

Attachment 3: Technical Comments on November 2007 Draft Industrial Stormwater General Permit

The following comments are generally applicable to the permitting process.

1) Pending issuance of the final EPA MSGP for industrial discharges and potential conflict with state authority of set state water quality standards

EPA has still not finalized its 2005 draft MSGP for industrial storm water discharges. EPA acknowledges that the main reason for the continued delay is the ongoing Section 7 ESA consultation. The potential impacts of industrial storm water discharges on salmonid species here on the West Coast is the major concern of Fisheries as expressed in their comment letters on both the EPA draft permit and the Ecology February 07 draft permit.

Fisheries clearly states that it does not concur with EPA's assertion that even compliance with national water quality criteria would be protective of listed salmonid species. By issuing the ISWGP with new benchmarks for metals, including copper, expands the dispute between EPA and the Services to this permit. The state of Washington should not in front of the federal agencies in this battle. The draft Fact Sheet does not contain any supporting arguments for its determination that the copper benchmark will be protective of listed species. Ecology does not explain why it is not proposing to take EPA's approach to setting site specific benchmarks. An appeal of this permit will focus on this lack of support and may raise issues more appropriate to the arena of federal courts. For example, the recent decision in the Arizona state program delegation appeal which addresses CWA and ESA conflicts will most likely be appealed to and heard by the Supreme Court next session.

Ecology should avoid getting into the middle of these Federal consultations. This federal issue cannot be resolved in state court. If Ecology believes the standards need to be revised it should be done through rulemaking and not de facto case by case permit appeal rulings.

2) Pending outcome of appeal of municipal Phase 1 and 2 permits in Washington.

The Phase I and II Municipal general stormwater permits are scheduled for hearing starting in mid-April. This is the first time these permits have been appealed to the PCHB. Two of the main issues are compliance with water quality standards and how AKART applies to municipal discharges.

The outcome of this appeal will impact the ISWGP not just because many ISWGP discharges are to municipal systems, but because of broader equity and consistency issues within the state's storm water management program. If Ecology does not delay issuing a new ISWGP until the Board rules on the municipal appeal or a settlement is reached, it will miss a chance to integrate these storm water control efforts and achieve consistency between the industrial, construction and municipal permits.

3) Development of a coordinated monitoring and sampling program.

In order to have a storm water program that provides scientifically defensible measure of results a broad based monitoring program in both discharges and receiving waters is essential. The state needs to create an integrated, coordinated storm water program to assess all sources of storm water contamination. The PSP will help to direct and integrate achievement of these goals. The municipalities which are participating in the PS Coordinated Monitoring Program advisory committees recognize the importance of this kind of integrated monitoring

approach needs to be extended to industrial and construction related discharges. Further, Ecology needs to work with the stakeholders to determine 1) how to structure this monitoring program and 2) create a reliable and adequate source of funding.

4) Application of AKART to Corrective Action.

The fact sheet accompanying this draft permit has provided an incomprehensible defense of the change in definition and application of AKART. The fact sheet discussion is in direct conflict with Ecology's own statement in Exhibit A - Policy Statement to be published in the Washington State Register (attachment 4) collected from Ecology's website

(http://www.ecy.wa.gov/programs/wq/stormwater/industrial/exhibit_a1.pdf) which has formed the basis for storm water AKART interpretation for prior permit cycles. Specifically this exhibit states: "If these practices are implemented correctly, Ecology believes they should result in compliance with existing regulatory requirements for stormwater – including compliance with the Federal Clean Water Act, Federal Safe Drinking Water Act and State Water Pollution Control Act."

The discussion in the Ecology fact sheet asserts that a permittee's duties to meet AKART (all known, available, and reasonable methods of prevention, control, and treatment) and state water quality standards justify requiring detailed engineering reports for facilities which exceed a benchmark after implementing Step A corrective action. See Fact Sheet at 91. That assertion is at odds with the adaptive management approach to industrial stormwater management on which the draft and existing permits are based, and as provided for in state law (RCW 90.48.555(8)(a)). Under that approach, a permittee which implements appropriate BMPs from an Ecology-approved SWMM and otherwise complies with permit conditions is presumed to meet AKART and water quality standards, without having to demonstrate the technical basis for those BMPs. See Draft Permit § S3.A.3.ii (permittees choosing to follow stormwater practices in SWMMs need not document the technical basis for those practices, including compliance with AKART and water quality standards). State law further provides that compliance with water quality standards is presumed under those circumstances, unless "discharge monitoring or other site specific information" demonstrates that a water quality violation exists. RCW 90.48.555(6).

Ecology contends that it may require engineering reports under this permit to meet AKART and water quality standards for two reasons, neither of which withstands scrutiny. First, Ecology indicates that the "most current technology" characteristic of AKART (WAC 173-210A-020 Definitions) means a permittee exceeding benchmarks after completing Step A must go beyond the BMPs contained in an Ecology-approved SWMM, or at least examine that option in a detailed engineering report, while remaining under the general permit. Even if this interpretation of AKART were correct, would not all permittees similarly situated be required to implement an advance in the current state of the art ("most current methodology") for stormwater management revealed in one permittee's engineering study, regardless whether those other permittees were meeting benchmarks? If meeting benchmarks is the distinguishing factor among such permittees, the benchmarks would appear to be functioning as numeric AKART standards, despite Ecology's stated intention to the contrary. See Fact Sheet at 25 (stating benchmark values are not numeric permit limits).

