

The Boeing Company
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April 20, 2007

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

Subject: Comments on Draft Industrial Stormwater General Permit

Dear Mr. La Spina:

The Boeing Company appreciates the opportunity to comment and looks forward to a workable stormwater program. We provide the following comments to the draft Washington State Industrial Stormwater General Permit. The draft permit presents a number of difficult challenges for the permittee, agency and environment. This permit appears to be ineffective in promoting improvements in environmental conditions related to storm water, inefficient for the permittee to implement due to its extreme complexity and un-enforceable by the agency, it lacks understandable criteria based on rational and practical applications of engineering principles of storm water control. The draft permit also has abandoned the agreed upon principles described in SB 6415 for adaptive management based upon continual implementation of best management practices. Instead, Ecology has admitted in its fact sheet that it has reversed engineered the proposed benchmarks from water quality standards. Ecology has then attempted to impose these benchmarks as effluent standards by proposing a extensive set of actions for permittees to take in event of monitoring data that is higher than benchmark values. Taken as a whole, this permit addresses none of the goals needed to address storm water discharges from industrial sources. The Boeing Company strongly recommends that Ecology withdraw this permit pending redevelopment into a effective, efficient and enforceable tool that can be used by all involved parties.

The Boeing Company has reviewed and concurs with the comments provided by the Association of Washington Business and the Weyerhaeuser Company. To the extent possible we will not repeat these comments here-in. An attachment is provided to this comment letter that provides specific section by section comment on the technical aspects of the draft permit. The balance of this comment letter will address policy issues central to creating a workable storm water management program.



Application of narrative standard: The complex issues surrounding water quality standards require an enlightened approach when applied to storm water. The current and proposed draft EPAMSGP for Industrial Stormwater include the use of narrative standards to satisfy compliance with water quality standards. This approach to compliance was incorporated into the adaptive management concepts in SB 6415. Under this approach the use of adaptive best management practices is applied to attain significant improvements in storm water quality.

A general permit does not allow for the typical characterization studies of a individual permit, thus the EPA and Ecology have previously recognized that permittee selection of appropriate BMPs from relevant guidance material is the most practicable approach to achieving, water quality compliance. The lack of characterization also discredits approaches that attempt to reverse engineer water quality standards to create benchmark values that “must be attained”. Ecology’s effort to create new benchmarks based on in-stream water quality standards is inherently flawed for lack of the needed site specific information. It will in effect create a one standard describes all receiving waters. The proposed benchmarks do not even differentiate between fresh and salt water receiving waters which have distinctly different water quality criteria for many pollutants. Nor do they compensate for increase seasonal stream flows, upstream contributions or any other of many factors needed to establish an effluent discharge limit.

Recommendation: Retain the use of narrative standards for compliance with water quality standards. Compliance will equate to implementation of all reasonable BMPs as identified in the appropriate approved storm water guidance document(s).

Utilizing benchmarks in adaptive management: The report conducted by Ecology and prepared by Herrera under the requirements of SB6415 provides some useful insights into the state’s knowledge about Washington Stormwater. The obvious problems are with societal pollutants- zinc and copper. Other issues appear to be considerably less a concern than originally anticipated- pH, Oil & Grease. Thus, Washington has taken its first significant step in understanding the adaptive management approach. We now have better data that identifies those areas in which greater focus is need and where better BMPs may need to be developed. Where the “6415 report” falters is its inability to differentiate the types of industries, BMP’s employed, urban/rural locations and other factors that would allow Ecology and industry to refine practices and employ improved technology. The Herrera report does recommend additional monitoring studies outside of the permit requirements to assist in the development of improved benchmark targets and BMPs. It is not clear whether Ecology concurs with this recommendation and is planning on conducting these types of studies. Without the recommended additional information the 6514 report data is not satisfactory for the development of

benchmarks any more than reverse engineering from water quality standards for lack of relevant “characterization” data.

