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RE: Port of Seattle Comments on Public Draft Industrial Stormwater NPDES and State Waste Discharge General Permit

Dear Mr. La Spina and Ms. Winters:

The purpose of this letter is to provide the Port of Seattle's comments on the Public Draft Industrial Stormwater NPDES and State Waste Discharge General Permit (the "Draft Permit"). The Draft Permit represents a considerable change from the existing industrial stormwater permit that was issued in August 2002 and substantially modified in January 2005 (the "Current Permit"). We appreciate the opportunity to submit these comments, and for the opportunity to participate in your process in developing them.

GENERAL COMMENTS

Before addressing our specific comments on the Draft Permit, we would like to raise two overarching concerns at the outset. These are: (1) whether Ecology's focus on revising the Current Permit is premature; and (2) whether the approach laid out in the Ecology 6415 Report represents a better approach than the Draft Permit.

Ecology's Focus on Revising Current Permit Premature

Ecology has spent a great deal of its scarce staff time and consultant dollars on modifying the Current Permit. Apparently, the decision to do so was based on several basic assumptions, all of which the Port questions.

The first basic assumption is that the stormwater being discharged from sites regulated under the Industrial Permit represents a significant source of harm to water quality. We do not question that stormwater is a significant source of harm, but rather whether industrial sources represent a significant source from a watershed perspective.

Quantitatively, even for the Lower Duwamish watershed (for example), industrial outfalls represent less than 10 % of the surface area within the basin area. This is true even though there are more industrial outfalls (120 industrial vs. 79 non-industrial). Qualitatively, it is more difficult to compare industrial contributions to non-industrial because of the lack of municipal stormwater monitoring data. However, in a recent study of water quality in highly-industrialized streams, Ecology found that water quality

excursions in the receiving water were only slightly above acute water quality criteria.¹ Similarly, King County has also found that zinc levels in stormwater discharges from highly industrialized land areas are typically right around the acute criteria.²

Ecology's second assumption appears to be that it is necessary to modify the Current Permit because, in its present form, the Permit is inadequate to prevent the kind of environmental harm posed by these industrial facilities. The Port believes that this conclusion is premature. The ESSB 6415 Ecology Report³ found that there is an overall low rate of compliance by permittees with developing a SWPPP, monitoring, and documenting corrective actions in other states, and there is no reason to believe it is any different in Washington. Indeed, it is widely believed that there are numerous industrial operations that have failed to apply for an Industrial Stormwater Permit, and even more who have failed to comply with all the terms and conditions of the Permit. The Current Permit is technically complex, the costs of full compliance are often extremely high, and the operational changes it requires often represent a significant change for these businesses. For these reasons, the high rate of noncompliance is not surprising. Our point here is simply that until the Current Permit is fully implemented and enforced, it is premature to conclude that its provisions are inadequate to prevent environmental harm, and such further ratcheting down of standards is not necessary. Focus and resources needs to be on enforcement of the existing permit.

Ecology's third assumption is that the best way to decrease the risk of environmental harm presented by these facilities is by lowering benchmarks and action levels. This is an overly simplistic solution. Perhaps the best way to actually decrease risk is by providing more technical assistance to increase understanding of the requirements. Another idea is to provide financial assistance to reduce the business' resistance to compliance. Or to focus on developing technological solutions that are easy to install and evaluate effectiveness and which actually address the pollutants of concern. (For example, in general, source control BMPs for metals are extremely limited, and cost-effective treatment technologies to achieve the copper levels specifically likely don't exist.) The Ecology 6415 Study also offered numerous suggested solutions. However, all these alternatives would require Ecology to make a significant commitment of funds. Instead, the agency has taken the easy path (for them) of simply lowering benchmarks and action levels.

Port's Position on ESSB 6415 Ecology Report Recommendations

Ecology has requested specific feedback regarding whether the approach recommended in the ESSB 6415 Ecology Report is preferred over that in the Draft Permit. In particular, comments are requested on Special Conditions S4, S5, S6 and S8.

¹ Zinc and Copper Concentrations in an Industrial Area Creek during Storm Events (Department of Ecology, 2005)

² Douglas Henderson, King County METRO, 2001-2002 King County Green-Duwamish Watershed Water Quality Assessment

³ Evaluation of Washington's Industrial Stormwater General Permit (EnviroVision and Herrera Environmental Consultants, November 2006)

Overall, the Report's package of recommendations reflect an adaptive management approach that is more streamlined, more practical to apply, and more scientifically defensible. At the same time, these recommendations will produce a Permit that better protects State water quality. The Port believes that Ecology should use the recommendations of the Report, rather than the approach taken in the Draft Permit.