Attachment 3: Technical Comments on November 2007 Draft Industrial Stormwater General Permit

Second, Ecology appears to say that a permittee exceeding a benchmark after completing Step A can be required to do an engineering report because the permittee is ineligible for the statutory presumption of compliance with water quality standards in RCW 90.48.555(6). Under that statute, the presumption does not apply if monitoring data or other site-specific information “demonstrates” a discharge “causes or contributes to” a water quality violation. Excursions over benchmarks cannot “demonstrate” that a discharge “causes or contributes to” a water quality violation since benchmarks are neither water quality standards nor numeric permit limits. See Fact Sheet at 25. Ecology implicitly acknowledges this by stating it will look to the engineering report to “provide Ecology with the basis to determine whether the Permittee has implemented AKART” and (presumably) has met water quality standards. See Fact Sheet at 91. Under its approach, Ecology would confirm whether the statutory presumption applies by requiring the first deliverable—a detailed engineering report—that would be required only if the presumption were inapplicable. That result is not what the Legislature intended when it enacted RCW 90.48.555.

Specific comments by permit section are as follows:

S1.A Table 1 Footnote 1

1 All activities requiring permit coverage may not be included in a single SIC Code. Facilities with activities similar to those described in the narrative title shall also apply for permit coverage.

This requirement is unclear and imprecise. The placement of this requirement in a footnote is likely to be missed by a permittee. Under this requirement, a facility will not be allowed to rely on the SIC code used for the state Department of Revenue reporting. The permittee would be required to consider if activities are “similar” to the “narrative title” of the SIC code as opposed to a careful comparison of a facility’s activities to the SIC code definitions. Will any facility engaged in recycling, for example, be required to obtain permit coverage under SIC code 5015? How will Ecology enforce this requirement? Condition S1.B. (Significant Contributors of Pollutants) is adequate for Ecology to require a facility to obtain coverage under the permit. Footnote 1 should be deleted for the reasons stated above.

S2.A.4 and Appendix 2

Facilities with *Significant Process Change*

A Permittee anticipating a significant process change shall submit a completed application for coverage, marked as modification of coverage, as follows:

- a. The Permittee shall apply for modification of coverage at least 60 days before implementing the significant process change.
- b. The Permittee shall complete public notice requirements as part of a complete application for modification of coverage.
- c. The Permittee shall update the SWPPP to reflect the change before commencement of the significant process change.

Attachment 3: Technical Comments on November 2007 Draft Industrial Stormwater General Permit

- d. The Permittee shall revise and submit the SWPPP to Ecology with the application for modification of coverage. Receipt of the SWPPP by Ecology does not constitute review or approval of the SWPPP contents.
- e. The Permittee shall comply with the SEPA, as applicable to the proposed significant process change, as part of a complete application for modification of coverage.

Significant Process Change means any modification of the facility that would result in any of the following:

- 1 Add different pollutants in a significant amount to the discharge.
- 2 Increase the pollutants in the stormwater discharge by a significant amount.
- 3 Add a new industrial activity (SIC) that was not previously covered.
- 4 Add additional impervious surface or acreage such that stormwater discharge would be increased by 25% or more.

Does Ecology anticipate that a facility will submit a new application for coverage, submit an updated SWPPP and go through public notice requirements for any new process even if the process does not change the type and amount of pollutants in the site's stormwater? In most cases, a significant process change as defined in the draft permit will not result in any changes to the requirements imposed by the permit (e.g., additional monitoring). S5.B (Additional Sampling Requirements for Specific Industrial Groups) of the draft permit lists additional requirements for five industrial groups (Table 3). The requirement to submit a new application for coverage when there will be effectively no change in permit requirements is an unnecessary administrative burden to permittees and to Ecology. We propose that S2.A.4 and the definition of Significant Process Change be revised to exclude changes that will not change sampling requirements.

The definition of Significant Process Change is a *circular* definition because the word *significant* is used in items 1 and 2 of the definition. A circular definition is inappropriate for a permit where definitions should be concise and unambiguous.

S2.A.3.b

b. New Facilities

- i. All new facilities shall apply for coverage at least 180 days before the commencement of stormwater discharge from the facility.

...

S2.E.1

E. Permit Coverage Commencement

Ecology intends to notify applicants by mail of their status concerning coverage under this permit within 60 days of completion of all application requirements including compliance with SEPA and public notice requirements.

1. Except for an application requesting modification of a Permittee's sampling protocol, if the applicant does not receive notification from Ecology, coverage/modification of coverage under this permit automatically commences on the latest of the following:
 - a. The 61st day following receipt by Ecology of a completed application for coverage,
 - b. The 31st day following the end of a 30-day public comment period, or
 - c. The effective date of the general permit.

The current permit requires a new facility to apply for coverage at least 38 days before the commencement of activity. There is a difference between the commencement of activity and the commencement of stormwater discharge but this difference, in practice, is usually academic. The Fact Sheet on page 61 states;

“Condition S2.A.3 and A.4 of the draft permit requires new facilities or existing facilities not previously under permit coverage to submit their application coverage at least 60 days before beginning operation or implementing a significant process change . This is the minimum amount of time that is legally required to issue coverage.”