Recommendation: A second round of studies is needed to refine the preliminary data collected. This collection effort should provide refined information on types of BMP’s employed, local conditions, facility characterization and such other data as would assist in determining which BMP’s are most effective in controlling pollutants. The data refinement would also help identify which industry sectors need to develop and implement additional BMPs .

Benchmarks: In the fact sheet Ecology states that it is relying on EPA’s approach to metals’ benchmarks because EPA changed its approach to benchmarks based on preliminary comments from NOAA on the potential impacts on fish, wildlife and their habitat. The state NPDES program does not require review or consultation under the ESA because there is no direct federal action to trigger this requirement. EPA has significantly delayed issuance of a final revised MSGP which indicates that it will be making major revisions to the 2006 draft and that reliance on the draft to justify revised benchmarks in state issued permits is unwise. Studies on issues such as sub-lethal effects of pesticides, metals and even pharmaceuticals will shed further light on the risks from storm water. Over time sampling data from receiving waters will clarify the parameters for waters into which these materials will flow. Over time the scientific community will provide better information on which scientifically defensible benchmark can be established. All of this information can be used to develop revised benchmarks over time, however the information cannot be used to create de facto revised state water quality standards. Please see AWB comments on the improper application of more stringent benchmarks in lieu of required rulemaking to adopt state water quality standards.

The Herrera report does recommend that Total Suspended Solids (TSS) sampling and benchmark values replace turbidity as a method to assess solids impacts. TSS is widely used in estimating the effectiveness of storm water treatment systems as a surrogate for pollutant removal- particularly heavy metals. Turbidity, while easy to measure, has poor correlation to pollutant removal and is very susceptible to false values due to colorimetric interference. It is not clear why Ecology has decided not to follow the Herrera report recommendations on this sampling method. Please see the Weyerhaeuser comments for a complete discussion of this concern.

Recommendation: Retain the existing 2003 benchmark values for use in the new permit. Allow the use of TSS in lieu of turbidity by developing a technology based standard. We support the Weyerhaeuser recommendation of 130 mg/l.

Complexity: The draft ISWGP needs to be effectively implemented by the permittees. Effective implementation needs to recognize the range of

permittees, from two person shops to large industrial complexes. Boeing has trained professional engineers who spend their entire work lives implementing and maintaining the storm water permit and related activities. A large part of their work is interpreting and complying with the myriad of requirements in the existing permit. Medium and small companies may not have the resources to provide full time professional engineers to understand the ISWGP. Their ability to comply is greatly reduced by the complexity of the current permit. The draft permit is considered by Boeing staff to be more complex and difficult to comply with than the existing document. If professional engineers have concerns about ability to understand and comply with the draft permit then what is the chance that smaller organizations will succeed? Ecology must consider the ability to read, understand and effectively comply with a permit before it is issued. To do otherwise is to ensure failure for the storm water program and reduce the likelihood that real improvement in stormwater quality will be achieved.

Recommendation: The draft ISWGP needs to be withdrawn and rewritten with an aim to simplify its requirements to the point where it can be understood by the permittees. It may be appropriate to devise several permits that recognize the permittees size, ability or other factors that would influence their ability to understand and implement the permit. Ecology should also consider a range of outreach options from classes to web courses to assist permittees in understanding the permit and their obligations under it.

Individual Permits and Action Level 4: Discussions with Ecology staff have revealed that action level 4 is considered a prelude to a requirement for requiring an individual permit. Implementation of Action level 4 ignores the concept of compliance via implementation of required BMPs and requires the permittee to conduct additional, expensive, time consuming studies and effluent and receiving water monitoring. Ecology has the duty and right to require any storm water general permittee to obtain an individual general permit. Once the need for an individual permit has been made, the permittee and Ecology initiate a well known set of studies, negotiations and actions. During these steps in the individual permit process the permittee has a number of rights and options that are not available to a general permittee. Key among them is the right to appeal to the PCHB over study requirements and permit conditions. The use of the general permit as a tool to force a permittee to conduct studies normally required of an individual permittee deprives them of the protections that come as part of the individual permittee process.