Monitoring and Reporting - The Port agrees with the following Report recommendations related to monitoring and reporting:

- Revise the monitoring and reporting schedule to correlate to a "site assessment" period and a "corrective actions" period
- Focus monitoring on the period that encompasses the season of highest precipitation: September through March
Require stormwater monitoring to occur at minimum of five times in this period
- Reduce written reports to twice annually (end of the winter and early fall)
Define new qualifying conditions for storm events that will make it easier for permittees to collect the required sample, and collect information that quantifies the data. (For example, rain in the last 24 hours, etc.)
- Identify a more meaningful set of monitoring parameters for assessing both BMP performance and potential receiving water impacts.

Benchmarks And Action Levels – The Report recommends establishing new permit targets for all of the parameters evaluated that are derived based on regional monitoring data. We support the Report's approach because it makes sense from both a legal and practical perspective.

In essence, the Report's approach is technology-based, while the Draft Permit takes a water-quality based approach. We believe a technology based approach is the right course. From a legal perspective, the technology-based approach is in accord with the Legislature's direction in RCW 90.48.550 that the water-quality based approach should not be used until a Reasonable Potential analysis has been completed, and the department has made a determination that technology-based BMPs are not effective to achieve compliance.⁴ Neither of these two steps has been undertaken. In addition, RCW 90.48.555(6) creates a presumption that a facility is already in compliance with water quality standards, as long as an entity is fully implementing the BMPs contained in the Stormwater Technical Manuals (SWMM). Ecology should not utilize a water-quality based approach until it has made the requisite determinations.

⁴ RCW 90.48.550 frames these threshold requirements as applying to the development of effluent limitations. Effluent limitations are defined in 40 CFR 122.2 as "any restriction imposed by the Director on quantities, discharge rates, and concentrations of pollutants." Based on this definition, we believe that the action levels are functioning as de facto effluent limitations.

From a practical perspective, the ESSB 6415 Ecology report also makes more sense. The Ecology 6415 approach ties actions to response. It also seeks to provide feedback to permittees on a macro level regarding what's working and what's not.

In particular, the Port supports the following recommendations:

- Use the Simple Percentile Method to establish benchmarks and action levels for those parameters that have an adequate database
- Retain three levels of response with the level of response dictated by each permittee's attainment of target concentrations (similar to the existing program)
- Change the response criteria, as summarized in Table 5-3
- Eliminate monitoring for the rest of the permit, if the median value is at or below the benchmark through two monitoring seasons. (This incentive is essentially the same as exists in the current permit)
- Implement recommendations to improve the effectiveness of routine visual site inspections

Improving NPDES Program Management

The Port supports the following recommendations concerning overall program management:

- Implement a supplemental monitoring program to address technical issues that cannot be effectively addressed through permittee monitoring
- Improve database management system to allow easier assessment of permit compliance, enhance identification of high risk sites, improve evaluation of BMP effectiveness and overall program performance
- Improve feedback and reporting associated with the permit by requiring better tracking of site activities and formalizing constructive feedback between Ecology and the permittees with regard to program operations and key research findings
- Provide constructive feedback to permittees on program operations and especially on BMP performance.

SPECIFIC COMMENTS ON DRAFT PERMIT

The following is a section-by-section discussion of our comments

Summary of Permit Report Submittals – Please clarify that there is not a requirement to submit a SWPPP one time per permit cycle. We understand that a SWPPP only needs to be submitted for new facilities.

S1. Table 1 – Ecology has added several industrial categories as requiring coverage under the permit that did not previously require coverage. Specifically, SIC Codes

42XX, 44XX, 45XX, and 5171 were previously only required to obtain coverage if the operation included maintenance, fueling, or cleaning activities. The Draft Permit now requires coverage for these SIC Codes regardless of the operations performed onsite. To our knowledge, this extension of coverage to additional industrial categories is not required by federal regulations, and Ecology has nowhere justified its decision to include them. If it is Ecology's intent to require coverage for these facilities, there should be a ramp-up period to allow these facilities time to achieve compliance. Specifically, Condition S2 does not recognize these types of facilities and does not provide a compliance pathway to obtain coverage. It appears that these facilities would best fit under Condition S2.A.3.a. since these are existing facilities that previously did not require permit coverage. They do not fit under the definitions of "Existing Facilities" under S2.A.3.b or "New Facilities" under S2.A.3.c.

