



December 3, 2014

Washington Public Ports Association  
Washington State Marine Terminal  
AKART and ISGP Corrective Action Guidance Manual  
30 April 2014 Public Review Draft

RE: Response to Comments

Dear Interested Parties:

On behalf of our members, I would like to thank each of the interested parties that provided comment on the Public Review Draft of our AKART Manual.

Ecology received 17 individual comments on the Public Review Draft (PRD) of the Washington Public Ports Association (WPPA) AKART and ISGP Corrective Action Guidance Manual (WPPA Manual) that was released for public comment on 01 May 2014. Copies of all comment letters and emails were posted on Ecology's Industrial Stormwater General Permit website: <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/index.html>

While we do not believe a responsiveness summary is required by law, WPPA has assembled excerpts from comments into this document, and organized them in alphabetical order based on the named firm or individual providing comments. WPPA has provided a written response listed in italics below each comment provided.

General Comment (multiple firms)

Several commenters provided general support and appreciation to Ecology and WPPA for undertaking development of the WPPA Manual.

***Response:*** *WPPA would like to thank all supporting groups, agencies, and individuals for their kind words and support for the WPPA Manual and would like to encourage active participation in efforts to keep the document updated and relevant over time.*

AMEC Environment & Infrastructure, Inc.

**AMEC Comment 1:** The WPPA AKART Manual provides a good summary of available treatment technologies and vendors. However, the summary of effectiveness presented in Appendix C for the treatment BMPs is misleading, given that the sources for the cited effectiveness represent a mix of claims from published sources, Ecology-reviewed documents,

and vendor marketing materials. Peer reviewed claims for effectiveness should be differentiated from non-peer reviewed vendor data sets.

**WPPA Response:** *WPPA agrees that identification of the specific level of review each data set referenced in the tables included in Appendix C would be optimal. Unfortunately this information is not readily available for inclusion into the document.*

*The following statements have been included in Section 4.3.2 of the WPPA Manual providing caution for permittees;*

1. *PRD Section 4.3.2, lines 34-36; "In general, Permittees should consider the quantity and quality of available performance data to determine whether a stormwater treatment technology will provide sufficient pollutant removal for meeting applicable benchmarks."*
2. *PRD Section 4.3.2, lines 39-40, "In all cases, the quantity and quantity and validity of vendor-supplied performance data have not been independently verified."*
3. *PRD Section 4.3.2, lines 1-3, "Treatment performance data for technologies achieving a GULD certification have typically been collected by a third party other than the vendor and have gone through an independent review by a board of external reviewers that supports the TAPE program."*
4. *PRD Section 4.3.2, lines 19-22, "Performance data for the treatment technologies in Table C-1, C-3, C-4, and C-5 are all vendor supplied and have not been independently verified. Permittees are recommended to pilot test candidate treatment systems that are selected from this list to verify they will provide sufficient pollutant removal for meeting applicable ISGP pollutant benchmarks."*

**AMEC Comment 2:** The Reasonable Costs calculation examples do not include operation and maintenance (O&M) costs for treatment system comparisons and do not include cost savings that can be realized by implementing source controls versus treatment systems.

Implementation costs as well as potential O&M costs for a combination of operational source control methods, structural source control methods, and treatment systems should be compared in order to determine the most cost-effective, long-term option for site compliance with benchmarks.

**WPPA Response:** *WPPA agrees that consideration of O&M costs and cost savings that may be recognized through additional source controls are important when selecting stormwater treatment approaches for potential selection. Unfortunately, due to a lack of long term performance data for most of the technologies discussed in the WPPA Manual and the variability of stormwater runoff quality at various industrial facilities, accurate and reliable O&M cost data for operational and*

*structural source control and treatment approaches at a broad range of facilities were not practical to include in the WPPA Manual. Consideration of O&M and capital costs and several other quantitative and qualitative criteria are recommended to be performed on a facility-specific basis are recommended in Section 5.0 of the WPPA Manual.*

Washington State Department of Natural Resources

**WA DNR Comment 1:** Although the draft manual seems to be an appropriate guidance document for determining compliance with goals of Level 1 through Level 3 corrective actions, it is not clear whether this document could be or is intended to be used to identify if AKART has been met.

**WPPA Response:** *Ecology and WPPA did purposefully intend for the WPPA Manual to be used to assist permittees and the agency to help determine whether proposed treatment approaches meet State AKART standards.*

**WA DNR Comment 2:** While this document includes a study of technologies and their relative effectiveness, DNR believes that both site specific and cargo specific AKART evaluations are essential due to the variety of site and situational differences in marine terminals statewide. A site specific engineering analysis should be the determining factor for each AKART evaluation.

**WPPA Response:** *WPPA wholeheartedly agrees with DNR's comment.*

**WA DNR Comment 3:** DNR is concerned that the broad application of the BMPs and treatment approaches at a variety of facilities rather than using a facility-specific approach could lead to an increased risk to sediment quality on state-owned aquatic lands. When contamination occurs on state-owned aquatic lands, it becomes the responsibility of the State and citizens to provide cleanup and restoration efforts.

