



Port of Vancouver USA
A CENTURY OF POSSIBILITIES.

February 2, 2012

SWMMWW Comments
WA Department of Ecology
Water Quality Program

Submitted via email to wswmancmnts@ecy.wa.gov

Email subject line "POV Draft 2012 Stormwater Management Manual for Western Washington Comments."

RE: Port of Vancouver Comments on the Draft 2012 Stormwater Management Manual for Western Washington

To whom it may concern:

The Port of Vancouver (port) appreciates the opportunity to provide comments on Washington Department of Ecology's (Ecology) draft *Stormwater Management Manual for Western Washington* (Draft). The port respectfully offers the following comments and/or suggestions listed below:

Volume 1, page 2-12: Please provide project examples for residential, commercial, and industrial projects showing how Minimum Requirements 5, 6, and 7 would apply. The new guidance has become significantly more complex with the advent of the new Low Impact Development (LID) requirements and project examples would help project proponents understand how to navigate and comply with the numerous requirements;

Volume 1, page 2-35: LID requirements should not be mandated. The liabilities associated with the proposed requirements may far outweigh the benefits in certain situations. Two particularly serious liabilities include the cost of compliance, as well as potential damage to downgradient properties (such as potential flooding and erosion where infiltrated water resurfaces). In certain cases, LID will provide benefits at a reasonable cost and should be implemented. However, this decision should be made on a site specific basis;

Volume 1, p 2-35: LID requirements should not be required in flow control exempt areas. LID is appropriate to protect against potential downstream erosive impacts, and is potentially an appropriate treatment technique to protect water quality. However, in flow control exempt areas, Ecology has already determined that stormwater discharges are unlikely to cause downstream erosive impacts. Regarding treatment, LID may be

one of many technologies appropriate for a particular site and a project proponent should not be required to implement LID when another technology may be as or more protective, at a reduced cost and impact to the site;

Volume 1, p 2-46: The proposed strikeout appears to remove the 40% Total Impervious Area (TIA)/20 year criteria. Please clarify if the 40% TIA/20 year criteria will still be allowed;

Volume 1, p 2-54: The proposed strikeout “of the local government” makes it unclear who the “administrator” is. We suggest keeping the original language in or further clarifying;

Volume 1, p 3-2: The stormwater site plan (SSP) requirements are too burdensome. Requiring geotechnical engineering, licensed landscape architect, etc. for most projects is excessive. These requirements should be included when appropriate, but not on every project;

Volume 1, App F: The geotechnical opinion that bioretention and/or permeable pavements should not be used should not be restricted to erosion, slope failure, or flooding. We recommend deleting the remainder of sentence after the word “area” since there may be other factors that may be discovered during a geotechnical evaluation that indicates that bioretention and/or permeable pavements are not appropriate;

Volume 1, App F: We recommend replacing the criterion of “Within 100 feet of known hazardous waste site” with “upgradient of a known or suspected contaminated site that could be hydraulically impacted by the project”;

Volume 1, App F: We recommend including “high land value” as a competing need making the application of LID BMPs infeasible;

Volume 1, App F: LID BMPs should not be required in flow control exempt areas. LID is appropriate to protect against potential downstream erosive impacts, and is potentially an appropriate treatment technique to protect water quality. However, in flow control exempt areas, Ecology has already determined that stormwater discharges are unlikely to cause downstream erosive impacts. Regarding treatment, LID may be one of many technologies appropriate for a particular site and a project proponent should not be required to implement LID when another technology may be as or more protective, at a reduced cost and impact to the site;

Volume 1, Glossary: Please remove gravel roads and packed earthen materials from the listing of impervious surfaces. The terms are too vague and may not represent actual impervious surfaces in many cases. Gravel roads and packed earthen materials may indeed be pervious;

Volume 1, Glossary: Please clarify in the definition of impervious surface that railroad tracks designed with ballast and sub-ballast layers are not impervious or hard surfaces;

Volume 3, p 3-72: Is it Ecology's intent to require subsurface characterization everywhere infiltration will be performed? Requiring numerous monitoring wells and a full wet season of monitoring is excessive and burdensome. Subsurface characterization should be required only where necessary and not on every project;

