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Via e-mail (Sharleen.Bakeman@ecy.wa.gov)

Sharleen Bakeman – Permit Comments
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504

Re: Comments on Draft Construction Stormwater General Permit

Dear Ms. Bakeman:

These comments on the draft Construction Stormwater General Permit are submitted on behalf of Puget Soundkeeper Alliance. Puget Soundkeeper Alliance has a number of serious concerns about this draft permit, particularly including its approach to discharges to 303(d)-listed waters, Ecology's failure to satisfy the requirements of Tier II antidegradation analysis, and the lax response provisions for when problems are detected at a permittee's site. In addition, with this draft permit Ecology proposes to miss an important opportunity to ensure that post-construction stormwater control mechanisms are implemented and maintained for development and redevelopment that is not regulated by the Phase I or Phase II municipal stormwater permits.

Antidegradation

Ecology has failed to comply with the requirements of the antidegradation policy with regard to the draft permit. Ecology has not done the analysis, developed the adaptive process, or provided the public notice mandated by WAC 173-201A-320, Tier II antidegradation protection.

Tier II applies whenever a water quality constituent is of a higher quality than a designated water quality criteria (i.e., whenever a waterbody is not on the 303(d) list) and a new or expanded action conducted under an NPDES permit is expected to cause a measurable change in the quality of the water. WAC 173-201A-320(1). New or reissued general permits must undergo an analysis under Tier II when Ecology develops and approves the general permit. WAC 173-201A-320(6).

Tier II analysis requires a determination of whether the discharge to be authorized has the potential to cause a measurable change in the physical, chemical, or biological quality of the receiving waters. WAC 173-201A-320(3). If this determination is affirmative, "then an analysis must be conducted to determine if the lowering of water quality is necessary and in the overriding public interest." WAC 173-201A-320(4). "Information to conduct the analysis must be provided ... by [Ecology] in developing a

general permit ...” and must include specified information about social, economic, and environmental costs, as well as “site, structural, and managerial approaches” to prevent or minimize the lowering of water quality. Id.

These requirements apply to general permits. As Ecology explained in a January 19, 2006, letter to EPA¹,

During the development or re-issuance of a general permit, Ecology will assess the anticipated level of degradation due to new or expanded discharges that are likely to be authorized by the general permit, and that level of degradation will be taken into account during the antidegradation review of the general permit. The permit or fact sheet will contain a determination whether or not the lowering of water quality from the anticipated discharges is necessary and in the overriding public interest.

Nowhere in the Fact Sheet or other materials available with the draft permit is any discussion of the anticipated level of degradation due to new or expanded discharges likely to be authorized by the general permit, or of whether the lowering of water quality is necessary and in the overriding public interest. Has Ecology made the assessments and determinations required by WAC 173-201A-320(4)? Where are these discussed?

Furthermore, to allow meaningful public participation in the Tier II antidegradation analysis, Ecology explained that it would provide information about all permittees in the public notice process for general permits:

A list of the facilities applying for coverage along with a list of the potentially effected (sic) water bodies will be public noticed each time a permit is reissued and each time that a facility applies for coverage under a general permit. The public notice will occur in both a local paper and on Ecology’s webpage. The notice will identify the facilities requesting coverage, the receiving water bodies they may affect, and the fact that general permit conditions were established with the expectation that the facilities covered will meet water quality standards; including the antidegradation requirements. A contact name for obtaining more information on the antidegradation review will also be included.

Jan. 16, 2006, Ecology letter to EPA. EPA specifically relied on these provisions in its determination approving the changes to the antidegradation regulation as a means to allow antidegradation review on the general permit level, rather than permittee-by-permittee. May 2, 2007, EPA letter to Ecology.

¹ January 19, 2006, letter from David C. Peeler, Ecology Water Quality Program Manager, to Michael Gearheard, U.S. EPA Region 10. EPA explicitly relied on Ecology’s representations made in this letter in its approval of Washington’s 2003 amendments to the antidegradation provisions of the water quality standards. May 2, 2007, letter from Michael F. Gearheard to David C. Peeler.

It appears that Ecology has not followed these procedures for the draft permit. Has Ecology public noticed on its website and in appropriate local papers the list of facilities applying for coverage and the receiving waters that they may affect? Has Ecology provided a contact name for providing more information on the antidegradation review?

Finally, where “information regarding the existence, effectiveness, or costs of control practices for reducing pollution and meeting the water quality standards may be incomplete” because a water quality control program and associated control technologies are “in a continual state of improvement and development,” Ecology may satisfy the requirements of Tier II necessity analysis for a general permit by adopting “a formal process to select, develop, adopt, and refine control practices for protecting water quality and meeting the intent” of the antidegradation policy. WAC 173-201A-320(6)(c).

