one storm event that are combined into one composite sample.
- Based on the multiple-grab composite sampling results, if the discharge continues to exceed benchmarks after installing structural BMPs, the facility will be considered "high risk" and implement the Tier III requirements.

Tier III: High risk facilities that have a history of exceeding the benchmarks. This determination will be based on data collected for two monitoring years. If the geometric mean of any

benchmark parameter at any outfall exceeds benchmark(s), the facility will be considered high risk.

- Conduct a feasibility study to determine the treatment BMPs to control pollutants in discharge. Complete a Tier III corrective actions report and submit it DEQ for approval within 60 days.
- Conduct flow weighted composite sampling four times per year to more accurately characterize the pollutants in discharge.
- Based on the flow weighted composite sampling results, if the discharge continues to exceed benchmarks after installing treatment BMPs, the facility will conduct an evaluation of the discharge and its effect on the receiving stream to determine if the discharge has the potential to violate water quality standards (evaluating compliance with water quality standards will be discussed during meetings 7 through 9).