**WPPA Response:** *DNR's comment would seem to imply that the WPPA Manual encourages random application of BMPs and varied treatment approaches not in consideration of facility-specific considerations. Rather it is Ecology and WPPA's intent for permittees to use the guidance provided in the WPPA Manual to focus on facility-specific operational and stormwater runoff characteristics during all steps in the stormwater treatment selection process.*

**WA DNR Comment 4:** It is also not clear to DNR how Ecology will use this document in the review of an AKART analysis.

**WPPA Response:** *WPPA refers DNR to the following excerpt from Ecology's 23 May 2014 letter of appreciation to WPPA for its leadership in developing the WPPA Manual which provides the following clarification "Furthermore, a facility that follows the pathway to compliance and receives*

*Ecology approval of the facility's chosen stormwater treatment approaches (through approval of Engineering Reports prepared in accordance with Ecology guidelines as required), will be understood to have implemented AKART to the satisfaction of Washington State standards"*

**WA DNR Comment 5:** While we believe that it could be used to define treatment solutions for individual facilities, could it also be used as an avenue to re-establish benchmarks for stormwater sampling at a specific facility?

**WPPA Response:** *No, the WPPA Manual includes no mechanism or intent to re-establish benchmarks at individual facilities.*

#### WaterTechtonics

**WaterTechtonics Comment 1:** Table C-2 (page 55 of 70): Table C-2 "Chitosan Enhanced Sand Filtration" and "Wavelonics" are both labeled as having GULD status in the Pre-Treatment category. Neither of these technologies has a Pre-Treatment GULD designation. However, both of them do have GULD status in the Construction Site category. As noted in the Department of Ecology's definition of the Construction Site category,

"Construction treatment is intended to achieve the goals of a maximum of 5 NTUs above background (background of 50 NTUs or less), not more than 10% increase in turbidity where background is greater than 50 NTUs, pH of 6.5-8.5 in freshwater and 7.0-8.5 in marine water, and no visible oil sheen."

WaterTechtonics recommends the Chitosan Enhanced Sand Filtration and Wavelonics be removed from the Pre-treatment category and that all technologies listed in the Construction Site GULD category be added to this table in a new column.

**WPPA Response:** *WPPA appreciates identification of the error described in Table C-2. Table C-2 has been corrected to identify WaterTechtonic's Waveionics treatment BMP as well as the general description for Chitosan-Enhanced Sand Filtration to be approved for general use for construction stormwater treatment.*

**WaterTechtonics Comment 2:** Additionally, Watertechtonics is concerned about recommending technologies approved under the TAPE program (Pre-Treatment, Oil Treatment, Basic Treatment, and Enhanced Treatment) as being applicable to industrial facilities.

**WPPA Response:** *WPPA echoes WaterTechtonic's concerns and cautions permittees (see WPPA Manual Section 4.2) that GULD certification does not constitute Ecology approval or endorsement of specified treatment approaches at industrial facilities. WPPA has included reference to the bounded influent ranges identified in Ecology's Tape protocol documents in the final version of the WPPA Manual.*

**WaterTechtonics Comment 3:** WaterTechtonics is concerned about the use of percent reductions as an indicator of a technology's abilities to meet ISGP benchmarks for Zinc and Copper (examples are provided identifying vendor data showing high percentage reduction of pollutants, though the resultant effluent pollutant concentrations would exceed ISGP benchmarks due to high influent pollutant concentrations).

**WPPA Response:** *WPPA appreciates the comment and agrees that additional permittee cautions are warranted. WPPA has added a cautionary statement in Section 4.3.3 of the WPPA Manual addressing this topic.*

**WaterTechtonics Comment 4:** Table C-5 (page 60 of 70): Table C-5 references multiple technologies included in the Herrera "Emerging Tech" report. The WaterTechtonics Wavelonics system was included in that report. TSS data showing 98% reduction for Wavelonics system was noted in that report. Please add the TSS data for the Wavelonics system that was included in the Herrera Emerging Tech report.

**WPPA Response:** *WPPA has updated Table C-5 of the final WPPA Manual to include "% reduced" data for the Watertechtonics Wavelonics treatment system.*

#### The Weyerhaeuser Company

The Weyerhaeuser Company has a number of questions and comments on this *WPPA/Washington State Marine Terminal AKART and ISGP Corrective Action Guidance Manual* (hereafter, the "Guidance Manual"), all focused on understanding the regulatory significance of the document.

**Weyerhaeuser Comment 1:** Did the WPPA and/or Ecology intend this Guidance Manual to be consistent with the regulatory requirements in the current Industrial Stormwater NPDES permit (2012); i.e., not add procedural or substantive requirements beyond what is in the ISWGP?

