

State of Oregon  
Department of Environmental Quality

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**Industrial Stormwater Advisory Committee  
Meeting 5- November 17, 2009**

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**Subject: Draft Tiered Regulatory Approach**

At the 4<sup>th</sup> Industrial Stormwater Advisory Committee meeting, DEQ presented a draft tiered regulatory approach that had escalating responses based on benchmark exceedances. In this memorandum, DEQ expands on the reasoning behind this draft concept, how it could work and the goals and objectives of this approach. DEQ seeks input from the committee on whether the draft regulatory approach and accompanying goals and objectives are appropriate.

**Philosophy behind the Tiered approach:**

The purpose of the industrial stormwater permits is to achieve the following goals:

- Improve the quality of Oregon waters.
- Provide an adaptive management approach whereby facilities install and maintain Best Management Practices (BMPs), monitor their discharge and evaluate whether the BMPs are effective where necessary at minimizing or eliminating the pollutants in their discharge.
- Support incremental change and innovations in stormwater management over the course of the next permit cycle that results in improvement in water quality and the reduction of industrial stormwater pollution.
- Collect industrial stormwater data that may guide future permit requirements and water quality management.

Do committee members' agree with these purposes? Is there anything missing?

Given these purposes, the philosophy behind the draft tiered approach is:

- Provide increasing stringency as facilities move through the tiers. Facilities may also move from a higher tier to a lower tier.
- Require tier-specific categories of BMPs (operational, structural, or treatment BMPs<sup>1</sup>) that facilities must implement, unless they can document that certain BMPs are not technologically and economically achievable (e.g., treatment BMPs).
- Provide tier-specific monitoring requirements (single grab samples or composite grab samples).

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<sup>1</sup> DEQ is proposing to define these terms in the following manner:

- Operational BMPs means a schedule of activities, prohibition of practices, maintenance procedures, employee training, good housekeeping, and other managerial practices to prevent or reduce the pollution of waters of the state that does not require the construction of pollution control devices.
- Structural BMPs means physical, structural, or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater
- Treatment BMPs means BMPs that are intended to remove pollutants from stormwater.

- Recognize that facilities may not meet certain benchmark concentrations (e.g., MSGP copper benchmark) within one permit cycle. However, facilities must show incremental improvement in reducing pollutant concentrations in their discharge within the permit cycle.

The objective of the draft tiered approach is for facilities to improve the quality of their discharge over time. When existing BMPs are not sufficient to control pollutants, the tiered approach would require facilities to implement more effective BMPs and conduct additional monitoring to demonstrate incremental improvements in controlling pollutants in their discharge. The current permit does not require explicit corrective actions or BMPs to reduce pollutants.<sup>2</sup> One objective of the tiered approach is to provide clarity and expectations regarding the type of BMPs a facility must implement (operational, structural or treatment) under each tier.

DEQ heard from committee members at the last meeting that the permits should establish an off ramp where more stringent BMPs are not technologically and economically achievable. For example, since the MSGP copper benchmarks are significantly lower than the current Oregon benchmarks, it may not be achievable for some facilities to treat their stormwater discharge to levels at or below these concentrations. DEQ seeks further feedback from the committee on the type of information DEQ would use to evaluate whether more stringent BMPs are technologically and economically achievable. Because this information is highly site specific, DEQ may not have the expertise or resources to evaluate if a facility has the financial capability to purchase and install treatment BMPs.

Another objective of the tiered approach is to increase the amount of monitoring a facility must conduct based on their risk level as recommended by the National Research Council Report. For example, “low risk” facilities may collect single grab samples four times per year. “Medium risk” facilities may collect composite grab samples four times per year. The more intensive monitoring conducted by a “medium risk” facility should provide more information about the elevated pollutant loads in the discharge that is necessary to evaluate the appropriate BMPs for the site.

Given that some of the MSGP benchmarks are much lower than DEQ’s current benchmarks, facilities may not reduce the pollutant concentrations in their discharge to levels below the new benchmarks in one permit cycle. If the tiered approach requires an individual permit for facilities that can not achieve the benchmarks by the end of the permit cycle, there will likely be significant increase in the number of facilities that will be required to obtain an individual permit. Depending on a facility’s location, individual permits may not further protect water quality and reduce the pollutants in a facility’s discharge. Also, DEQ does not have the resources to issue a large amount of new individual permits to these sources. As a result, DEQ prefers to regulate the majority of these facilities under a more prescriptive general permit. DEQ is proposing a more robust approach for regulating industrial discharges under a general permit where facilities will conduct more intensive monitoring and install more sophisticated BMPs that will ratchet down the pollutants in their discharge with the goal of achieving the benchmarks in one or more permit cycles.

**Feedback Requested:**

For the November 17<sup>th</sup> meeting, DEQ seeks the following input from the committee on the concept of the tiered regulatory approach:

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<sup>2</sup> See Schedule A.9 of the 1200-Z permit.

- How should DEQ approach a tiered regulatory approach for achieving benchmarks?
- Should the objective be incremental improvement in water quality through more stringent BMPs and increased monitoring requirements?
- What type of information should DEQ use to evaluate whether more stringent BMPs are technologically and economically achievable?
- Should the tiered approach recognize that more than one permit cycle may be necessary to achieve the benchmarks?

### **Tier Classifications**

At this time, DEQ is not proposing specific language for classifying which facilities may fall within each tier. DEQ and the committee will further evaluate the industrial stormwater data to determine the number/nature of facilities that may fall within each tier.

### **Feedback Requested:**

For the November 17<sup>th</sup> meeting, DEQ seeks the following input from the committee on how to group facilities into the tiers.

- **Group facilities based on benchmark monitoring data.**
  - Option 1: Do not use historical benchmark monitoring data collected under the current Oregon permits to group facilities within tiers. All facilities will begin in Tier I under the new permits. Based on benchmark monitoring collected under the new permit, facilities would then determine in the second year whether they would move into Tiers II or III.
  - Option 2: Use historical benchmark monitoring data to group the facilities within tiers at the beginning of the permit cycle. DEQ has considering the following issues with this option:
    - How would DEQ group facilities that have submitted limited or no data?
    - Since the MSGP benchmarks are more stringent, facilities in Tier II may quickly move Tier III after one or two years under the new permits.
  - Hybrid of Option 2: Group the facilities within Tiers I and II at the beginning of the permit cycle based on the geometric mean of the historical benchmark monitoring data. If the geometric mean of the benchmark data is above the current benchmark(s), the facility will begin the new permits in Tier I. If the geometric mean is below the current benchmark(s), the facility will begin the new permits in Tier II. After the second year of the new permits, facilities will determine if geometric mean is above the new benchmark(s), the facilities will move to the next tier.
  - Should the tiered approach be pollutant specific? Facilities may fall into multiple tiers (e.g., Tier I for lead and Tier II for zinc). DEQ has considered the following issues:
    - Grouping pollutants so that a facility is in one tier.
    - Evaluating whether BMPs and monitoring requirements in a higher tier will address pollutants at issue in a lower tier.
    - DEQ and the facilities may have challenges tracking multiple tiers.
- **Group facilities based on other site specific factors besides benchmark data.**
  - DEQ could use the site specific factors such as the receiving stream, type of industry, or process or materials used on site to group facilities within each tier at the beginning of the permit cycle. However, it may be difficult for DEQ to classify facilities based on site specific activities or characteristics because DEQ does not regularly inspect industrial facilities.