June 17, 2011

Municipal Stormwater Permit Comments
WA Department of Ecology
Water Quality Program
P.O. Box 47696
Olympia, WA 98504-7696

Re: 2012 Phase I Municipal Permit Reissuance Comments

Sent electronically to: jwin461@ECY.WA.GOV and SWPermitComments@ecy.wa.gov

To whom it may concern,

Thank you for the opportunity to present our comments regarding the upcoming reissuance of the Municipal Stormwater Permits. The Port of Seattle appreciates the opportunity to provide early input to the Phase I Municipal stormwater Permit (Permit).

Below the Port provides comments regarding:

- Population Estimates Used in Calculating Regional Monitoring Program Cost Allocation
- Monitoring Program Cost Allocations and Payment Schedule
- Allowing Agencies to "Opt Out" of Portions of the Regional Monitoring Program
- Requirements for Continuing Current Monitoring Programs into the Next Permit Cycle
- LID

Topic: Population Estimates Used in Calculating Regional Monitoring Program Cost Allocation

The monitoring program pay-in calculations are currently based largely on census supported population data or "equivalent population" for permittees that include a largely residential area. This method is reasonable, as many permit requirements (including permit coverage requirements) are based on population. However, we request that the "equivalent population" estimates for Ports and other secondary permittees be based on justifiable population definitions and not by an arbitrary reference to County and City populations[1].

We acknowledge that calculating an equivalent population for a non-residential area is difficult. As such, we propose two potential methods for consideration:

1. Calculate "equivalent population" based on the size of the permit coverage area and the density (persons per acre) of the surrounding jurisdiction (i.e. City of Seattle from 2010 census is approx 6.7 people/acre). While the Port has nowhere near the residential population of

[1] The current monitoring program cost allocations calculate the Port's "equivalent population" as 1/6 of the total population of the surrounding City and County. This calculation is based only on a past choice by Ecology to require Port's to monitor 1/6 as many outfalls as the surrounding City and County combined.

surrounding City areas, this method will likely over-estimate the actual "population" of the Port. This calculation method could be easily reproduced and recalculated.

2. Use the definition in the NPDES NOI, which defines "equivalent population" as the total residential and commuter populations. For Ports, the resident population would include the live aboard population at residential marinas. The commuter population would include Port employees and tenant employees (possible based on building capacity). Note that this estimate will "double count" employees in the monitoring program cost allocations, as each Port and tenant employee is already counted in the population of the City or County in which they reside.

We understand that adjusting the Port's "equivalent population" number may reduce the Port's financial contribution to the regional stormwater monitoring program. However, we feel this reduction is justified because the Port also funds a large portion of the City of Seattle's stormwater program. The Port of Seattle and Port tenants currently pay City stormwater utility fees totaling over $2M per year, which the City can use to contribute to the regional monitoring program.

Topic: Monitoring Program Cost Allocations and Payment Schedule

The proposed schedule and timing for monitoring program payments is reasonable. We appreciate having the payment for each year dictated within the permit. This helps permittees to justify and budget for the large monitoring payments that are coming in future years.

Of the three cost allocation options presented, Option 1, which is based primarily on population, seems to be the most clear-cut and defensible method to distribute the costs of the regional monitoring program. Larger communities have both greater pollution potential and more opportunities to benefit from the findings and conclusions that come out of the monitoring studies.

Option 2 and Option 3 are both complicated with some costs divided by regions, some dispersed among permittees, and some divided by population. These methods are challenging to explain, hard to justify, and difficult to quickly duplicate, which could lead to ongoing protests and challenges. In addition, these options introduce a new level of uncertainty in the future payment requirements for each jurisdiction – if the future monitoring program activities change, how will the cost differences be allocated among permittees? Will some permittees pay more while others pay less if/when particular aspects of the monitoring program cost more than originally anticipated?

A Hybrid Cost Allocation Proposal

We recognize the motivation to divide monitoring costs by region and instead propose an "Option 1a." This modified option would divide the monitoring program costs by larger receiving waters (i.e. split Puget Sound and SW Washington) and then distribute costs by population. This method would create a more watershed-based approach to fundthe monitoring program. The studies and data collected in each particular region are paid for by the communities in those regions. This payment model would be similar to the format from Southern California presented in Ecology's workshop.

Additional Funding Partners
Another opportunity to fund the regional monitoring program would be to seek additional funding partners. One example would be to tap industrial permittees – allow industrial permit holders to suspend their individual monitoring activities on a rotating basis and pay in to the regional monitoring program for a year or two instead. It might also be worth considering WSDOT as an additional partner.

Topic: Allowing Agencies to "Opt Out" of Portions of the Regional Monitoring Program

We are not in favor of allowing agencies to "opt out" of portions of the regional monitoring program. If some agencies are allowed to opt out, it will shift the monitoring costs to the remaining agencies. This is not fair or equitable to those agencies that choose to remain in the regional monitoring program.