The Fact Sheet does not cite the legal requirement for the 60 day requirement.

In addition, the 180 days in S2.A.3.b conflicts with S2.E (Permit Coverage Commencement). It appears that this may be a typographical error. A 180 day requirement is not practical and is an unnecessary burden to businesses. Business decisions to start a new operation are often made that would require a shorter period of time than 180 days in order to prevent the delay the start of operations and the unnecessary commitment of resources. The 38 day period in the existing permit, or even a 60 day period is consistent with the time required to obtain local and other state permits.

S3.B.1

The site map shall:

- ...
- i. Identify conditionally approved non-stormwater discharges in S5.D.,
- ...
- m. Identify lands and waters adjacent to the site that may be helpful in identifying discharge points or drainage routes.

The requirement in condition i to identify conditionally approved non-stormwater discharges on a map will be difficult for a large and complex site, such as Boeing's major manufacturing facilities in the State of Washington. Many of these discharges are pervasive but generally small such as air conditioning condensate, irrigation such as landscape watering, and fire protection system testing and drainage points. Also, many of these discharges are transient in nature such as potable water line flushing that occurs when a new pipe is installed. This requirement may require a great deal of effort with little environmental benefit, and only serve to clutter a drawing and obscure what are significant potential pollutant sources. We recommend that this condition be deleted since sufficient documentation of conditionally approved non-stormwater discharges is required by S5.D.3 (Conditionally Approved Non-Stormwater Discharges).

We recommend that condition m be deleted. The requirement to identify lands and water adjacent to the site may be useful but adjacent properties are often inaccessible, thereby making it difficult to provide an accurate and complete rendering of features found on such adjacent properties. A permittee likely will not have the legal right to enter adjacent property for such purpose and may be held liable for an erroneous characterization of features on adjacent property.

S3.B.2.b

The inventory of industrial activities and equipment shall identify all areas associated with industrial activities (see Table 1) that have been or may potentially be sources of pollutants, including, but not limited to, the following:

- ...
- ix. The inventory shall include incidental sources such as tire wear or equipment leaks.

What does Ecology anticipate an inventory of tire wear or equipment leaks would look like? Equipment leaks are often associated with mobile equipment. A general list would be adequate to describe incidental or pervasive pollutant sources such as tire wear, mobile equipment leaks, vehicle brake wear, and galvanized building surfaces. Therefore, the permit should state instead;

ix. The inventory shall include a general list of incidental sources such as tire wear or equipment leaks.

S3.B.3.a.ii and iii

- ii. Good Housekeeping: The SWPPP shall include BMPs that define ongoing maintenance and cleanup, as appropriate, of areas which may contribute pollutants to stormwater discharges. The SWPPP shall include the schedule/frequency for completing each housekeeping task.
- iii. Preventive Maintenance: The SWPPP shall include a BMP(s) to inspect and maintain the stormwater drainage, source controls, treatment systems (if any), and plant equipment and systems that could fail and result in contamination of stormwater. The SWPPP shall include the schedule/frequency for completing each maintenance task.

Large and/or complex facilities often use sophisticated computing systems to manage preventive maintenance. Accordingly, the draft permit should state clearly that SWPPPs may reference a facility's internal systems used to track housekeeping and preventive maintenance task and schedules.

S3.B.3.a.iv

Spill Prevention and Emergency Cleanup Plan: The SWPPP shall include BMP(s) to identify areas where potential spills can contribute pollutants to stormwater discharges. The BMP(s) shall specify material handling procedures, storage requirements, and cleanup equipment and procedures, as appropriate. The SWPPP may include excerpts of plans prepared for other purposes [e.g., Spill Prevention Control and Countermeasure plans under Section 311 of the CWA], where those excerpts meet the intent of this requirement.

This provision should be amended to clarify that a SWPPP may refer to other facility plans such as the SPCC plan without repeating text from these plans. Repeating the same requirements in more than one plan increases the probability of an error as one plan is revised and the other is mistakenly not revised. In addition, this would decrease the burden on complex facilities that often have multiple plans with overlapping requirements.

S3.B.3.a.v

Employee Training: The SWPPP shall include BMPs to provide SWPPP training for employees who have duties in areas of industrial activities subject to this permit. At a minimum, the Permittee shall develop a training plan that includes:

- A. The content of the training.
- ...
- B. The process of training including field exercises

...

E. The Permittee shall attend at least one Ecology-approved industrial stormwater training session for this permit within one year of obtaining coverage under this permit.

Is it Ecology's intent to require field exercises? If so, Ecology should clearly state in the permit what the elements and the goals of the field exercises should be. Ecology should allow the use of field exercises performed for other purposes such as compliance with other regulatory requirements (e.g., HAZWOPER or OSWER) to be used to meet this requirement.

When will Ecology provide training courses covering the subjects listed above, or in the alternative provide a list of approved third-party training courses? We are concerned that there will be inadequate time to comply with this requirement in the absence of such guidance. The draft permit should be revised to waive this requirement until Ecology or a third-party provider has developed a course (and gained approval from Ecology), and adequate time has been given permittees to schedule and attend such courses.

