June 17, 2011

Washington State Department of Ecology
Water Quality Program
Attn.: Bill Moore, Program Development Services Section Manager
P.O. Box 47600
Olympia, WA 98504-7600

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

Re: Comments on the preliminary draft language intended to implement low impact development requirements in the Municipal Stormwater General Permit

Dear Mr. Moore:

Thank you for this opportunity to comment on the preliminary draft language put forward by the Washington State Department of Ecology ("Ecology") concerning implementation of low impact development ("LID") requirements in construction and post-construction runoff controls for new development and redevelopment.

This comment letter discusses the benefits and challenges of implementing low impact (re)development techniques in a port setting, with a special emphasis on areas of concern raised in response to the current proposal. In addressing these issues, we provide scenarios based on real-world conditions at port facilities and provide possible solutions for addressing these concerns.

Throughout this discussion, the following themes consistently emerge:

- Many LID techniques are neither feasible nor particularly functional in an industrial setting.
- Additional regulatory complexities introduced by this proposal could unduly complicate existing regulatory structures and could undermine or dilute existing stewardship and sustainability efforts.

- Further discussion is required to fully address these concerns with a special emphasis on the unique conditions present at ports.

Given the unique conditions that exist at port facilities, we stand ready to work with you in helping to understand and address the concerns raised in this letter.

Background: the role of public ports in meeting public expectations

The Washington Public Ports Association is a public agency trade association authorized by the Washington State Legislature as the coordinating organization for all Washington public port districts. We submit these comments as a representative of 68 individual port districts responsible for maintaining critical trade infrastructure that includes the following: marine terminals, barge facilities, industrial developments, marinas, railroads and other infrastructure critical to the state's economic development engine and transportation network.

For more than a century, Washington has benefited from the good fortune of sitting astride a great global trading route. We have worked hard to establish and maintain this route against intense competition from other states and other countries. As a result of this hard work, our state enjoys many benefits including good paying waterfront labor jobs and low export rates for state products. One key factor in maintaining these benefits is ensuring that the limited resource of industrialized, urban land bordering state waterways continues to be used to accomplish our statutory mission of promoting economic activity.

Ports are unique among economic interests in several regards. For one, ports are public entities. As representatives of these public entities, port officials tend to approach economic activity with a particular focus on long-term development and sustainability. Therefore, environmental stewardship plays an important role in the on-going activities at numerous ports in our state. Ports around the state promote environmental stewardship in a number of ways, including the following: through hazardous site cleanup projects and remediation; energy conservation; pollution prevention; and, through integrated decision-making processes that incorporate environmental costs, ecological impacts and stewardship benefits into business decisions.

Worker safety is another critical factor in our planning efforts. Our activities occur in an industrial environment that includes heavy equipment and machinery, large ships, heavy rail and mobile cranes specifically developed to accomplish specialized tasks. Given the dynamic nature of waterfront work environments and the long history of safeguards developed over decades to protect the lifespans and livelihoods of maritime workers, we simply cannot support any environmental regulatory regime that could sacrifice worker safety.

In keeping with Ecology's mission as an environmental regulator, we understand that these comments will be judged primarily through a lens of environmentalism. Furthermore, we understand why such an agency may judge these comments exclusively from an environmental regulatory perspective. After all, the three goals Ecology sites as critical to fulfilling the agency's mission and "move forward in a global economy" are to: prevent pollution, clean up pollution, and support sustainable communities and natural resources.

These are certainly important objectives and the public is well served by Ecology's dedication to these goals. However, these goals alone do not meet the full range of public expectations that define a good quality of life. Our hope in providing these comments is that at some level of discussion there will be a recognition of the larger policy ramifications that are at stake. In other words, there must be a recognition that the proposed requirements will exist beyond a micro-regulatory framework and will ultimately be judged by a public audience that expects balanced inclusion of economic activity, job growth, worker safety and other quality of life factors.

These background comments, therefore, are intended to reflect the larger policy perspective and the realities that port districts face as we consider implementation. In keeping with this approach, the comments in this document are intended to reflect the larger policy considerations ports will consider generally as they approach this additional layer of regulatory compliance. You may also receive more specific comments from individual ports.

When might LID make sense in a port setting?