Allowing agencies to opt out goes against the intention of developing a regional monitoring program, in which all communities contribute and benefit from the regional studies.

We understand the motivation for individual permittees that want to implement a specific local monitoring program rather than contribute to regional program. If those local monitoring programs are good quality studies that have far reaching benefits, they should be submitted to the regional program for consideration, scoring and ranking. If those studies rise to the top of the ranking, then the regional program will fund (at least portions of) that study, and all communities will contribute to both the funding and the benefit from the study. In this way, we prevent the regional monitoring program from being pulled into focused local issues, unless there are larger regional benefits.

Topic: Requirements for Continuing Current Monitoring Programs into the Next Permit Cycle

We would like the monitoring program language to include a final end date for ALL monitoring programs required by the current permit. The "finish by" date should coincide with the date that Ecology intends to start implementing the regional monitoring programs (i.e. August 2013). The final end date would allow jurisdictions that are further along in their monitoring studies to complete their data collection and processing. The final end date would also bring an end to monitoring programs that are struggling to meet conditions of their QAPPs and/or collect meaningful data.

For perspective, we would like to explain how the proposed monitoring program completion requirements will translate into specific activities for the Port of Seattle:

Stormwater Outfall Monitoring:
Because the Port of Seattle began outfall monitoring in March 2009, we will have completed the intended three full years of data collection by March 2012. However, we will be required to continue monitoring until the new permit goes in effect (expected July 2012). The proposed permit language will result in more than 3 full years of Stormwater Outfall monitoring data for the Port of Seattle.

SWMP Program Effectiveness
The Port of Seattle's current study design includes two years of baseline data collection and two years of treatment condition data collection. The proposed permit language will result in data collection

through September 2013 (assuming monitoring activities do not run into problems). A final end date would set a hard date for stopping this monitoring program once the regional program takes over.

BMP Monitoring

The Port of Seattle has been diligently working to implement a BMP Monitoring program over the last three years at a cost of $100K-$150K per year. Due to challenges with equipment, tidal influences, and site clean-up activities following oil spills on site, we have yet to develop a reliable method to collect BMP monitoring data. The proposed permit language would require the Port to continue attempts to develop and implement this BMP Monitoring study. We anticipate that full implementation of the monitoring study will require over $300K[2] per year (in addition the Port's regional monitoring program payments), and yet, it is unlikely that the data collected will be particularly meaningful to other jurisdictions. We would like to see a final end date in the new permit to ensure that permittees are not required to continue local studies that are not producing meaningful data once the regional program takes over.

Topic: LID

LID

The Ports generally support LID as a method of storm water management, but remain concerned about unique Port conditions if LID were **required** for all sites without sufficient options to modify the requirement based on individual site conditions. Unique Port conditions include property development in areas subjected to both Phase I and Industrial permit requirements. In addition, The Port conducts property development in highly industrial waterfront areas on properties with complex environmental contamination histories. Both these conditions are described in the context of examples which highlight the issues of LID application.

Example 1:
A two acre water front boatyard is required to install treatment and additional improvements which would trigger a 2,000 square foot LID implementation standard per City Stormwater Code. The yard discharges to a flow control exempt designated water body. This is one of the boatyards that Ecology has identified in their Economic Analysis as a yard that will be put out of business by the costs of required treatment under the Boatyard Permit. Concerns:

- If LID implementation is required in this case AND an engineered treatment solution, the boatyard may not be able to afford both. An engineering treatment solution might be the best solution given limited space and available funds.

- In an LID scenario water would potentially this boat yard runoff would be infiltrated into ground water that was 5 feet or less from the surface and only 10 feet from the surface water body. This could cause flooding during high rain events, high tides or both. An under-drain system is impractical also because of high tides.

[2] Compared to the previous permit fact sheet that estimated Port BMP Monitoring programs would cost $59K per year.

- It would seem prudent that the boatyard be required to collect additional soil or groundwater information on their site to ensure that their discharge was not contaminating the soils in the site or the sediment in front of their Port property. The Port, of course, would be concerned about this also so that when the boatyard left, the Port didn't end up with a soil or sediment clean up caused by infiltration.

- Ecology has taken the position that this is a Municipal permit requirement and not an "other" NPDES permitted area requirement. However, cities will err on the conservative side and, unless directed, will not eliminate other NPDES permit areas from LID requirements. Would Ecology be willing to include this in the Phase I permit modification associated with this requirement?

Similar scenarios exist for an Industrial- permitted site on Port property (after all, approximately 75% of our property is covered by ISGP or BYGP. Almost all of our property is water front and on non-flow designated water bodies).