This requirement is unclear because it does not state who should attend this course. We recommend that this requirement be revised to state that the person or persons identified in SWPPP shall attend this course. Therefore, we propose that item E be revised as follows;

E. The ~~Permittee~~ SWPPP shall identify by name or title person(s) that shall attend at least one Ecology-approved industrial stormwater training session for this permit within one year of obtaining coverage under this permit, or within one year of the availability of an Ecology-approved industrial stormwater training session for this permit whichever is later.

S3.B.3.a.vi

Inspections and Recordkeeping: The SWPPP shall include documentation of procedures to ensure compliance with permit requirements for inspections and recordkeeping. At a minimum, the SWPPP shall:

- A. Identify facility personnel who will inspect designated equipment and facility areas as required in S7.B. and C,
- B. Provide a tracking or follow-up procedure to ensure that a report is prepared and any appropriate action taken in response to visual inspections,
- C. Define how the Permittee will comply with signature requirements and records retention identified in S9, Reporting and Recordkeeping Requirements, and
- D. For each inspection, include certification of compliance with the SWPPP and the permit using the language in S7.D.

We propose that condition A in the draft permit should be revised to:

A. *Identify facility personnel by name or by title who will inspect designated equipment and facility areas as required in S7.B. and C,*

This revision will account for changes in staff and multiple people performing the same task at different times, and is consistent with S4.B.3.a.i (Pollution Prevention Team).

Why is it necessary to have a documented procedure for response tracking and follow-up? We propose that this requirement be deleted because it is unnecessary. Documentation of the identification of a problem and the follow-up actions as required under S7.D (Inspection Results) is adequate.

S3.B.3.d

Stormwater Peak Runoff Rate and Volume Control BMPs

- i. For stormwater runoff from new facilities and facilities that have significant process change, the Permittee shall evaluate whether flow control is necessary to satisfy the state's AKART requirements, and comply with state water quality standards.

This requirement in S3.B.3.d.i appears to have been revised from “new development to redevelopment” in the current permit to “new facilities and facilities that have significant process change”. The revised requirement appears to be broader, and would, in conjunction with the new *significant process change* definition, appear to require a facility to evaluate flow control even when flow is not affected by the process change. We propose that this requirement be revised to the language in the existing permit, or limited to “significant process changes” that result in an increase of impervious surface such that stormwater discharge would be increased by 25% or more. This revision would be consistent with the Stormwater Management Manual and the satisfaction of AKART.

S4.B.1

B. Sampling Requirements

1. Sample Timing and Frequency
 - a. The Permittee shall sample the discharge from each designated location identified in its SWPPP in accordance with this sampling schedule and frequency identified below:

Facility Location Sampling Period Minimum Number of Storm Events Sampled

| | | |
|------------------|----------------------------|---|
| West of Cascades | September 1 to March 31 | 5 |
|------------------|----------------------------|---|

East of Cascades September 1 to April 30 3

- b. The Permittee shall take at least one sample from each designated location to capture the first discharge from the site after September 1.
- c. The Permittee shall sample each designated discharge point as soon as possible after the discharge begins.
- d. The Permittee shall obtain a single grab sample, a time-proportional sample, or a flow-proportional sample.
- e. If the Permittee allows stormwater to accumulate in a retention pond, which subsequently discharges, the Permittee shall obtain a sample of the discharge, even if the discharge is not associated with a particular storm event.
- f. The Permittee need not sample during unsafe conditions.

We agree with Ecology's decision to remove the storm event requirement. We have found that this requirement was often difficult to meet in Western Washington. On page 69 of Fact Sheet, Ecology states: *Ecology streamlined the sampling requirements in the draft permit by allowing the Permittee to sample 1) within 12 hours of the beginning of the discharge, or 2) within 12 hours of the beginning of normal business hours.* This requirement is not repeated in the draft permit.

The condition stated in the existing permit, that a permittee is not required to sample outside of normal business hours, is not in the draft permit. It is important to maintain this condition in the new permit. In particular, it is important for the September first flush event. What if the first flush event occurs on a weekend or holiday or at night? It would unnecessarily costly to keep personnel on call or on site to obtain samples from the first flush event if this event occurred outside of normal business hours.

S4.B.3.

Sample Documentation

For each stormwater sample taken or visual inspection conducted, the Permittee shall record the following information in the site log:

- a. Sample date,
- b. Sample time,
- c. Sample location (using the unique 4-digit alphanumeric identifier established in the SWPPP),
- d. Method of sampling, and method of sample preservation, if applicable, and
- e. Individual who performed the sampling.

This requirement does not make sense with respect to a visual inspection. The text "or visual inspection conducted," should be deleted since visual inspection documentation requirements are adequately addressed under S7.D, and items a to e listed above are irrelevant to visual inspections.

S4.C.3

A Permittee that implements a significant process change shall continue sampling and may not use previous sampling results to demonstrate consistent attainment.

We understand that this requirement is in the current permit. However, the new definition of “significant process change” is broad and applies to the entire facility. Previous sampling results cannot be used if there is a facility change even if the change does not affect the amount or quality of discharge, or if a part of a facility is changed that does not drain to a particular outfall. See also comments above on the new definition of significant process change.

S4.D

Analytical Procedures for Sampling Requirements

The Permittee shall ensure that analytical methods used to meet the sampling requirements specified in this permit conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA).