Recommendation: Eliminate Action Level 4 and include a more detailed explanation of how Ecology will assess whether a general permittee should apply for coverage under an individual permit. Coverage under the ISWGP will continue while Ecology orders additional studies as needed. This approach will preserve the appeal rights of the permittee.

Right to apply for mixing zone.

The proposed draft permit does not allow general permittee to apply for

mixing zones . (Fact Sheet page 44) “No mixing zones are established in this draft permit. Since a general permit must apply to a number of different sites, precise mixing zones and available dilution are not applicable to facilities covered under a general permit. Any discharger may request a mixing zone through an application for an individual permit in accordance with WAC 173-220-040 or WAC 173-216-070.”

State law allows for mixing zones for stormwater permittees (WAC 172-201A) within the terms of the general storm water permit. The current ISWGP recognizes this requirement and contains a provision for allowing mixing zones to be applied for and granted. (See Final Permit 2004 modification S3 F1). Current permittees who have applied for and been granted mixing zones would apparently lose these mixing zone allowances under the proposed draft permit.

This lack of an opportunity to apply for a mixing zone, other than in a request for an individual permit, is of concern because

- 1) Ecology proposes to set benchmark and action levels for many parameters at or near the state water quality criteria and
- 2) the statement in section S10D that Ecology will “assess compliance with this permit at the point of discharge from the site. “

The benchmark and action levels apparently were not set with any consideration of the actual impact on the receiving water following allowable mixing. Nevertheless “exceedance” of action levels, measured at the point of discharge, will trigger additional BMP implementation requirements at all of the Actions Levels. Due to the lack of consideration of mixing in setting benchmark values and action levels and the cost and compliance implications of not meeting these levels, a general permittee should be, and is under PCHB ruling, allowed to apply for a mixing zone for its discharge. The mixing zone must then be considered in assessing whether or not a benchmark value or an Action Level is exceeded.

S10D implies that Ecology intends to assess "compliance with this permit" without consideration of mixing or dilution as allowed in state water quality standards WAC 173-201A.

Recommendation: Ecology must allow for consideration of mixing zones in this permit as required by the state water quality standards prior to conducting any “compliance with this permit” assessment. Ecology should provide for application for a mixing zone on the NOI and include an explanation of the options and benefits in the permit and fact sheet. Benchmark values that are calculated from water quality standards, as Ecology currently is doing, must be revised to reflect the impact of compliance at the edge of the mixing zone .

Puget Sound Partnership: The imminent passage of the Puget Sound Partnership bill gives rise to consideration of storm water in a larger

Attachment 2: Boeing comments on Feb 2007 draft permit

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geographic and societal sense. Stormwater may be one of the greatest threats to a sustainable Puget Sound. It is alleged to be the dominant carrier of various pollutants that adversely affect a range of plants and animals that call the Sound home. These are pollutants that originate from a range of sources including industry, homes, transportation and overseas airborne transport. Pollutants that may better be addressed by employing other Ecology programs to eliminate the source of these pollutants from the environment. Copper free brakes, non-zinc guard rails, bio-degradable agricultural pesticides and the ability for POTWs to accept and treat more storm water may be much more effective approaches to managing “storm water” than any number of ISWGP mandated BMPs and treatment systems. Ecology is encouraged to step back and take a larger view of the storm water challenges to see if there are fixes outside the traditional command and control NPDES program and related RCW’s. Industrial discharges were listed in the “Extinction is not an Option” document from Gov Locke as less than seven percent of the challenge for salmon, and storm water is only a part of this seven percent. While industrial permittees must do their part, a continued effort to squeeze industrial discharges will fail to solve the Puget Sounds Problems while diverting scare resources from more productive actions.

The Boeing Company continues to strive to work with Ecology to develop regulatory and voluntary approaches to improving the environment while maintaining a healthy, job creation, business environment. Please contact me or Mel Oleson (253 988-0378) if you have questions or wish to further discuss the above issues.

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Attachment: Section by section technical comments

Attachment 2: Boeing comments on Feb 2007 draft permit

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