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April 20, 2007

Jim LaSpina
Water Quality Program
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504

Subject: AWB Comments on Draft Industrial Stormwater General Permit

Dear Mr. LaSpina,

The Association of Washington Business appreciates the opportunity to provide the following comments on the Department of Ecology's February 2007 Draft Industrial Stormwater General Permit (ISWGP).

AWB represent over 6,000 businesses in the state of Washington; many of whom operate facilities permitted under the ISWGP. Our members are committed to managing stormwater runoff in a responsible and realistic manner that minimizes unnecessary environmental impacts, but we are very concerned that the compliance requirements in the draft ISWGP are not practical, technically achievable or legally defensible.

AWB requests that Ecology not reissue the ISWGP at this time, but rather keep in place the current permit until the following problems have been addressed.

1) COSTS, COMPLEXITIES AND COERCION

Ecology's ISWGP has evolved into what is likely the most costly, complex stormwater permit in the nation. These complexities and costs provide little or no environmental benefit. Rather, they have led to the development and prosperity of a cottage industry of third party litigants, whose goal is to identify even the most miniscule permit compliance issues and extort monies from otherwise well intentioned permittees. This practice is all too common and leads to the payment of expensive legal fees, settlement costs and forced "donations" to selected environmental organizations.

Ecology should strive to develop an ISWGP that is effective, efficient and legally enforceable to remedy these significant problems. The February draft falls considerably short of all of these goals, while setting unrealistic requirements.

2) CONFUSION AND NON-COMPLIANCE

The department estimates that less than ten percent of the facilities permitted under the current ISWGP are in compliance (Fact Sheet, p. 37). If this is true, the February draft, which is even more demanding than what is in place now, will only exacerbate that fact, leading to increased litigation.

The majority of permittees desire and take prudent steps to legally comply with the terms of the permit. But given the ISWGP's sheer voluminous nature (118 pages), Fact Sheet (97 pages), requirement to develop a Stormwater Pollution Prevention Plan (guidance manual, 94 pages), hundreds of individual compliance requirements, the obligation to decipher several hundred or more pages within stormwater manuals and other guidance and then select and implement from them appropriate best management practices, it is understandable how Ecology's estimations could be correct. It also appears that the department is adding facilities and expanding coverage at existing facilities under the new permit, yet there is no discussion or justification for this in the Fact Sheet. In addition, no coverage or compliance pathway is described for these facilities.

Ecology should develop a permit that permittees can confidently comply with if reasonable, good faith effort is made.

3) MISSING MIXING ZONES

A critical component in the current permit is the availability for a permittee to apply for and receive a mixing zone, provided certain conditions are met and the permittee has implemented all known, available and reasonable methods of prevention, control and treatment (AKART).

According to the Fact Sheet (page 45), Ecology is proposing to eliminate mixing zones, citing that "precise mixing zones and available dilution are not applicable to facilities covered under a general permit".

This is a very significant proposed policy change from what is allowed under current law and one that will add considerable costs to comply with the permit.

4) DEPARTURE FROM LEGISLATIVE FINDINGS AND INTENT

During the 2004 legislative session, AWB, Ecology and environmental advocates worked in good faith with legislators to pass Senate Bill 6415, which was codified as RCW 90.48.555. This legislation recognized the unique challenges and difficulties in managing the intermittent and largely unpredictable nature of stormwater, including compliance with technology and water quality-based standards. Inconsistent with the Findings of SB 6415, the draft permit effectively imposes water quality based numeric effluent limitations. Not only is this unlawful, there is no technical or scientific basis for this approach.

Additionally, RCW 90.48.555:

- Encourages the use of adaptive management in permitting stormwater discharges;
- Requires that flexibility and cost-effective methods of treatment be allowed in meeting state and federal water quality requirements;
- Provides that permittees implementing best management practices (BMPs) and all requirements of the permit were deemed to be in compliance with state water quality standards;
- Determined that monitoring benchmarks were to be used as an adaptive management indicator in determining the effectiveness of BMPs, not water quality effluent limitations.

These key provisions of RCW 90.48.555 have been discarded in the development of the draft ISWGP.

5) BENCHMARKS AND BMPs

As stated above, RCW 90.48.555 provides clear direction regarding the purpose of benchmarks and the role of best management practices. This important point merits further discussion. As drafted, the permit fails to adequately account for a presumption of compliance with water quality standards through implementation of BMPs.