If there is conflict between this requirement and methods specified in Tables 2, 3, 4, 5 and 6, which method will prevail? Ecology should clarify this in the permit. Also, will Ecology allow a reasonable time for a laboratory to implement a significant revision to a method? The existing permit has an additional statement, “unless otherwise specified in this permit or approved in writing by the Department of Ecology (Ecology) provided that such otherwise approved analytical method is the equivalent of that found in the guidance cited in this section or will result in more accurate analytical results or will have a lower detection limit.” Why did Ecology remove this statement from the permit?

S5.A Table 2

Table 2: Benchmarks, Thresholds, and Sampling Requirements Applicable to Discharges to Non-303(d)-listed Surface Water bodies

The basis for these benchmarks is not clear from the Fact Sheet. Ecology should disclose the data used to determine these benchmarks and subject them to independent review.

Turbidity: Boeing believes that total suspended solids (TSS) should replace turbidity as a monitored parameter, as stated in our comments on the February 2007 draft of the permit.

Attachment 3: Technical Comments on November 2007 Draft Industrial Stormwater General Permit

Turbidity is an inadequate surrogate for TSS. This change would be consistent with the 6415 Data Analysis Report. Setting the turbidity benchmark at 25 NTU based on field experience, as stated in the Fact Sheet, seems arbitrary and not supported by any data. As Boeing found at some of its permitted facilities, turbidity results above the 25 NTU benchmark can be attributed to dissolved iron from groundwater infiltration and architectural uses such as iron pipes rather than high levels of suspended solids. In fact, Ecology has agreed with this evaluation and that additional action under Level 3 Response under the exiting permit is unnecessary.

Copper: With respect to copper, Boeing is concerned that Ecology is setting benchmarks based on non-peer -reviewed documents and a draft federal Multi-Sector General Permit from EPA that has not been finalized. Sources of copper in the environment are often pervasive and out of control of the permittee (e.g. car brakes). This will eventually require permittees to treat stormwater using unproven technology, as Boeing observed in its comments on the February 2007 draft of this permit.

S5.B

Additional Sampling Requirements for Specific Industrial Groups

- 1 In addition to the requirements in Table 2, Permittees identified by an industrial activity in Table 3 shall sample stormwater discharges to surface water for the parameters and frequencies specified in Table 3.
- 2 Ecology authorizes no reduction in sampling frequency except through a modification of permit coverage in accordance with S4.C. that specifies what, if any, reduction will be allowed.

Ecology does not distinguish between primary activity of a facility and secondary activity even though SIC codes generally only apply to primary activity as demonstrated by use of the phrase “primarily engaged in” in SIC code definitions. Also, as discussed above, it appears that Ecology is requiring that facilities with activities that are “similar to those described in the narrative title” also apply for permit coverage.

On page 57 of the Fact Sheet, Ecology stated that “Applicants must identify all applicable SIC codes for any and all industrial activities conducted on their site.” Ecology states later on the same page that “Ecology clarified this permit requirement because the permit contains some industry-specific sampling requirements that can yield useful data that will help Ecology make better decisions at the next permit renewal.” Again, this is an unnecessarily burdensome requirement because, in most cases, the additional activities likely to occur at a facility will not result in additional sampling requirements.

S5.E.1

Prohibited Discharges

Unless authorized by a separate NPDES or state waste discharge permit, the following discharges are prohibited:

- 1 Process Stormwater. The permit prohibits the discharge of process wastewater. Stormwater that commingles with process water becomes process wastewater. This definition of process wastewater does not include non-stormwater discharges conditionally approved under S5.D.

“Process Stormwater” is a new term which is misleading. We recommend revising this subheading to “Process Wastewater” since stormwater and process wastewater that is co-mingled is process wastewater. This revision is consistent with S3.B.1 (Discharge Prohibited) under the existing permit.

S6, Table 6

Footnote g has a spelling error.

S7.A

Inspection Frequency

1. The Permittee shall conduct visual inspections of the site each month during the reporting periods specified in Table 7 using personnel identified in the SWPPP.
2. The Permittee shall also conduct visual inspections of the site each time a stormwater discharge is sampled.
3. The Permittee shall conduct dry season inspections described in S7.C.

Does Ecology intend that the term “site” as used in the permit provision 2 above, should refer to an entire facility, or just the sampled outfall location?

The requirement to inspect the entire facility each time a discharge is sampled may be a difficult and time consuming undertaking for a large site such as Boeing’s major manufacturing facilities in the State of Washington, and would potentially delay sampling if a large number of outfalls are being sampled during each sampling period. Inspection of sample locations each time samples are collected, and monthly inspections of the facility, is more than adequate. If there are visible problems at an outfall (e.g., an oil sheen), a permittee would be expected to investigate under S3.B.3.a.vi (Inspection and Recordkeeping)

What is Ecology's expectation for inspection of outfalls that are not sampled when representative outfalls are sampled? Annual inspection of these outfalls is required under the existing permit.