**WPPA Response:** *Yes, consistency with the requirements of the ISGP was a primary goal while drafting the WPPA Manual. WPPA's intent in this regard is described in Section 1.1 of the WPPA Manual; "This Manual is intended to work in concert with the ISGP without changing the permit requirements." Additionally, the following statement is provided for further clarification "This document is intended as guidance only and does not modify or otherwise change the requirements of the ISGP. If there is any discrepancy between this guidance and the ISGP, the ISGP requirements supersede this guidance."*

**Weyerhaeuser Comment 2:** Does Ecology intend to approve and incorporate into the ISWGP this Guidance Manual, per S3.A.3.of the ISWGP? We presume the answer is no, given the lack of

any mention of this Guidance Manual in the revised ISWGP (2014) now out for public review/comment.

**WPPA Response:** *Weyerhaeuser's assumption is correct with regard to specific inclusion of the WPPA Manual into the ISGP. It is our understanding that Ecology did not intend to approve and incorporate the WPPA Manual into the ISGP in an effort to maintain permittee flexibility in selection of BMPs appropriate at their facilities and to allow for future updating of the WPPA Manual without the regulatory requirement to issue updates for public comment as defined in the Washington Administrative Code.*

**Weyerhaeuser Comment 3:** The intent/coverage of this Guidance Manual extends to "Waterfront Log Yards" (SIC 2411 – Logging). Does Ecology suggest this Guidance Manual has relevance for all ISWG permittees with SIC 2411 – Logging activity, or only those associated with WPPA/Washington State Marine Terminals?

**WPPA Response:** *As described in Section 1.3.4. of the WPPA Manual; "The waterfront log yards considered in this Manual are marine terminals at public ports draining to marine/estuarine waters..." The WPPA Manual was developed to provide assistance specifically for Washington State marine terminals. Ecology would be required to include the Manual in the ISWGP for it to apply to other industrial facilities. WPPA hopes the Manual will be a helpful reference for others in their efforts to comply with state water quality standards.*

**Weyerhaeuser Comment 4:** Paragraph 5 of page 7 of the Guidance Manual includes a statement that is not necessarily consistent with S8.D.5. of the ISWGP (2012), in particular that "Ecology anticipates ... that Permittees address all steps in the accompanying flowchart before a Modification of Permit Coverage will be considered." It is noted that the Guidance Manual flowchart presents the Permit Coverage Modification process only at the tail end of Treatment BMP evaluation, BMP installation, assessment of Benchmark achievement, etc.

Yet the ISWGP provides that installation of Treatment BMPs may be waived if "not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard." There is no precondition to complete each of the treatment technology evaluation steps in S8.5.D. 1-4 to support a waiver request. AKART, of course, is always required at all NPDES discharges.

We note that Sections 4.1 and 7.3 of the Guidance Manual faithfully presents the ISWGP S8.5.D. language.

**WPPA Response:** *The referenced statement has been deleted from the final WPPA Manual.*

Windward Environmental LLC

**Windward Comment 1:** The ISGP offers an opportunity to provide certainty regarding the definition of all known and available reasonable treatment (AKART); unfortunately, the new proposed permit represents a missed opportunity. We recommend that Ecology consider adding language to the permit stating that if a permittee is at a Level 3 response, submits an engineering report for implementing treatment, and the proposed treatment is reviewed and accepted by Ecology, then once the treatment is installed and operating, the permittee is considered to have achieved AKART.

**WPPA Response:** *WPPA agrees with Windward's stated comment and believes that the excerpt below taken from Ecology's 23 May 2014 letter of appreciation for WPPA's efforts in development of the WPPA Manual supports this position;*

*"Furthermore, a facility that follows the pathway to compliance and receives Ecology approval of the facility's chosen stormwater treatment approaches (through approval of Engineering Reports prepared in accordance with Ecology guidelines as required), will be understood to have implemented AKART to the satisfaction of Washington State standards"*

**Windward Comment 2:**

It is encouraging to see that on the website Ecology provided the draft ISGP along with the draft guidance manual for Washington State Marine Terminal AKART Guidance and ISGP Corrective Action prepared by the Washington Public Ports Association (WPPA). However, the WPPA guidance does not provide the same legal certainty of compliance as does the ISGP, nor is it intended to apply to facilities other than container and break-bulk terminals and waterfront log yards. We recommend that Ecology consider whether the WPPA guidance should qualify under Section S3.A.3.c as an equivalent manual, inasmuch as it is not currently referenced in the draft ISGP or the draft ISGP factsheet.

**WPPA Response:** *It is our understanding that Ecology did not intend to approve and incorporate the WPPA Manual into the ISGP in an effort to maintain permittee flexibility in selection of BMPs appropriate at their facilities and to allow for future updating of the WPPA Manual without the regulatory requirement to issue updates for public comment as defined in the Washington Administrative Code. We would support a broader use of the AKART Manual by Ecology and permittees in the future.*

Again, the Washington Public Ports Association thanks you for your comments.

Best Regards,

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A handwritten signature in blue ink, consisting of a large, stylized initial 'G' followed by a series of loops and a long horizontal stroke that ends in a small hook. To the right of the signature, the word 'for' is written in a simple, lowercase cursive script.

Gerry O'Keefe  
Assistant Director for Environmental Affairs