As previously mentioned, ports generally support sustainability measures (including low impact techniques) and work to incorporate them into development and redevelopment efforts wherever feasible. The following scenario illustrates an example where LID may be feasible in a port environment.

Scenario 1: *Port habitat redevelopment project*

A port is redeveloping a 10-acre parcel. The site is considered undeveloped. It is surrounded by industrial and commercial development. The land has historically been used for industrial dumping of garbage and inert waste products. A drainage ditch on the property was installed in the past to drain the surrounding industrial and commercial facilities.

In this situation, it is both feasible and favorable for the port to build an LID facility in the ditch. While the ditch may not be configured in a way that would allow it to be used as part of the facility development, it could be redeveloped into a bio-retention area. Theoretically, it could accept runoff from several parcels because it is centrally located at the northern end of the proposed project.

In this scenario, low impact techniques could be particularly useful given the nature, location and condition of the project. The project would not pose potential danger to worker safety, it would not impede on limited industrial spaces and it seems unlikely to conflict with other regulations. In many regards, this approach to LID seems feasible.

Feasibility is an important matter to consider as many port facilities are subject to other National Pollutant Discharge Elimination System ("NPDES") permits that require treatment in order to meet compliance. For many industrial applications, LID is completely untested. As a result, many existing low impact technologies are completely unproven and would not ensure that permit benchmarks could be met, creating a situation where low impact development may actually conflict with existing permitting structures and processes.

Could LID jeopardize worker safety at ports?

Human safety is the foremost operational consideration at port facilities. As previously mentioned, the movement of cargo from oceangoing vessels to land transport requires the use of heavy cranes and specialized freight handling equipment which must operate on a foundation of secure pavement designed specifically to accommodate heavy loads. Simply put, these sites are not conducive to putting water into the ground as the following scenario illustrates.

Scenario 2: *Major pavement repair at a container terminal*

A port is conducting a major pavement repair on a container terminal. A total of 20+ acres on that terminal will have 12 inches of asphalt ground off, six to eight inches of base coarse material removed and replaced with a layer of gravel and roller compacted concrete, and a maintenance layer of three inches of asphalt will be put on top.

Pervious pavement is not a safe option given the loads and location of the facility. Heavy loads are a particular concern as pavement failure due to subsidence or pumping could cause fatal accidents for workers such as "straddle carrier" operators who control their equipment from a cockpit situated 40 feet in the air. From this height, the operator is unable to detect pavement ruts or sudden buckling. A continual, guaranteed smooth driving surface is absolutely critical to ensure worker safety.

The size and nature of this project would trigger Minimum Requirements 1-9 defined in Appendix I of the Municipal Separate Storm Sewer Systems Permits ("MS4 Permits"). The facility is covered under the Industrial Stormwater General Permit (the "Industrial Permit"), and is in a Level 2 corrective action stage. In order to meet compliance with the Industrial Permit, structural best management practices ("BMPs") are required. The facility would be subject to the LID requirements as well, so a bioretention facility that is four percent of the total project size of .88 acres would also be required.

This scenario illustrates the following immediate concerns:

<u>Worker safety:</u> the possibility of pervious pavement failure could endanger the lives of straddle carrier operators and other longshore workers. Labor unions may have serious concerns about putting their workers in unsafe situations.

<u>Structural failure:</u> engineering specifications for water dependent industrial construction do not allow for infiltration of water into structures. Bulkheads, wharfs and other similar structures are made particularly vulnerable by water infiltration. Adding water to the landward side of bulkheads could cause subsidence and failure.

<u>Instability to heavy loads:</u> permeable pavement may not be suitable for the heavy loads that are common at industrial facilities such as ports.

Beyond the worker safety issues identified above, this scenario raises additional questions about the value and best use of industrial land dedicated to water-dependent uses. As one of the most trade dependent states in the nation, Washington relies on industrial waterfront land to move the state's products out to the global marketplace. Our state competes aggressively against other ports along the West Coast of the United States as well as ports immediately to our north in Canada and (with the

expansion of the Panama Canal) we will soon compete against ports in the Gulf of Mexico. Property along our state's working waterfronts is a finite resource and major constraints to operations could potentially divert jobs out of the state.