S7.D

Inspection Results

The Permittee shall record the results of each inspection in an inspection report or checklist and keep the records with the Permittee's SWPPP in a site log book. The Permittee shall ensure each inspection report includes observations in S7.B and:

- 1 Time and date of the inspection;
- 2 Locations inspected;
- 3 A statement that, in the judgment of the person conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and this permit;
- 4 If the site inspection indicates that the site is out of compliance, shall include a summary of the remedial actions that the Permittee shall take to meet the requirements of the SWPP and the permit and a schedule for implementing the remedial actions;
- 5 Name, title, and signature of the person conducting site inspection; and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief;"
- 6 A review by and signature of the duly authorized representative of the facility, in accordance with G.2.B; and
- 7 A statement that, in the judgment of the person conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and this permit.

Will Ecology provide a new form for documenting inspection results, similar to the form that Ecology has provided under the existing permit?

The certification of S7.D.5 by the inspector is a new requirement from the existing permit. This provision should be amended to clarify that the certification can be signed by the trained supervisor of the person performing an inspection. That is, we propose that this requirement be revised as follows;

- 5 *Name, title, and signature of the person conducting the site inspection or the trained supervisor of the person conducting the site inspection; and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief;"*

S8.A.2.c

Corrective Action Determinations

- 1 Individual sample results comparison. Upon receipt of results of individual sampling events, the Permittee shall compare the results to the benchmarks and thresholds for each discharge point. If any result exceeds a threshold, the Permittee shall comply with S8.B.
- 2 Seasonal median comparison
 - a. At the end of each sampling period as specified in S4, the Permittee shall calculate the median for each parameter using all samples obtained during the wet season for each designated discharge point.
 - b. At each discharge point and for each parameter, the Permittee shall compare the median for the wet season for each parameter to the benchmark.
 - c. If the seasonal median value exceeds the benchmark for any parameter one time, the Permittee shall implement the corrective actions described in S8.C, Step A Corrective Actions to ensure that all parameters are below the benchmark.
 - d. After the Permittee has implemented the corrective actions in S8.C, Step A Corrective Actions for all parameters, if the seasonal median exceeds a benchmark one time for any parameter, the Permittee shall implement Step B Corrective Actions in Condition S8.D.

The requirement to implement Step A corrective action for *all* parameters when only certain benchmarks have been exceeded is contrary to the principle of adaptive management. So too is requiring a facility to move to Step B corrective action when a seasonal median exceeds a benchmark for a parameter which was not the subject of an earlier Step A corrective action program. In addition, it is conceivable that a facility will be subject to Step A requirements because a seasonal median exceeds a benchmark for an outfall that drains only a part, and perhaps only a small fraction of an entire facility.

Boeing strongly disagrees with this approach. For example, the pollutant sources of suspended solids and of petroleum hydrocarbons are often very different. Evaluating pollutant sources for parameters that are within benchmarks does not make sense. In addition, evaluating an entire facility when only a portion of the facility has discharge that has exceeded a benchmark does not make sense. This would be a waste of resources, and would result in additional complexity in reports submitted to Ecology. The permit should have an approach that is consistent with a logical, systematic approach where a problem is identified through exceedance of a benchmark followed by a focused evaluation and elimination of, or treatment of pollutant sources. In addition, simpler focused reports submitted to Ecology will be easier for Ecology to evaluate in a timely fashion.

S8.A.3

Additional requirements for Permittees covered under the permit issued August 15, 2007.

- a. Any Permittee, who has taken samples between April 1 and May 31, 2008, shall submit a DMR in accordance with S9.

If a facility submits a DMR for samples collected between April 1 and May 31, 2008, must such results be counted as seasonal medians and made subject to corrective action determinations? Such requirements would be inappropriate because it would be the application of permit requirements to monitoring results obtained under a previous (expired) permit. In addition, the small number of samples (as little as one) would not be representative of stormwater being discharged by a facility. If this requirement was merely to insure that this data is available to Ecology, then this requirement should be revised to;

- a. *Any Permittee, who has taken samples between April 1 and May 31, 2008, shall submit a DMR in accordance with S9. Calculation of the seasonal median using this data is not subject to S8.*

S8.A.3.b and c

- b. Any Permittee who is in a Level 2 Response shall immediately begin a Step A Corrective Action described in S8.C. The Permittee shall submit a DMR and complete Forms 3 and 4 reports.
- c. Any Permittee who is in a Level 3 Response shall immediately begin a Step B Corrective Action described in S8.D. The Permittee shall submit a DMR, and Form 5 with both the certification statement and the scope of work for the engineering report as described in S8.D.2 and 3.

Ecology is attempting to apply new requirements based on sample data obtained under a previous permit. Under the draft permit, any facility which today is implementing a Level 2 Response under the existing permit would move immediately to Step A corrective action classification. It is conceivable that many such facilities would not otherwise be subject to Step A using Ecology's proposed seasonal median criteria. To avoid this inequity, Boeing proposes that the "crosswalks" be deleted from the permit.

S8.C

Step A Corrective Action Requirements

For any Permittee Step A is conducted only one time to ensure that all parameters are less than the benchmarks.