Volume 3, p 3-82: Ecology's infiltration testing protocol is overly complex. Consultation with a geotechnical engineer should not be required for every project. Please consider including a threshold;

Volume 3, App C, Section 7.9.1: Correction factors for sizing of bioretention facilities seem arbitrary. Please clarify the technical basis for the correction factors. Several projects in Western Washington and throughout the country have proven that treatment beyond Ecology's stated goals for enhanced treatment is achievable at flowrates in excess of 100 inches/hr. Ecology's bioretention design criteria are overly conservative and burdensome, resulting in higher costs and lost space, which are particularly problematic in concentrated urban settings. The default Bioretention Soil Mix infiltration rates of 1.5 or 3.0 inches/hr are both far too conservative. Ecology has approved proprietary media at over 16 times this infiltration rate with a General Use Level Designation based on a vast amount of data proving its performance;

Volume 4, Section 2.1 – The new applicable good housekeeping BMP, "Sweep all surfaces with vacuum sweepers quarterly, or more frequently as needed for the collection and disposal of dust and debris that could contaminate stormwater" would require any surface to be cleaned. We assume Ecology anticipates that paved surfaces only require sweeping, as gravel and landscaped surfaces are not conducive to sweeping. The language should be revised to require sweeping of paved surfaces only;

Volume 4, Section 2.1: The new recommended good housekeeping BMP, "promptly repair/replace/reseal damaged paved areas at industrial facilities" is vague and burdensome. It may not be necessary to repair/replace/reseal all damaged surfaces in order to protect water quality. "Damaged" is not defined and could be interpreted to mean many things. We suggest deleting the new BMP or clarifying that this BMP is recommended only if the damage may impact water quality;

Volume 4, Section 2.1: The new recommended Preventative Maintenance BMP, "Pressure wash impervious surfaces contaminated with oils, metals, sediment, etc." is vague and burdensome. When does Ecology consider surfaces to be "contaminated" since regional air deposition can occur on an ongoing basis? In addition, the BMP should not be limited to pressure washing, as other techniques may be available to remove contaminants;

Volume 4, Section 2.1: There is new added language regarding spill prevention that states that facilities covered under Industrial Stormwater General Permit **must** provide secondary containment for all chemical liquids, fluids, and petroleum products stored on-site. This statement is listed under “recommended” not “applicable” BMPs. Given the “must” wording, is this BMP “recommended” or “applicable”? We recommend that the language be removed or modified since all liquids (including water) are comprised of chemicals and would require secondary containment. We recommend that the requirement for secondary containment be limited to that required by other applicable laws and regulations;

Appendix IV-E: This section references 40 CFR 122.26(b)(14). However, Ecology has altered the language contained in the federal regulations, specifically, the deletion of the language in 40 CFR 122.26(b)(14)(viii) limiting regulation to “only those portions of the facility involved in the above activities, or which are otherwise identified in one of the other 10 categories”. We recommend that Ecology retain the language in the federal regulations or explain otherwise;

Volume 5, p 7-24: Correction factors for sizing of bioretention facilities seem arbitrary. Please clarify the technical basis for the correction factors. Several projects in Western Washington and throughout the country have proven that treatment beyond Ecology’s stated goals for enhanced treatment is achievable at flowrates in excess of 100 inches/hr. Ecology’s bioretention design criteria are overly conservative and burdensome, resulting in higher costs and lost space, which are particularly problematic in concentrated urban settings. The default Bioretention Soil Mix infiltration rates of 1.5 or 3.0 inches/hr are both far too conservative. Ecology has approved proprietary media at over 16 times this infiltration rate with a General Use Level Designation based on a vast amount of data proving its performance.

POV supports efforts to improve stormwater quality as set forth in this manual and applauds your efforts. However, we hope you will take these considerations put forth above to refine the update to the 2012 Stormwater Management Manual for Western Washington.

Thank you for your time.

Sincerely,



Matt Graves,
Environmental Manager