This adaptive process must:

- (i) Ensure that information is developed and used expeditiously to revise permit or program requirements;
- (ii) Review and refine management and control programs in cycles not to exceed five years or the period of permit reissuance; and
- (iii) Include a plan that describes how information will be obtained and used to ensure full compliance with [the antidegradation policy]. The plan must be developed and documented in advance of permit or program approval under [WAC 173-201A-320].

WAC 173-201A-320(6)(c).

In other words, this adaptive process is one that Ecology must follow to develop and use information about the efficacy of its regulation and the available technology to review and refine general permit requirements and/or other programs in conjunction with the five-year permit cycle, and there must be a documented plan about how this is to be done before the general permit can be issued.

While information about the best control practices for reducing pollution from Construction Stormwater General Permit discharges is incomplete, Ecology has no documented plan to comply with these requirements. The Fact Sheet includes a statement on pages 17 - 18 describing a defunct protocol for evaluating emerging stormwater treatment technologies, and identifying some mechanisms that Ecology *may* use to develop and spread information about stormwater control techniques. This constitutes no plan whatsoever to ensure that information about technology for control of construction discharges is developed and used expeditiously to revise requirements in future permits. No description of how such information will be obtained and used to ensure full compliance with the antidegradation policy is presented. No timelines,

milestones, or schedule is included. How has Ecology complied with the requirements of WAC 173-201A-320(6)(c)?

Post-construction Stormwater Controls

This permit should mandate and set standards for permanent post-construction stormwater BMPs for any discharge that is not regulated by the Phase I or II municipal stormwater permits. These provisions should result in BMPs and protections comparable to those resulting from the measures that local governments are mandated to require for new development and redevelopment projects under the Phase I and II permits, including permit conditions that require the use of Low Impact Development (“LID”) techniques where feasible. While the Phase I and II permits set standards for post construction stormwater controls, many situations are not included within the scope of the Permits, including: a) construction that takes place outside the geographic coverage area of the Phase I and II permits; b) direct discharges (i.e. construction that will not discharge to municipal storm sewer systems); c) construction under permit thresholds like the 1-acre disturbance threshold in the Phase II permit. Post construction runoff is a serious problem in these situations. The construction stormwater permit provides an opportunity to bring some of these discharges under the CWA’s regulatory umbrella and prevent additional degradation of water resources.

Other states have begun applying post-construction controls in construction permits. For example, such requirements have recently been imposed in the California construction stormwater general permit (see Order No. 2009-0009-DWQ regarding NPDES No. CAS000002, September 2, 2009, attached, at 37 – 45). They should be imposed in Washington as well.

Condition S1.

S1.C.3. concerns non-stormwater discharges and should be tightened up to prevent or minimize the discharge of pollutants in non-stormwater discharges. The permit should explicitly require the application of AKART to all of these discharges. Specifically, there should be restrictions on discharges of water used to control dust – use of such water should be required to be the minimum amount necessary, prohibited when the site is wet, and subject to BMPs. Similar restrictions should be incorporated for routine external building wash down water and landscape irrigation water.

The limitations on coverage of S1.E. should be revised to be consistent with the prohibitions of 40 C.F.R. § 122.4. As clarified and explained by the Ninth Circuit Court of Appeals in 2007, § 122.4(i) “is very clear that no permit may be issued to a new discharger if the discharge will contribute to the violation of water quality standards [that resulted in the inclusion of the receiving waters on the 303(d) list],” unless both requirements of § 122.44(i)(1) and (2) are satisfied. *Friends of Pinto Creek v. US EPA*, 504 F.3d 1007, 1012 (9th Cir. 2007).

When a new discharge is proposed that would add a pollutant of concern to a 303(d) listed waterbody, it is proper to presume that the addition would contribute to the violation of water quality standards. As the PCHB has held in an appeal of a previous version of the Construction Stormwater General Permit, in the context of 40 C.F.R. § 122.4:

The § 303(d) listing process, by definition, identifies bodies of water that currently fail to meet applicable water quality standards for specified pollutants. It follows that allowing new or additional discharges of an identified pollutant to an impaired water body would necessarily cause or contribute to the existing violation of water quality standards. Such an action is contrary to state and federal law and would cause harm to the receiving water that is not easily repaired.

Puget Soundkeeper Alliance, et al. v. Ecology, PCHB No. 00-173, Order Granting Partial Stay (August 29, 2001); *see also, Associated General Contractors, et al. v. Ecology*, PCHB Nos. 05-157 through 05-159, Findings of Fact, Conclusions of Law, and Order (June 4, 2007) at 51 – 52.