During a Step A Corrective Action, the Permittee shall:

- 1 Within 2 two weeks of entering Step A Corrective Action status, identify and correct any BMPs that are not properly installed, properly constructed, or properly maintained;
- 2 Identify potential sources of all stormwater pollutants in the discharge;
- 3 Identify, select, and implement additional source control and treatment BMPs that the Permittee will implement within 18 months to reduce all pollutant concentrations below the benchmarks;
- 4 In the spring and in accordance with the schedule in Table 8, submit a DMR in accordance with S9.A and a Form 3 report (provided in Appendix 6) to include at a minimum:
 - a. A list of actions taken within two weeks of entering Step A Corrective Action status, per conditions S8.C.1 and 2 above, and
 - b. A list and description of additional source control and treatment BMPs in accordance with S8.A.3 and an implementation schedule for additional BMPs which is not to exceed 18 months after entering Step A status;
- 5 In the fall and in accordance with the schedule in Table 8, submit a Form 4 report (provided in Appendix 6) to include, at a minimum, a status report on implementation of the additional source control and treatment BMPs that will be implemented within 18 months of entering Step A status.
- 6 One year after entering Step A status and in accordance with the schedule in Tables 8 and 9, submit a DMR in accordance with S9.A and an updated Form 4 report. The report shall include, at a minimum, a status report on implementation of the BMPs identified in S8.C.3
- 7 Eighteen months after entering Step A status and in accordance with the schedule in Tables 8 and 9, submit a final Form 4 report. The report shall include, at a minimum, a list of BMPs that the Permittee has implemented in accordance with S8.C.3.
- 8 As sources are identified and BMPs installed or corrected, update the SWPPP to reflect findings, actions taken, and BMPs implemented;
- 9 Maintain copies of all DMR's and reports in the SWPPP;
- 10 Table 9 summarizes the requirements for a Step A Corrective Action.

Although the elimination of action levels has changed the complexity of the draft permit, the benchmarks which would now serve as the trigger points for the requirement to begin Step A corrective action are far more stringent than the deleted action levels or the benchmarks contained in the existing permit. The requirements of Step A are similar to the Level 2 requirements under the existing permit, but Step A is initiated by exceeding a benchmark and not the higher action level of the existing permit. Similarly, Step B is similar to Level 3 but is

initiated by exceeding the lower benchmark level. Also, it is possible that a facility will enter Step B for exceeding a benchmark once for a given parameter if the facility has completed Step A for another parameter. Boeing strongly opposes this approach for the same reasons stated under Boeing's comments to S8.A.2.c above.

S8.D

Step B Corrective Action Requirements

During a Step B Corrective Action, the Permittee shall:

1. Prepare an engineering report in accordance with WAC 173-240-130 by a licensed professional engineer. The report shall include an evaluation of effectiveness and costs of all possible source control and treatment BMPs to reduce all pollutants to below benchmark concentrations. The Permittee shall submit the engineering report within 12 months of entering a Step B Corrective Action.
2. In the spring and in accordance with schedule in Tables 8 and 10, submit a DMR and Form 5 (provided in Appendix 6) with a certification. The statement shall certify that the Permittee will complete the engineering report within 12 months of entering a Step B Corrective action and will meet the schedules identified in the engineering report.
3. In the fall, submit a scope of work for the engineering report with Form 5 (provided in Appendix 6) in accordance with the schedule in Tables 8 and 10.
4. One year after entering Step B status and in accordance with the schedule in Tables 8 and 10, submit a DMR in accordance with S9.A and the engineering report. The engineering report shall include a schedule for implementation not to exceed 12 months from Ecology approval or conditional approval of the engineering report. Ecology will review and approve, or conditionally approve the engineering report in writing. If the report is denied, Ecology will explain the reasons, and establish a schedule for resubmitting the report.
5. Implement the report in accordance with the approved implementation schedule upon Ecology's approval or conditional approval of the report.
6. Maintain copies of all DMR's, the scope of work, and the engineering report in the SWPPP.
7. As sources are identified, BMPs corrected, and new BMPs installed, update the SWPPP to reflect findings, actions taken, and BMPs implemented.
8. Table 10 summarizes the requirements of the Step 3 Corrective Action.

Ecology should clarify what it expects in terms of an engineering report under the draft permit. Does Ecology intend to contain all the analysis and detail required of an engineering report submitted to Ecology in support of an application for an individual stormwater permit? In the context of the Boatyard General Permit, Ecology staff has represented that an engineering report requires receiving water characterization and data collection to support a reasonable potential analysis.

Attachment 3: Technical Comments on November 2007 Draft Industrial Stormwater General Permit

If Ecology intends engineering reports under this permit to contain the same level of detail and analysis as those required for individual permits and/or Boatyard General Permit, Ecology should reconsider whether this approach is truly tenable in this context. A November 27, 2007 White Paper on the industrial permit and section 303(d) discharges to impaired water bodies states that Ecology does not have the staff or funding to review and approve engineering reports from the estimated 250 covered facilities that discharge to 303(d) listed water bodies. The White Paper describes one option for 303(d) discharges under which Ecology would issue enforcement orders requiring dischargers to prepare engineering reports:

Issue individual enforcement orders to the approximately 250 facilities discharging to impaired waters.

The orders would require an engineering report and a water quality assessment. The information would allow Ecology to conduct a reasonable potential analysis and establish appropriately derived water quality-based effluent limits for each facility. This approach would entail an even greater level of effort, as is required for an individual permit, requiring resources Ecology does not have. This approach does not appear to be tenable.

G2.B.1

The authorization is made in writing by a person described above and submitted to the Ecology.