In addition, the Port manages highly industrial properties in waterfront areas with complex environmental contamination histories. Application of LID without a more complete evaluation of the impact it may have on contaminant distribution may have unintended impacts to water quality, as highlighted by the below example.

> Example 2: A 4-acre waterfront property in slated for paving improvements from gravel base to asphalt paving. The site is on waterfront property, immediately adjacent to an in-water Superfund site. Control of sources, including storm water discharges, to the Superfund site are being overseen by Washington Department of Ecology Toxics Cleanup Program and/or EPA. A small dissolved petroleum plume is located on the site, and has been identified as a potential source of contamination to the Superfund Site. The only viable bioretention location is upgradient, in hydrogeologic communication with, but over 100 feet away from the plume. In addition, storm water infiltration may also impact groundwater quality by increasing release of metals, not currently in the site ground water, above the ground water cleanup levels being used to monitor releases from the site. The paving plans were a part of the Ecology approved cleanup remedy for the site result of an Ecology recommendation to reduce infiltration to the subsurface to reduce discharges from the groundwater plume to the adjacent surface water body. Therefore permeable pavement is not suitable from the cleanup remedy perspective.

Broad requirements of LID in this scenario could jeopardize water quality. Therefore, exemption should clearly state that for sites within or near cleanup sites, the suitability of LID should be approved by appropriate cleanup regulatory agency responsible for oversight. The current exemption of 100 feet distance may not represent the full range of areas that might impact cleanup actions at all sites. In addition, the definition of the "hazardous waste site" (whether it's a plume or a facility that contains a plume) could be subjected to interpretation that shouldn't be made without consultation with the cleanup agency.

The Port also recommends the following changes (these changes are also added in track comment for to the attached Appendix I):

Exemption that should be considered:

On-site Stormwater Management is not required for projects that discharge to a designed receiving water where more applicable water quality best management practices are available.

Pollution-generating pervious surfaces (PGPS) **-** Any non-impervious surface subject to vehicular use, industrial activities (as further defined in the glossary of the Stormwater Management Manual for Western Washington); or storage of erodible or leachable materials, wastes, or chemicals, and that receive direct rainfall or run-on or blow-in of rainfall, use of pesticides and fertilizers, or loss of soil. Typical PGPS include permeable paved roads, driveways and parking lots, lawns, landscaped areas, golf courses, parks, cemeteries, and sports fields *unless no herbicides, fertilizers or other chemicals are not used in these areas. Pervious areas that are "chemical free" are not considered pollution generating.*

Infeasible situations for LID:

If the project discharges to a designated receiving water, LID is not required. LID BMPs can be considered for water quality, but are not required if an engineered water quality solution is more cost effective, implementable or facilitates site use.

If the project discharges to a Superfund site, LID is not required. (Note: This is a critical comment to ensure that new sources to the superfund site are not unintentionally created by LID BMPs. Since, at this time, there is no way to eliminate an LID BMP as a potential source, providing an off ramp for this type of site is prudent.)

If a project is in an area covered by another Ecology stormwater permit, LID can be considered but is not required. Corrective Actions under an Ecology permit would also not be required to implement LID BMPs. However, other engineered solutions per permit requirements would be required to be implemented.

For Bioretention BMP's and Rain Gardens, if the project is in:

- An over water area

- Tidally Influenced and high groundwater areas. In areas where there is high ground water and an under drain is to be used, buoyancy factors may limit the use of this type of system. Including, but not limited to, tight lining the system to the regional stormwater system.

- An area where unsuitable soils exist. A specific example would be unstable soils which require concrete treatment of soils beneath the pavement.

- Within the area of groundwater influence of a known contaminated hazardous waste site; or an abandoned or active landfill.

For Permeable Pavements, if the project is in:

- Overwater areas

- Tidally Influenced and high groundwater areas. In areas where there is high ground water and an under drain is to be used, buoyancy factors may limit the use of this type of system. Including, but not limited to, tight lining the system to the regional stormwater system.

- Unsuitable soils exist. A specific example would be unstable soils which require concrete treatment of soils beneath the pavement.

- Weight bearing loads would prohibit the use of vaults or under drain systems. For example, a large wet vault would be cost prohibitive due to the significant amount of structural support required. A small foot print coalescing plate separator would be less costly to implement.

- Soil stability is critical to personal safety.

- Within the area of groundwater influence of a known contaminated hazardous waste site; or an abandoned or active landfill.

- Where the risk of concentrated pollutant spills is more likely such as gas stations, truck stops, industrial activity and industrial chemical storage sites.

For Vegetated Roofs, if the project is in:

- Flow control exemption areas. If the project discharges to a designated receiving water, LID is not required. LID BMPs can be considered for water quality, but are not required if an engineered water quality solution is more cost effective or implementable

Please feel free to contact me at (206) 787-3378 with questions or comments.

Sincerely,

Marilyn Guthrie

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Attachment – Revised Appendix I