Pollutants that are likely to be present in construction stormwater discharges include turbidity, suspended and settleable solids, pathogens, metals, organic compounds, and nutrients. 74 Fed. Reg. 62996, 63010 – 011 (December 1, 2009). Thus, in issuing coverage to new or expanded construction sites, Ecology must abide the prohibition of 40 C.F.R. 122.4 with respect to discharges to waters that are 303(d) listed for impairment of virtually any water quality criteria or sediment management standard.

As interpreted by the Ninth Circuit, 40 C.F.R. § 122.4 prohibits new discharges of pollutants of concern to 303(d) listed waterbodies unless “a TMDL has been performed and the owner or operator demonstrates that *before the close of the comment period* two conditions are met, which will assure that the impaired waters will be brought into compliance with the applicable water quality standards. The plain language of this exception to the prohibited discharge by a new source provides that the exception does not apply unless the new source can demonstrate that, under the TMDL, the plan is designed to bring the waters into compliance with applicable water quality standards.” *Friends of Pinto Creek*, 504 F.3d at 1012 (emphasis in original).

Neither in S1.E. nor elsewhere in the permit appears any indication that Ecology intends to limit coverage under the permit in compliance with 40 C.F.R. § 122.2. Under the prohibition of this regulation, Ecology may not issue NPDES permit coverage for a new construction site that discharges to a 303(d) listed waterbody if the discharge may include a pollutant of concern unless § 122.2(i)(1) and (2) are satisfied. Since none of the waterbodies currently on the Washington 303(d) list also have TMDLs, it is not possible for these requirements are to be satisfied. As a result, Ecology may not issue NPDES permit coverage for a discharge to a 303(d) listed water unless Ecology determines that no pollutant of concern will be discharged.

Does Ecology disagree with this analysis? If so, why and how? How does Ecology intend to abide by the 40 C.F.R. § 122.2 prohibition with respect to new construction sources and how does the permit reflect this?

Consistent with the discussion of post-construction stormwater controls above, S1.E.1. should be modified to require continued coverage for permittees outside Phase I or II municipal stormwater permit coverage areas.

Condition S2.

S2.C. concerns the erosivity waiver. S2.C.2.b. provides for no timeframe restrictions for “sites east of the Cascades Crest, within the Central Basin.” “The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.” This definition is imprecise and susceptible of differing interpretation. How is the mean annual precipitation to be determined? What is the appropriate reference for this? The permit should either precisely identify the areas within the Central Basin or the definition should be made more definite.

In S2.C.3.b., the certification should also require a statement that AKART will be provided to any discharge.

Condition S3.

The last sentence of S3.A. includes a double negative, is unclear, and should be revised. What is the meaning of a permit statement that a discharge is “not authorized”? Is this the same as “prohibited”? The essence of S3.A. is that “Discharges that cause or contribute to violation of these standards are prohibited,” and PSA suggests that this last sentence be changed to this text.

Condition S4.

The last row of Table 3 is confusing and should be deleted. It could be read to indicate that sites that disturb 10 acres or more but that do not exceed 280 NTU need not do the monitoring specified, or that weekly pH monitoring is not required of sites of 10+ acres. As indicated by the actual text of S4., all sites of 5 acres or more are subject to the same monitoring requirements and the bottom table row is thus unnecessary and potentially confusing to readers of the permit.

S4.B.1. specifies what a permittee must do when an inspection reveals a problem. The timeline provided in S4.B.1.a. and b., 7 days to review and revise the SWPPP and 10 days to fully implement and maintain appropriate BMPs, is inappropriate. First, as conditions at construction sites are very fluid and often rapidly changing, it is important and reasonable that a permittee should act as soon as possible to figure out what to do about a problem detected either during an inspection or as a result of sampling. Second, the permit already requires implementation of appropriate BMPs at all times (S9.). The draft S4.B.1. language would allow a problem detected by a permittee, no matter how

serious, to continue for nearly a week without even requiring the permittee to start to figure out what to do about it. Many phases of construction or construction tasks that cause the problems detected will be finished by the time that this permit language would require a permittee to do anything about the problems. This language also potentially creates a shield against enforcement of the S9. requirement to implement BMPs all the time. Permittees are likely to argue that there is no permit violation for inadequate BMP implementation as long as the S4.B. timeline has not expired. This language should be changed to require shutdown of all construction activities until the problem has been corrected with restoration of proper and adequate function of existing BMPs or the implementation of additional BMPs. This is a common provision of local government construction stormwater ordinances and programs and, as Ecology is charged with ensuring that AKART is applied, should include comparable strict requirements in this permit.