S1.E.1 – Requirements for facilities that discharge some stormwater to the ground needs to be clarified. Currently, the Draft Permit states that discharges to the ground will need to comply with "the terms and conditions of this permit". Which terms and conditions of the permit apply? Discharges to the ground should not require sampling and analysis or comparison with benchmarks. For example, if a retention pond, wetlands, or swale is employed onsite, it will be impossible to collect samples of stormwater that discharges to the ground.

S2.A.3.a.i – Please provide a time frame to apply for coverage rather than using the term "immediately".

S2.A.1 – Please state the compliance schedule for submittal of a SWPPP for these facilities (and we assume Ecology will include facilities that previously did not require coverage under this section). Also clarify whether Public Notice is required for these facilities.

S2.B. – The language in this section is confusing. S2.B.1 seems to indicate that there is no compliance schedule for implementing a SWPPP except for previously exempt facilities, yet S2.B.2 presents what appears to be a compliance schedule for "other" facilities. Existing facilities not previously covered are required to submit a SWPPP to Ecology within 30 days as specified in S2.A.3. This schedule is too short for facilities that have never required permit coverage; we suggest 90 days for these types of facilities. This section should also address a schedule for preparing and implementing a SWPPP for those existing facilities that previously did not require coverage, but do now (due to Ecology adding SIC Codes requiring coverage).

S3. – The language in this section should clarify when a SWPPP needs to be submitted to Ecology. Our understanding is that the only requirement to submit SWPPPs to Ecology pertains to new facilities or facilities that are newly brought under the permit. We understand that if a SWPPP is updated for any reason, it does not need to be submitted to Ecology.

S3.B.3.iii – The definition of Treatment BMPs has changed from the previous permit. The definition in the Draft Permit states that the Permittee shall complete construction/installation of treatment BMPs when operational and source control BMPs do not adequately reduce pollutants “below the benchmark”. Since treatment BMPs may not achieve benchmark values, we suggest that the phrase “below the benchmark” be replaced with “as described in Condition 8, Corrective Actions”.

S4. - The new sampling routine proposed in the Draft Permit appears much easier to implement. However, Ecology is certain to want to compare data from all sampling events to evaluate problem industries and permit success. Unless additional information is obtained during sampling, the data will not be comparable, even within the same industry. The benefit of the sampling criteria in the current permit is that the data is more comparable, since sampling is conducted within a constrained time frame (first flush after a dry period). Under the Draft Permit, samples could be collected anytime during any type of storm event, making comparisons impossible. One possible solution would be for Permittees to provide additional information in DMRs regarding the condition under which samples were collected. These could include qualitative and/or quantitative information such as amount of rainfall for the day of, and day prior to sampling, as well as rainfall intensity during sampling. This information should be readily available via an on site rain gauge or from the closest weather station via the Internet. In addition, available information regarding whether the sample was taken at the beginning, middle or end of a particular storm would be useful. This information may be more qualitative, but would allow better comparisons between facilities, or even within the same facility, to assess if BMP improvements are working.

Because stormwater quality is highly variable, results from a single sample are not necessarily an indicator of BMP effectiveness. A single result may be less related to BMP performance and more determined by such factors as storm event intensity, time lapse of sampling the storm event, various aspects of the sampling protocol, etc. A rolling annual geometric mean of monitoring data, not individual sampling events, should be used to trigger Level Two, Level Three and Level Four adaptive management actions. Another alternative would be to use the Ecology 6415 Report approach to this issue.

S8.B. – Level Two Corrective Actions specify that the permittee should implement operational source control BMPs within 45 days. We are not aware of any particular source control BMPs specified in the SWMMs that are aimed at metals in particular. Ecology has a process to approve new BMPs (TAPE). We suggest that the permit specifically allow the use of new operational and source control BMPs developed through this process, even though they are not specified in the SWMMs. Consistent with the comment immediately below, and to allow Ecology more time to update their list of approved BMPs, we suggest a twelve month implementation schedule for Level Two Corrective Actions. Another alternative would be to use the Ecology 6415 Report approach to this issue.