The proposed benchmarks and action levels in S5 and S6, when combined with the proposed corrective action requirements, become numeric water quality based effluent limits. The permit violates state law by requiring dischargers to meet these limits. Benchmarks are intended to be an "adaptive management indicator" (RCW 90.48.555(8)(a)) to determine how well BMPs are working and were never intended to become effluent limitations. Ecology is not authorized to impose numeric limits unless (1) it determines that a discharge has a reasonable potential to cause or contribute to a violation of water quality standards, and (2) best management practices are not effective in achieving compliance with state water quality standards. RCW 90.48.555(3)(d). At

that point, the statute instructs the Department to account for the variability of the pollutant in the stormwater discharge, and the dilution of the stormwater in receiving water. (RCW 90.48.555(4)).

Contrary to above state law, Ecology has derived the benchmarks, as described in the Draft Fact Sheet (p. 79) as water quality based effluent limitations. The permit enforces the benchmarks as effluent limitations by requiring treatment technology to control discharges to the level of the benchmarks (S8).

6) COPPER AND ZINC BENCHMARKS

Ecology should delay revising the copper and zinc benchmarks until it has determined whether it needs to modify the state water quality criteria for copper and other heavy metals.

The Pollution Control Hearings Board (PCHB) has specifically directed Ecology to consider the sublethal effects of copper on salmon. *Puget Soundkeeper Alliance v. Ecology,* PCHB No. 05-150 (2007); *Puget Soundkeeper Alliance v. Ecology,* PCHB No. 02-162 (2003). Ecology can only consider this information by considering whether it needs to modify the state water quality criteria for copper and zinc in WAC 173-201A-240. If so, Ecology must engage in rule making and any amendment of the standards is subject to EPA approval pursuant to 33 USC § 1313.

Setting new water quality criteria by permit constitutes unlawful rule making under the Administrative Procedures Act. RCW 34.05.010(16). *Simpson Tacoma Kraft Co. v. Department of Ecology,* 119 Wn.2d 640, 835 P.2d 1030 (1992); Washington *Independent Telephone Ass'n v. WUTC, 148* Wn.2d 887, 64 P.3d 606, 614 (2000).

7) COPPER EFFECTS CONSIDERATION AND FACT SHEET REISSUANCE

Ecology should reissue the Fact Sheet if it is going to consider the effects of copper on salmon without engaging in rule making.

The Fact Sheet makes general reference to the February 15, 2006, NOAA comment letter on the EPA Multi-Sector General Permit but fails to provide any detail or explanation as to how it will comply with the board's rulings. The public should have full disclosure of how Ecology complied with the PCHB orders, the specific studies or research relied on by the Department, and an opportunity to comment on how Ecology complied with the PCHB orders. Ecology should answer the following questions:

(1) How did the Department consider the effects of copper on salmon as directed by the PCHB?

(2) What was the process used by the Department to consider the effects of copper on salmon?
(3) What specific studies and research did the Department use to consider the effects of copper on salmon?

Additionally, Ecology should consider all available reviews of NOAA's more recent research on effects of copper on salmon.

Ecology has in its possession the April 2005 *Review of the Effects of Copper on Salmonid Olfaction* prepared for the San Francisco Bay Copper Site-Specific Objective Workgroup. This study, which reviews much of the literature, cited in the 2006 NOAA letter raises the following questions:

(1) Does Ecology agree that NOAA research on the effects of copper on salmonid olfaction has not been extrapolated to marine waters?
(2) Has NOAA ever advised Ecology that its research on salmonid olfaction should be applied to marine waters?
(3) Has Ecology evaluated the studies reported in the 2006 NOAA letter for use in setting water quality criteria?
(4) Would Ecology use studies cited in the 2006 NOAA letter to set water quality criteria?
(5) How does the bioavailability of copper vary from the studies cited in the 2006 NOAA letter between laboratory water used in the studies cited in the 2006 NOAA letter and natural surface waters?
(6) How do pH, alkalinity, organic carbon and suspended sediments in natural surface waters impact the toxicity of copper in receiving water conditions?
(7) If Ecology is not able to answer these questions, how does it believe it has responded to the PCHB orders?

8) FACT SHEET DISCLOSURE FOR ZINC AND COPPER

The Draft Fact Sheet should disclose the specific values used to calculate the benchmarks and actions levels for zinc and copper. The Draft Fact Sheet discloses that the zinc and copper benchmarks were based on translator value for the dissolved fraction of metal at the 75th percentile of data in the 6415 study. Draft Fact Sheet, 64. The Draft Fact Sheet further claims that Ecology relied on an analysis of 80 previous scientific studies to develop a translator. *Id.* The Fact Sheet does not disclose, however, the results from this analysis or any reference to the previous scientific studies. Ecology should specifically consider a recently published study for the Washington Department of Transportation. M. Barber, *Phase I: Preliminary Environmental Investigation of Heavy Metals in Highway Runoff,* Washington State Transportation Center WSU (2006). This study raises the following questions:

(1) Has Ecology evaluated the quality of data that it relies on to determine a translator?
(2) The WSU study discusses numerous problems in relying on state and national data to determine a translator value; does Ecology agree or disagree with this analysis?
(3) The dissolved fraction of copper and zinc are not likely to be the same. That is demonstrated in Figures 5 and 6 in Appendix III to the 6415 Report as well as the WSU study. Why does Ecology use the same translator for both metals in the draft ISWGP?
(4) The WSU actual field data shows a median dissolved fraction of 20% to 30% for copper. Would you agree that Ecology should rely on actual data that was specifically collected to determine the dissolved fraction of metals rather than a Monte Carlo statistical analysis of suspect data as used in the 6415 Report?