The second “the” is a typographical error.

G25.3.c

Ecology is properly notified of the bypass as required in Condition S9.E of this permit.

Condition S9.E should be revised to condition S9.D.

Appendix 2 - Definitions

There are definitions of terms in this Appendix that are not used in the draft permit, including “*demonstrative approach*”. The definition of the demonstrative approach is not in the existing permit but is described in S9 along with “*presumptive approach*”. Has Ecology abandoned these approaches to complying with AKART?

Definitions of terms not used in the permit should be deleted from Appendix 2.

Attachment A.

If the option to issue orders does not work for 250 facilities, it is not likely to work for the much larger number of facilities that are likely to be subject to completing the engineering report under Step B. The proposed benchmarks for copper and zinc are based on the 50th percentile or median values for all discharge monitoring. On this basis alone, perhaps half or more of the covered industrial facilities will be required to prepare complex engineering reports. The 6415 Data Analysis Report reveals that entire industry sectors operate in excess of the pollutant benchmarks and action levels that the 6415 Data Analysis Report recommends. Under the draft permit, those industry sectors likely would be required to prepare engineering reports as part of Step B corrective action. Ecology should clarify if it in fact has the resources to review and approve such a potentially large number of engineering reports. It would be unfair to require businesses to prepare such engineering reports if Ecology lacks the resources to review them.

Ecology should also clarify why facilities operating under the draft permit would be required to do more in terms of corrective actions for exceeding benchmarks than typical facilities covered under individual permits. The 6415 Data Analysis Report concluded that the benchmarks and action levels the Report recommends would be protective of water quality standards. Ecology used the same methodology to conclude that its more conservative benchmarks for copper and zinc in the draft permit would also be protective of water quality. It is not clear why permitted facilities must develop engineering reports to achieve values at the 50th percentile of monitoring data when Ecology typically sets technology based limits at the 90th percentile where discharges with that level of zinc and copper would be protective of water quality.

Ecology should clarify which best management practices (BMPs) can routinely be relied upon to ensure that a facility will meet the proposed benchmarks for copper and zinc contained in the draft permit. Are there specific BMPs in Ecology's stormwater management manuals that will assure that a facility can achieve these new benchmarks? If not, it is improper for Ecology to set benchmarks for copper and zinc so low that there are no approved BMPs which dependably can be employed to meet these benchmarks. Ecology is currently participating in a study that is evaluating technology to reduce copper levels in stormwater runoff from boatyard facilities. Ecology should clarify whether the information from that study will be relevant to the industrial permit and whether information from that study can be used in developing engineering reports for industrial facilities that would be subject to Step B corrective action under the draft permit.

The permit needs to explain what options are available to comply with the copper and zinc benchmarks because it is no longer assumed under the draft permit that compliance with an Ecology stormwater management manual will constitute compliance with AKART. The Fact Sheet states that repeated excursions above a benchmark provide "sufficient evidence that a facility has not implemented AKART." According to the Fact Sheet, the "completed engineering report will provide Ecology with the basis to determine whether the Permittee has implemented AKART, should be allowed to stay under the general permit, or must apply for an individual permit."

Attachment 3: Technical Comments on November 2007 Draft Industrial Stormwater General Permit

The November 2007 White Paper has not been circulated with the draft permit's Fact Sheet. Nor is that document freely available to the public. Ecology cannot meet its disclosure requirement for seeking public comment on the draft permit without making this document available.

How long does a permittee wait after submission for Ecology approval. What is Ecology's process for reviewing, and approving or disapproving such reports?

Appendix 3

The list of Permittees that discharge to impaired water bodies and associated monitoring requirements can be viewed on Ecology's WEB site at:

<http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>

The list referenced above cannot be found at the website listed. A permittee cannot reasonably evaluate the impact of the draft permit without the information contained in the referenced list. It is premature for Ecology to release a draft permit for public review and comment without this key piece of information. Ecology needs to make this list publicly available and extend the comment period at least 30 days after release of the information to enable permittees an adequate opportunity to submit comments on the draft permit in light of the list.

Fact Sheet, page 70

Suspension of Sampling Due to Consistent Attainment

After two consecutive seasons for which the seasonal median equals or is less than a benchmark for any parameter, the Permittee may suspend sampling for that parameter for the remainder of the permit term. Consecutive means all samples used to calculate the seasonal median for a parameter at a specific sampling location.

Ecology based suspension of sampling for consistent attainment of benchmarks on a similar condition in EPA's MSGP (section 4.2.1.2). The MSGP allows suspension of sampling if the average of four samples collected during the first year of the permit does not exceed the benchmark. Ecology considered using the same criteria, but concluded four samples are not sufficient to adequately characterize the discharge from a facility.

What is Ecology's basis for stating that four samples are not sufficient to adequately characterize the discharge from a facility, and why is five samples adequate?

The statement "Consecutive means all samples used to calculate the seasonal median . . ." seems to contradict the first sentence in the same paragraph. This statement can be interpreted to mean that one sample that exceeds the benchmark will require continued sampling.

Economic analysis

It does not appear that the analysis faithfully accounts for the permit costs associated with the unique conditions in this draft permit. Nor does the analysis realistically characterize the potential range of costs that will be associated with preparation of an engineering study and the subsequent installation of treatment facilities.