S4.B.2. sets the frequency of inspections at at least once every calendar week and within 24 hours of any discharge. To ensure that BMPs are in place and properly functioning, inspections should be required every day that there is precipitation and at the end of each day on which there is any chance of rain in the forecast for the evening or following day.

Condition S5.

S5.C.1. allows sampling using a turbidity tube instead of a turbidimeter for sites of less than 5 acres. A turbidimeter is an easily used machine that should be standard equipment for all contractors with sites of an acre or more. Since the water quality standards are in turbidity, it is reasonable and appropriate to require all permittees to monitor turbidity.

S5.C.2. sets a sampling frequency of at least once every calendar week. This is inadequate given the importance of sampling and benchmarks to the permit, the potential for discharges to cause or contribute to violations of water quality standards, and the ease of monitoring for turbidity or transparency. Sampling should be required every day that there is a discharge from a site.

In S5.C.5., a 33 cm transparency benchmark is used. This benchmark was included in the previous permit based on a study that found 33 cm transparency to be equivalent to 25 NTU. That study examined data from only some areas of the state and may not be valid in other areas. The transparency benchmark value should be reexamined and updated to reflect more up to date and complete information if appropriate.

S5.C.5.a.v. and vi., which appear to be misnumbered, and S5.C.5.b.ii. and iii. include a 7 day/10 day response to benchmark exceedences schedule comparable to that for inspections in S4.B.1. PSA's comments on this schedule in the above discussion of S4.B.1. are applicable here as well. Furthermore, while S4.B.1. requires that "based on the results of the inspection the Permittee *must correct the problems identified by:*"

reviewing the SWPPP and fully implementing and maintaining BMPs, these S5.C.5.a. and b. provisions say nothing about correcting problems or bringing discharges to below benchmarks. It is simply inadequate to require a permittee that has exceeded a benchmark to merely review the SWPPP to make sure that it complies with permit conditions and to fully implement BMPs within ten days, which is already required by the permit for all permittees all the time. What is the permittee required to do to fix a discharge of muddy water if its SWPPP satisfies permit requirements and all appropriate BMPs are already implemented and maintained?

PSA is pleased to see the inclusion of the federally-mandated 280 NTU effluent limitation in S5.C.5.c., but this limitation should be applicable to all permittees instead of just those with sites of 10 acres or more. While it could conceivably be reasonable to tie the applicability of the effluent limitation to the volume of the discharge, it makes no sense to attach it to the total size of the site. A 10 acre site may have four or five points of discharge with relatively small areas of drainage and corresponding discharge volume compared to a five acre site with a single point of discharge.

S5.C.5.c.i. seems not to make sense. Why does the numeric effluent limitation “not apply during periods of time when fewer than 10 acres of soil are disturbed, but not yet fully stabilized”? The effluent limitation should apply when soil is not yet fully stabilized.

For S5.C.5.c.ii., how is the “local 2-year, 24-hour storm event” to be determined?

S5.C.5.c.iii. allows for averaging of sample results collected over the course of a day for purposes of determining compliance with the effluent limitation. This does not take into account the relative flow at the times of sample collection and thus does not ensure that the average is representative of the day’s discharge. To be conservative and protective of water quality, all samples should be individually compared to the effluent limitation to determine compliance.

S5.D. effectively defines “significant concrete work” as “greater than 1,000 cubic yards of poured concrete or recycled concrete.” This is arbitrary and inappropriate. A smaller concrete pour can cause a pH problem and pH is particularly easy and inexpensive to measure. What is the basis for this threshold? Why doesn’t Ecology include a more conservative threshold to provide greater protection to water quality?

S5.G.3. concerns providing records to Ecology and S5.G.3.a. concerns responses to requests for access to records made by the public. S5.G.3.a. should be renumbered S5.G.4., and S5.G.3.a.i. and ii. should be renumbered S5.G.4.a. and b. Alternatively, S5.G.3. should be S5.G.2.a., and S5.G.3.a. should be S5.G.2.b.

Condition S8.

To the extent that discharges containing pollutants of concern may be authorized to 303(d) listed waterbodies in compliance with 40 C.F.R. § 122.2 (see discussion of

S1.E. above), S8.A., B., and C. fail to satisfy the requirements of state law with respect to regulation of such discharges. S8.A., B. and C. should be entirely rewritten.

