

January 10, 2008

Mr. Lionel Klikoff
Department of Ecology
PO Box 47600
Olympia, Washington 98504-7600

via Email

Re: Comments on November 2007 Draft NPDES Industrial Stormwater General Permit

Dear Mr. Klikoff:

Please accept the following comments on the Draft Industrial Stormwater General Permit issued by the Department of Ecology (Ecology) in November 2007.

Condition S1.F Conditional “No Exposure” Certificate

The current permit (condition S6.D) specifies that Ecology will grant a conditional “no exposure” determination 60 days after the form is submitted to Ecology, unless Ecology responds in writing. The draft permit states that Ecology “intends” to respond to a request within 60 days of receipt of a complete form. What is the reasoning behind the change in wording; i.e., is it Ecology’s intent that an applicant is *not* granted a No Exposure Certificate unless and until Ecology responds? If so, is this procedure consistent with 40 CFR 122.26(g) and WAC 173-226-200?

S1.D Facilities EXCLUDED from Coverage

The Fact Sheet for the draft permit notes that S1.D.4 excludes “facilities located on tribal lands or facilities that discharge stormwater to receiving waters subject to tribal water quality standards” from permit coverage. The specific wording of condition S1.D.4 of the draft permit is facilities that “discharge stormwater to receiving waters within the boundaries of Indian reservations.” The exclusion in the current permit is for “Facilities that are federally owned or operated or are on Tribal land, or facilities that discharge stormwater to receiving waters subject to water quality standards of Indian Tribes, including portions of the Puyallup River and other waters on trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians Reservation.”

What is the intent of the change in wording? For example, are facilities discharging to “portions of the Puyallup River and other waters on trust or restricted lands within the 1873 Survey Area of the Puyallup Tribe of Indians Reservation” excluded from permit coverage?

Condition S4 Sampling

We support the proposed change to the sampling frequency; i.e., five samples collected between September 1 and March 31. It is very difficult to meet the storm criteria during the summer months. Eliminating the quarterly requirement adds needed flexibility to monitoring programs.

Minor detail: S4.B.1.e should read “detention” pond rather than “retention” pond (or a separate provision should be added for discharges from detention ponds).

Condition S5 Benchmarks, Thresholds and Discharge Limitations

S5.A.1 This provision appropriately states that benchmarks and thresholds are not water quality standards and are not “numeric” permit limits. However, the Fact Sheet (page 71) states that benchmarks “... are part of a narrative effluent limit.” Presumably this is the reason Ecology has underlined “numeric” in the permit condition? Is it Ecology’s intent that the benchmarks are narrative effluent limits per chapter 173-201A WAC? If this is Ecology’s intent, then mustn’t the department follow rulemaking procedures to modify chapter 173-201A WAC to use benchmarks and thresholds as a narrative effluent limit?

On page 88 of the Fact Sheet, Ecology states that these [adaptive program management] elements constitute a narrative effluent limit, as provided for in WAC 173-226-070(1)(d) and 40 CFR 122.44(k). Please explain how these cited regulations allow Ecology to adopt the adaptive program management elements as a narrative effluent limit.

Proposed Benchmarks for Copper and Lead. Numerous studies have shown that urban street runoff and residential runoff routinely exceed the proposed benchmark concentrations of 20 and 10.9 µg/L, including the studies surveyed by Ecology (Ecology, 2005). The combined surface area of these sources far exceeds that associated with the general permittees. To require permittees to meet the proposed benchmark concentrations before these sources are controlled to a comparable level is unreasonable and illogical.

The general permit doesn’t account for stormwater run-on from adjacent streets and doesn’t account for air deposition; permittees have little or no options to control either of these pollutant sources. The natural background concentrations for copper and lead in soil (state-wide average) are 36,000 and 17,000 µg/kg, respectively (Ecology, 1994). A few particles of soil washing off the tires of an employee vehicle and/or dust generated from an adjacent roadway could cause a facility to exceed the proposed copper or lead benchmarks of 20 and 10.9 µg/L. Additionally, copper from the wear of brake linings has been shown to contribute significantly to copper concentrations in stormwater runoff (Brake Pad Partnership, 2007). Even so, the Stormwater Management Manual includes no BMPs for the control of copper from brake wear.

Unless and until copper and lead concentrations in street runoff can be controlled to 20 and 10.9 µg/L, respectively, the general permit provides provisions for stormwater run-on and for air deposition, and the Stormwater Management Manual provides BMPs with demonstrated performance nearing these concentrations, the existing benchmarks for copper and lead should be retained.