9) WATER EFFECTS RATIO FOR ZINC AND COPPER

In calculating benchmarks for copper and zinc Ecology should include a reasonable water effects ratio (WER).

In *Puget Soundkeeper Alliance v. Ecology,* PCHB No. 05-150 (2007), the PCHB affirmed the use of standard water effects ratios for fresh water and marine waters in setting benchmarks in the Boatyard General Permit. The boatyard permit used a WER of 2.5 for fresh water and 1.4 for marine water. These values are very conservative and should be applied to setting the zinc and copper benchmarks in the ISWGP.

10) REVISION OF ZINC BENCHMARK UNJUSTIFIED

Ecology should not revise the zinc benchmark in the ISWGP. The existing zinc benchmark and action level were affirmed by the PCHB in *Puget Soundkeeper Alliance v. Ecology,* PCHB 02-162, FOF XIV (2003):

> The benchmark for zinc is 117 μg/L ("micrograms per liter"). Assuming a hardness of 20 to 50 μg/L (sic), which is typical for Western Washington, the benchmark is 2 to 3 times greater than the acute water quality criterion for that metal. The benchmark is 3 to 4 times the chronic water quality criterion for zinc. Total zinc is not more than 50 percent soluble in water. Thus, the zinc benchmark value would be reasonably close to the water quality criteria in many but not all cases. We find it adequate for this permit.

Ecology does not have data under the 2005 ISWGP to justify revising this finding by the PCHB.

11) GUIDANCE NEEDED FOR COPPER AND ZINC BMPs

Ecology should provide guidance on what best management practices can and should be employed to achieve proposed benchmarks for copper and zinc. The Draft Fact Sheet (p. 41) admits, "Ecology has not identified source control BMPs to reduce or eliminate concentrations of zinc in stormwater discharges." The same is presumably true for copper. It makes little sense for Ecology to require level two and level three corrective action reports if we know now that there is no available source control BMP to reduce metal concentrations to benchmark levels.

This will be a substantial expense to dischargers under the permit. The copper action level, 23.8 μg/l, for example, is the median value for sampling results in the 6415 report. Does Ecology expect half of all facilities covered under the permit to conduct a "comprehensive study" to identify the source of stormwater contamination and treatment BMPs? How does Ecology think this information will be helpful if it is not aware of treatment BMPs that will reduce copper and zinc discharges to the proposed permit benchmarks?

The Corrective Actions level four process is even more demanding. As structured in the proposed permit, the continuing inability to achieve action level values will force expensive (and redundant) environmental engineering studies (AKART, water quality impact analysis, modeling/sampling). It is hard to imagine that literally hundreds of permittees will be forced through this procedure.

12) ECONOMIC IMPACT ANALYSIS MISCALCULATIONS

The February 2007 Economic Impact Analysis grossly understates the cost of permit compliance by failing to consider the full impact of the permit.

The 6415 Report, when compared to the proposed benchmarks for copper and zinc, indicate that a substantial number of facilities will be required to proceed through all four corrective action levels. A level three response and report will likely cost between $25,000 to $50,000 to prepare. A level four AKART analysis and receiving water study could easily cost $100,000 or more.

Ecology should include estimates for the anticipated costs of conducting corrective actions under the permit. This should include costs to implement treatment, which the EIA does not address at all. A level three corrective action would require implementation of all treatment BMPs in Ecology's manuals. A level four corrective action under the new permit would require implementation of treatment beyond what is specified in Ecology's manuals (beyond what Ecology has stated is AKART). There are only a few, exotic technologies that can treat stormwater to the benchmarks and

action levels specified by the new permit. Implementing treatment under a level four corrective action could easily cost $500,000 or more.

For the above stated reasons, and additional concerns which will be submitted by member organizations, AWB requests that Ecology not adopt the February 2007 draft ISWGP and delay reissuance of the permit. The department should create an advisory group to remedy these concerns and accomplish the goal of developing an ISWGP that is effective, efficient and enforceable.

Thank you for your consideration.

Sincerely,

Grant Nelson
Governmental Affairs Director