The following solutions could potentially resolve the concerns identified in this section:

- Exclude mandatory use of permeable pavements for industrial land use areas.
- Allow more flexibility for industrial properties, especially for facilities subject to the Industrial Permit or other NPDES permits.

How does LID align with other permits regulating industrial activities?

A key area of concern within the port community is how LID mandates would interact with existing regulatory regimes assigned to the industrial sector. For example, how would LID be implemented in areas that currently fall under the Industrial Permit? Overlap between MS4 Permits and the Industrial Permit is problematic because port sites are developed or redeveloped under MS4 Permits and then operated under other permits with little or no integration. The following scenario illustrates the type of conflict that may occur as a result of LID implementation.

Scenario 3: Marine repair facility covered under the Boatyard General Permit

A marine repair facility that has coverage under the Boatyard General Permit (the "Boatyard Permit") is required to install stormwater treatment in order to meet the benchmarks identified in that permit. In order to install treatment measures, the facility would need to disturb an area large enough to trigger the requirements in Appendix 1, Minimum Requirements 1-9. As a result, LID would be required in order to install the treatment system needed to meet compliance under the Boatyard Permit. In other words, meeting the conditions of the Boatyard Permit would trigger mandatory compliance with the new LID regulations – or, stated differently, the act of meeting regulatory compliance would trigger an additional layer of regulatory compliance.

This scenario illustrates the following concerns:

<u>Techniques insufficient to meet benchmarks</u>: the LID techniques required may not be sufficient to provide adequate runoff treatment to meet the benchmark requirements of the Industrial Permit. This is of particular concern because many of the techniques offered to date are unproven in a large-scale, industrial setting so investment in these approaches can be high-cost and high-risk, with little proven environmental benefit. If the techniques cannot meet existing benchmarks, then it seems irresponsible to mandate investment in them.

<u>No distinction between differing land uses</u>: a critical distinction must be made between commercial and industrial land uses. Many of the low impact techniques tested to date are applicable in a residential or commercial setting, but are neither feasible nor proven reliable in an industrial setting.

In addition to the concerns listed above, it seems incongruous that actions necessary to trigger permitting compliance (under the Boatyard Permit) would trigger additional regulatory compliance

(under new LID regulations), particularly when the mandated LID measures are unsuitable in an industrial setting and would result in additional cost outlays without producing definitive environmental benefits.

The following solutions could potentially resolve the concerns identified in this section:

- Permitting and regulatory streamlining should be considered so that applicants are responsible for meeting the requirements of fewer permits (ideally, a single permit) rather than several. For example, MS4 LID requirements should not apply to facilities already covered under the Industrial Permit or the Boatyard Permit. At a minimum, Ecology should consider the intended use of a site, rather than the arbitrary fact that a site is being (re)developed.

- Specific requirements drafted for LID within MS4 Permits would be more applicable to industrial land uses, such as those occurring at ports.

- Facilities covered under the Industrial Permit should be exempted from MS4 LID requirements.

How does LID align with jurisdictional codes and ordinances?

Addressing LID through MS4 Permits introduces specific challenges for ports as local municipalities have very limited experience regulating LID for industrial land uses. This is largely because low impact techniques have primarily focused on residential applications. The overlap of local jurisdictions is potentially confounding when attempting to comply with the weave of required permits, jurisdictional codes and ordinances. Consider the following scenario.

Scenario 4: Multi-use facility redevelopment

A port is redeveloping a multi-use facility 90+acres in size. The finished site will include a breakbulk cargo terminal, light manufacturing, vehicle repair, mobile fueling and office space. There is a direct discharge to the waterway, and no runoff is discharged to the local jurisdiction's stormwater conveyance system. Minimum Requirements 1-9 are triggered.

The port has coverage as a secondary permittee under the Phase I Municipal Permit. The project triggers construction and redevelopment requirements in the MS4 Permit held by the port, including Appendix 1. The city is required to review the design of the facility for compliance with the LID requirements in an industrial setting. The port will be subjected to the LID requirements during the redevelopment phase, including a 3+ acre bioretention facility. The bioretention facility will have underdrains and additional treatment will be required for the water that discharges from bioretention.