S5.A.5 The provision that “Ecology will assess compliance with this permit at the point of discharge from the site”, is problematic for several reasons.

1. The provision is misplaced. Including it in S5 Benchmarks, Thresholds and Discharge Limitations implies that the benchmarks and thresholds are numeric limitations and compliance will be determined at a facility’s outfall pipe.
2. The permit requires compliance with state water quality standards. Provision S5.A.5 implies that Ecology will assess compliance with water quality standards at the point of discharge from the site. This is wholly inappropriate for facilities discharging to municipal storm drain systems and is misleading for facilities discharging directly to a surface water body.

As Ecology notes at the bottom of page 71 of the Fact Sheet, a water quality violation can only be confirmed after site-specific conditions of the discharge and receiving water body are evaluated. If it is Ecology’s intent that this Fact Sheet statement will temper the effect of condition S5.A.5, then at a minimum this Fact Sheet statement should be included in the permit itself.

The current permit defines the point of compliance with water quality standards (Condition S7 Compliance with Standards) as follows:

Compliance with surface water quality standards means that stormwater discharges by a facility with permit coverage will not cause or contribute to a violation of water quality standards in the receiving water.

The receiving water is the water body at the point of discharge. If the discharge is to a stormwater conveyance system, either surface or subsurface, the receiving water is the water body that the stormwater conveyance discharges to.

This definition has been dropped from the draft permit with no corresponding discussion or explanation in the Fact Sheet. This definition of the point of compliance should be retained in the new permit. For clarity, it should not be placed in Condition S5 Benchmarks, Thresholds and Discharge Limitations.

Condition S8 Corrective Actions

S8.D.1 As currently written, during a Step B Corrective Action, the permittee must evaluate the effectiveness and costs “of all possible source control and treatment BMPs” to reduce all pollutants to below benchmark concentrations. What is meant by “all possible” BMPs in this context? Rather than introduce a new concept/term, we suggest use of the AKART term in this sentence.

Background Concentrations

In October 2007, Ecology issued Phase 1 of a study which provides initial estimates of the amount of metals and other pollutants deposited from the air into the Puget Sound region. A loading of 31 metric tons of lead, 31 metric tons of copper, and 60 metric tons of zinc are estimated by this study to be deposited directly into Puget Sound every year (Hart Crowser et al., 2007). This study represents a significant effort to quantify the tonnage of pollutants entering Puget Sound through air deposition as well as through stormwater runoff. By definition, the study included air deposition onto the land as a portion of the pollutant contributions from stormwater runoff. However, permittees are not able to control the deposition of air pollutants onto their facilities and therefore cannot control this source of pollution in their stormwater runoff.

The draft permit includes no provision to address background sources of stormwater pollution, including air deposition, that are not controllable by the permittee. This is particularly problematic in light of the proposed lowering of the copper and lead benchmarks. Oregon’s Industrial Stormwater General Permit includes provisions for “background” contributions to runoff. Oregon permittees may determine that a benchmark exceedance was due to background or to natural conditions not associated with industrial activities at the site. Washington’s permit also needs a background provision, particularly in light of the department’s own findings on air deposition of pollutants. The background provision should allow the permittee to subtract pollutant contributions from air deposition; this could be done using the deposition estimates derived in the Phase 1 study or by collecting rain samples at the facility to obtain an area-specific deposition loading.

Unless and until the permit provides a methodology to consider background contributions to stormwater pollutants in a facility’s runoff, the existing benchmark concentrations for copper, lead and zinc should be maintained.

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Thank you for the opportunity to comment on the draft permit.

Sincerely,

Dawson Consulting LLC

A handwritten signature in black ink that reads "Linda Dawson". The signature is written in a cursive, flowing style.

Linda Dawson
Principal

References

- Brake Pad Partnership. 2007. Brake Pad Partnership Update. Sustainable Conservation, San Francisco, CA. Fall.
- Ecology. 1994. Natural Background Soil Metals Concentrations in Washington State. Publication #94-115. October.
- Ecology. 2005. Stormwater Management Manual for Western Washington. Prepared by WA Department of Ecology. Publication Numbers 05-10-029 through 05-10-033. February.
- Hart Crowser, Inc., Washington State Department of Ecology, US Environmental Protection Agency, Puget Sound Partnership. 2007. Phase 1: Initial Estimate of Toxic Chemical Loadings to Puget Sound. Ecology Publication Number 07-10-079. October.