RCW 90.48.555(7) mandates that this permit “require compliance with appropriately-derived numeric water quality-based effluent limitations” for discharges to 303(d) listed waters. Since construction stormwater discharge has potential to include virtually any pollutant and thus may contribute to violation of water quality standards in receiving waters impaired for any pollutant, this means that this permit must include numeric water quality-based effluent limitations for discharges to all 303(d) listed waters. On what basis has Ecology determined not to include numeric effluent limitations for discharges to waters 303(d) listed for all other pollutants and parameters?

S8.A. appears to concern only discharges to waters listed for turbidity, fine sediment, high pH, and phosphorus. Not only does this not satisfy the requirement of state law that all 303(d) listings be addressed, but there are no listings for “fine sediment” and it ignores that nutrients contribute to dissolved oxygen impairment.

The language of S8.B. and C. seems to attempt to set numeric effluent limitations but it is unclear and ambiguous. The permit writer should please see examples in other NPDES permits for language establishing effluent limitations, and consult with Ecology enforcement staff.

It is unclear what it means for “a discharge to exceed the water quality standard for turbidity” (S8.B.3). S8.B. also reads more like a benchmark and adaptive response provision than as a numeric effluent limitation. Where is it made clear that a discharge that has more than a specified turbidity level is a violation of the permit? It appears that a permittee need only do the same (inadequate) response to a high turbidity reading under this section as is required for benchmark exceedences and inspection findings.

Similarly, nowhere does S8.C. unambiguously state that a discharge outside the range of 6.5 to 8.5 s.u. is a violation of the permit. Instead, the same (inadequate) response is required as if the pH “limitation” were a benchmark.

S8.’s Table 5 does not remedy this problem. Nowhere does the table include the words “effluent limitation,” and it is unlikely to be interpreted so as to add substance to the text of S8. given this omission.

What are the 303(d) receiving waters that will be discharged to under this permit? What permittees discharge to 303(d) listed waters? This information should be provided in the fact sheet.

S8.D., concerning discharges to receiving waters with TMDLs, is also inappropriately limited to TMDLs for turbidity, fine sediment, high pH, and phosphorus. If any TMDL for any pollutant or parameter includes provisions applicable to construction stormwater discharges, this permit should provide for their effectuation. Why does this permit propose to exclude any such TMDLs from the limitations of S8.D.?

To allow meaningful evaluation and public comment on this provision, Ecology should state in the fact sheet which TMDLs fall into the categories identified in S8.D.1.a. – d. Are there any TMDLs that set specific waste load allocations or requirements for discharges authorized by the Construction Stormwater General Permit? Which are these? Are there any TMDLs that establish a general waste load allocation for construction stormwater discharges without identifying specific requirements? Which are these? Are there any TMDLs that do not specify a waste load allocation for construction stormwater discharges without excluding these discharges? Which are these? Are there any TMDLs that specifically preclude or prohibit discharges from construction activity? Which are these?

The fact sheet at p. 23 explains that Ecology will review the applicable TMDL to determine whether any additional requirements apply “where an operator indicates on its application for coverage form that the discharge is to one of these waters.” What if the applicant omits that information? How will Ecology detect that omission? The permit coverage timeline of S2.A., which provides for a grant of permit coverage automatically after the expiration of a certain period of time “unless Ecology responds to the complete application in writing,” should be inapplicable to applications for discharges to waters with TMDLs or to 303(d) listed waters. Permit coverage for discharges to these waters should require an affirmative determination by Ecology that permit coverage is appropriate and that any receiving water-specific permit requirements are identified, conveyed to the discharger, and included in the documents granting permit coverage.

Condition S9.

S9.D.5.b. includes the same problematic definition of “the Central Basin” as discussed in the section of this letter addressing S2.C.2.b.

S9.D.5.c. requires that soils be stabilized at the end of the shift before a holiday or weekend “if needed based on the weather forecast.” The permit should require that soils be stabilized at the end of every shift. What does “if needed based on the weather forecast” mean? Does a forecast 40% chance of drizzle mean that soil stabilization is needed? What about a 20% chance of rain? What about 10%? What about a forecast that says it may rain the following afternoon after the next shift begins unless it is called off for some unrelated reason?

S9.D.11.a. requires that BMPs be maintained and repaired “as needed to assure continued performance of their intended function in accordance with BMP specifications.” How does this fit with the provisions regarding responses to deficiencies detected in inspections and to benchmark exceedences? If this condition requires BMPs to be maintained and repaired as needed to assure continued performance at all times, why is a permittee allowed ten days to maintain and repair BMPs when it exceeds benchmarks?

Condition S10.

Consistent with the discussion of post-construction stormwater controls above, S10.A. should be modified to prohibit permit termination for permittees that are not regulated under municipal stormwater permits.

Very truly yours,

s/ Richard A. Smith

Richard A. Smith