The facility is also required to operate and maintain its stormwater system in accordance with the MS4 Permit. The port will pay approximately $6,000 per month to the city for surface water fees for a facility that discharges directly to marine waters.

The Industrial Permit would be triggered because the business is a transportation facility that performs vehicle repair and maintenance. The city may also be

responsible for reviewing and approving the design for any treatment system required under the Industrial Permit.

In this example, the port could incur significant costs in order to meet multiple overlapping permit schemes, but the environmental benefits are negligible. This is an area where a more flexible approach would be extremely beneficial.

The following solutions could potentially resolve the concerns identified in this section:

- If ports discharge runoff directly to a waterway or to a port-owned conveyance, LID should not be required.
- Under certain circumstances, ports should be allowed to review and approve their own stormwater designs for facilities that do not discharge to the local jurisdiction's conveyance system.
- Installation or treatment for compliance with another NPDES permit should not trigger the LID requirements for further treatment.
- Costs for LID plus treatment should be considered.
- Cities and counties should have the flexibility and clear guidance to exempt industrial land uses from LID requirements.

Could LID exacerbate legacy industrial contamination at identified cleanup sites?

Ports are particularly concerned about legacy contamination at industrial sites around the state and have a demonstrated history of working with Ecology to clean up these sites and put them back into productive use. In many cases, these projects are tremendously complex, quite expensive, and are the result of companies or industries that dissolved leaving the local community with the responsibility of cleaning up an abandoned site. Ports are uniquely suited to take on these projects and, in doing so, play a critical role in rejuvenating communities.

Given the time, cost and importance of these projects, it is critical that we do not further complicate them by exacerbating current conditions. However, the arbitrary application of LID in an industrial setting could actually serve to expand legacy contamination or even create new remediation projects where they do not currently exist.

Additionally, LID could create new legal concerns regarding remedial actions. For example, cities (and even Ecology) could inadvertently find themselves in the position of becoming a potentially liable party ("PLP") in remedial actions if they require LID and it triggers a cleanup action. It is also worth noting that restrictive covenants often apply to remedial action sites. For example, Ecology may issue an agreed order that calls for an area to be capped and all runoff diverted away from the designated area. In such a situation, LID could put Ecology in a situation where it would be acting in contradiction of its own requirements. The following scenario describes these concerns.

Scenario 5: Redevelopment project in a highly urbanized industrial setting

A port redevelopment project is being designed in a highly urbanized industrial area. The project is near several areas of known contamination, but they are not within 100 ft. of a possible bioretention or infiltration area.

A bioretention or pervious pavement facility is installed outside the 100 ft. buffer. The area is upgradient of a contaminated site, but more than 100 feet away. Over time, the contamination is impacted by the amount of water infiltrated, causing the plume to move and expand.

This scenario illustrates the following concerns:

Instigation or promotion of plume migration: the introduction of water into urbanized industrial sites could actually cause a toxic plume to begin migrating or could promote migration of an existing plume. If hydrological connection between a known area of contamination and LID exists, 100 feet may not be enough to prevent migration of contamination through soils or groundwater.

Triggering of unknown or dormant sites: although ports are generally aware of most contaminated areas within their properties, the historical land uses of waterfront industrial areas are such that unknown contamination could be impacted by LID infiltration.

The following solutions could potentially resolve the concerns identified in this section:

- Do not require LID in industrial areas.
- Ports should have their own LID requirements within the MS4 permits that are more applicable to industrial land uses.

Conclusions

In closing, I will reiterate some of the key themes that emerged through this correspondence:

- Many LID techniques are neither feasible nor particularly functional in an industrial setting.
- Additional regulatory complexities introduced by this proposal could unduly complicate existing regulatory structures and could undermine or dilute existing stewardship and sustainability efforts.
- Further discussion is required to fully address these concerns with a special emphasis on the unique conditions present at ports.

We would like to thank Ecology for providing this early, informal opportunity to comment beyond the agency's public notice requirements. With a little more than a year to go before the final reissuance of the permit, there is still time to discuss the concerns raised herein and work towards reasonable solutions. In this spirit, we look forward to further discussions.

Sincerely,

Johan Hellman
Assistant Director

Cc: Jim Justin, Legislative Director to Governor Gregoire