

State of Oregon  
Department of Environmental Quality

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

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**Subject: Characterization of Stormwater Discharges**

This memorandum will provide the advisory committee with an overview of the issues related to characterizing pollutants in industrial discharges to impaired waters. Because this issue is related to determining whether industrial stormwater discharges comply with instream water quality standards, further discussion of this issue will occur at meetings 7 through 9.

**Background:**

DEQ has agreed to seek feedback from the advisory committee on whether to increase the minimum monitoring provisions for characterizing the pollutants in industrial stormwater discharges, including analyzing for impairment pollutants (see 7.c of settlement agreement).

Currently, under DEQ and EPA's permits, the majority of the industrial facilities are not required to screen for all the pollutants in their discharge. Under the 2008 MSGP, it is not EPA's intent for facilities to monitor for all pollutants that may be present in their discharge. Rather, facilities are required to monitor for the sector specific benchmark pollutants and impairment pollutants, if they are discharging to impaired waters. EPA can also require additional monitoring and evaluation of a specific facility's discharge to ensure compliance with water quality standards.

**Discharges to Impaired Waters**

Under EPA's permit, *new* discharges to impaired waters (i.e., waters listed on the state's 303(d) list that include waters with an approved or established Total Maximum Daily Load (TMDL) and those where a TMDL has not yet been developed) are required to evaluate whether the impairment pollutants are present in their discharge before they obtain coverage under the permit. Facilities that are discharging pollutants of concern for which the waterbody is impaired are not be eligible for permit coverage, unless they submit data establishing that the discharge will not cause or contribute to a water quality standards violation at the point of discharge to the waterbody or there is remaining waste load allocation (WLA) in the TMDL.

Under EPA's permit, *existing* facilities discharging to impaired waters do not evaluate whether the impairment pollutants are present in their discharge before renewing their permit coverage. The permit requires that they collect one grab sample for the pollutant of concern on an annual basis. After the first year of monitoring, if the pollutants of concern are not detected in their discharge, the facility may discontinue this monitoring. Collecting one grab sample is not adequate to properly characterize the pollutants in these facilities' discharge. Also, it is not clear in the MSGP what actions EPA or the facility must take if the monitoring results show that pollutants of concern are present in their discharge in concentrations above the water quality standards.

DEQ's current permits do not include any specific requirements for new discharges or existing discharges to impaired waterbodies. Since the Pinto Creek decision that was issued in December 2007, DEQ has been conducting case by case evaluations of *new* discharges to impaired waters without TMDLs before granting permit coverage. DEQ does not have a monitoring protocol on how stormwater data is collected and evaluated to determine whether these new discharges will meet water quality standards. DEQ is proposing to develop a monitoring protocol and will seek feedback from the committee on the proposal in meeting 7.

### **Monitoring Approach**

DEQ has identified the following issues/challenges that make accurate characterization of stormwater discharges difficult:

- Grab samples may not provide sufficient information about the pollutants in the discharge given the variability of pollutant concentrations within a single storm event. Is it feasible for facilities to conduct more representative sampling of their discharge (i.e., compost grab samples or flow-weighted composite samples)?
- Given the variability of storm events, how many storm events would need to be sampled to adequately characterize the pollutants in the discharge?
- There may be challenges with evaluating certain impairment pollutants because the analytical detection/quantitation limit may be above the water quality standard.

Given some of these challenges with characterizing the pollutants in industrial stormwater discharges, one option may be to require "high risk" facilities to better characterize their discharge for impairment pollutants by collecting flow weighted composite samples.