S8.B – Capital BMP consideration is required as part of Level Two. Capital BMPs include treatment BMPs. Please clarify that treatment BMPs are not required to be

implemented as part of Level Two. In addition, six months is not enough time to implement Capital BMPs. All Capital BMPs require budgeting, procurement, and construction, all of which takes time, particularly for public agencies. By law, public agencies must procure equipment and services through a public process. In addition, permitting requirements for most capital improvements extend the time frame required to implement Capital BMPs. Depending on the location of the facility, extensive permitting (i.e., Shorelines) may be required. We suggest a twelve month implementation schedule for Capital BMPs.

S8.C and D – More time is needed to evaluate the effectiveness of BMPs implemented under Levels Two and Three prior to triggering the next level of corrective action. Specifically, relying on two stormwater sampling events, particularly with Ecology's proposed elimination of the sampling criteria, will provide poor data, particularly given the potential effort and costs associated with the higher corrective action levels. We suggest that four samples exceeding the action level be the trigger that requires the Permittee to move to the next corrective action level. The Draft Permit doesn't allow sufficient time between Corrective Action Levels Two, Three and Four to evaluate sources and potential solutions, budget for implementing the improvements, and finally, to assess the effectiveness of implementation. We believe that a better approach would be to develop a permit implementation schedule that results in better compliance, reflects the realities of implementation at an industrial facility, and considers the variability of stormwater analytical results to ascertain whether the improvements are effective. Please see our specific comments for recommended time frames for implementation of corrective actions.

S8.C.3 – This subsection requires Permittees to implement treatment BMPs “to reduce stormwater contaminant levels to or below benchmark values”. Since treatment BMPs may not be able to reduce stormwater contaminant levels to below benchmark values, please delete the phrase “to or below benchmark values”.

S8.D – The concept of including a Level Four Corrective Action, which requires Permittees to evaluate and implement treatment beyond what is required by the appropriate SWMM, is inappropriate because it is in direct conflict with RCW 90.48.555(6) and with AKART. A Level Four Corrective Action appears inappropriate since compliance with water quality standards is presumed upon full implementation of the appropriate SWMM. All appropriate BMPs in the appropriate SWMM would be completed as part of the Level Three Corrective Action. If Ecology insists on retaining Level Four, clarification is required regarding performance of the proposed AKART analysis. Since Ecology's SWMM represents AKART, we do not know what additional AKART analysis is expected. Other than a few exotic treatment technologies, we are unaware of any treatment technology that will consistently reduce stormwater concentrations to below the proposed benchmark values, as is required by the language presented in the Draft Permit.

If a Level Four Corrective Action provision is retained in the Permit, than the Permit should clarify that Level Four is not triggered until after full completion of the activities

conducted under Level Three. Specifically, if a twelve month implementation schedule is specified in the Level Three report, then sampling for comparison to action levels to ascertain whether a Level Four Corrective Action is necessary should not be required until after the twelve month implementation schedule has been completed. Of course, ongoing sampling required by the permit will be conducted; however triggering of Level Four would not occur until after Level Three implementation is complete.

In addition, if a Level Four Corrective Action provision is retained, Ecology should clarify when the engineering report and water quality study needs to be completed. The Draft Permit currently states that the Level Four report is due within six months of initiating the response. If Ecology intends to include the engineering report and water quality study as part of the Level Four report, the time frame needs to be expanded. Any water quality study would have to consider seasonal variability in the quality of both the stormwater discharge and the receiving water. The engineering report will need to consider the results of the water quality study to estimate treatment system influent quality, which is needed to evaluate potential treatment technologies and costs. We recommend at least 18 months for conducting the water quality study and subsequent preparation of the engineering report.

S9. – Ecology should consider electronic filing of DMRs and other submittals. We have experienced problems because information submitted to Ecology by Permittees takes months or years to be posted in the appropriate file at Ecology.

Thank you for this opportunity to comment on the Draft Final Permit. If you have any questions concerning the contents of this letter, please contact Marilyn Guthrie at 206-728-3347.

Sincerely,



Stephanie Jones
Seaport Environmental Manager

cc:

Susan Ridgley – POS Legal
Marilyn Guthrie – Stormwater Program Manger
Kathy Bahnick - Environmental Program Supervisor