

**Washington State Department of Ecology
Sediment Management Standards Rule
Review/Comment Form**

Please submit all comments to RuleUpdate@ecy.wa.gov

Reviewer Name:		Chris Waldron, PIONEER Technologies Corporation, 360.570.1700, waldron@uspioneer.com
Sections of Document Reviewed:		SMS – All Sections
Document Version/Date:		Draft Revisions SMS – August 15, 2012
Comment Number	Line Number	Comment
1	General	Thank you for the opportunity to provide comments on the Draft SMS Rule. I am very concerned that the August 15, 2012 Draft SMS Rule incorporates language/concepts that are significantly different than previous drafts of the rule language that I have reviewed and discussions with Ecology that occurred during the SMS Advisory Committee process. Consequently, I have signed a letter, along with six other SMS Advisory Committee members, (dated October 29, 2012) to Jim Pendowski that expresses some of our concerns and requests significant changes to the August 15 Draft SMS Rule language in order to align these rule amendments with the more practicable approach needed to move forward with sediment cleanups in Washington.
2	General	Regional Background. This concept is a new addition to the Draft SMS Rule language and was introduced during the SMS Advisory Committee Process to help expedite cleanups for sediment sites without the need to tackle the issue of baywide cleanups right away. However, in order for this concept to be effective it requires careful implementation by Ecology. Regional Background concentrations are key to establishing the two-tiered framework for selecting Sediment Cleanup Standards for bioaccumulative contaminants because the health-based values for the upper and lower tiers are identical and the PQLs are identical. Consequently, if Ecology establishes Regional Background concentrations that are similar to Natural Background concentrations, then the Sediment Cleanup Standards for most sites with bioaccumulative contaminants will be based on Natural Background concentrations, which essentially means that the SMS will be based on a single-tiered framework (i.e., the lower end of the range of cleanup values).
3	58	The rule language for WAC 173-204-330 (Low salinity sediment quality standards) was not included in the Draft SMS.
4	261	Recommend revising the definition of “Biologically active zone” to state a biologically active zone corresponding to the top 10 cm of sediment should be assumed at all SMS sites unless there is site-specific data to indicate that the biologically active zone should be deeper than 10 cm. This will minimize the time and cost associated with establishing the biologically active zone at most sites, while enabling incorporation of site-specific information to establish a deeper biologically active zone at sites where it is appropriate.
5	278	The definition of Cleanup Screening Level (CSL) should be revised to explicitly state that the CSL shall not be lower than the Maximum of regional background and the Practical Quantitation Limit (PQL).
6	389	Recommend revising the definition of “Regional background” to reflect Comment #2.
7	457	Recommend revising the definition of “Technically possible” to “Technically practicable.” Technically practicable means including consideration of environmental effects, technical feasibility, and cost. Recommend that all references to “technically possible” in the Draft SMS be replaced with “technically practicable.” In order to expedite the investigation/cleanup of sediment sites, Ecology should work with PLPs to identify technically practicable solutions rather than spend significant time and resources evaluating technically possible solutions that will be impossible to implement because of environmental effects, technical feasibility, and/or cost.
8	410	The definition of Sediment Cleanup Objective should be revised to explicitly state that the Sediment Cleanup Objective shall not be lower than the Maximum of natural background and the PQL.
9	415	The definition of Sediment Cleanup Standard should be revised to explicitly state that the Sediment Cleanup Standard shall not be lower than the Maximum of natural/regional background and the PQL.
10	518	This line references WAC 173-204-315 but WAC 173-204-315 was not included in the Draft SMS text.
11	607	Why aren't SQS values presented for TPH-Diesel and TPH-Heavy Oil (Residual) in Table I when these are included in Table VII for Freshwater Sediments?
12	1509	In order to provide more flexibility with respect to establishing the restoration time frame and the requirements of sediment recovery zones recommend modifying the line that follows, “At sites or sediment cleanup units where the cleanup action cannot practicably achieve sediment cleanup standards within <u>10 or more years as approved by the department on a site-specific basis</u> after <u>completion</u> of the cleanup action, the department expects that a sediment recovery zone will be established and managed in accordance with WAC 173-204-590.”

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13	1540-1544	Recommend revising the text to replace the phrase “technically possible” with “technically practicable.” Please see Comment #7.
14	2055-2180	Recommend revising/reorganizing this section to present the process for evaluating remedial alternatives in the FS. The current text is confusing and many concepts that are vital to the remedy selection process are only included by reference. Recommend reorganizing this section consistent with the USEPA’s Nine Remedy Selection Criteria: Threshold Criteria – Must be met for a remedial alternative to be acceptable <ol style="list-style-type: none"> 1. Overall protection of human health and the environment 2. Compliance with applicable or relevant and appropriate requirements (ARARs) (unless a waiver is obtained) Balancing Criteria – Additional criteria used to help rank the remedial alternatives that meet the Threshold Criteria <ol style="list-style-type: none"> 3. Long-term effectiveness and permanence 4. Reduction of toxicity, mobility, or volume 5. Short-term effectiveness 6. Technical implementability 7. Cost Modifying Criteria – Criteria that may result in the selection of a less desirable (i.e., less desirable in terms of the Threshold and Balancing Criteria) remedial alternative as the remedy for a site. <ol style="list-style-type: none"> 8. State acceptance 9. Community acceptance
15	2196-2197	Recommend revising the text to replace the phrase “technically possible” with “technically practicable.” Please see Comment #7.
16	2202-2203	Recommend deleting the limit on upward adjustments to the sediment cleanup level to the CSL. The SQS and CSLs developed under the SMS should be based on protection of human health and the environment, background (natural and regional background, respectively), and practical quantitation limits. However, the Sediment Cleanup Level WAC 173-204-560(2) should also be based on the Technical practicability of achieving the SQS and/or CSL. This evaluation should include consideration of environmental effects, technical feasibility, and cost and ultimately may result in a Sediment Cleanup Level that exceeds the CSL (and by default the SQS).
17	2289-2287	Recommend revising the text to clarify the intent. Regional background is vital to establishing the two-tiered framework under the SMS and must be reasonable and representative of site/region-specific conditions. If regional background concentrations are set close natural background (i.e., less than a factor of 10 higher), then the SMS two tiered framework essentially collapses to a single tier at most sites. The purpose of regional background was to reflect conditions representative of recontamination proximate to a cleanup site but not associated with area background. In addition, regional background plays a key role in the “glide path” that was discussed at the SMS Advisory Committee meetings where hot-spots of contamination are removed to significantly reduce contaminant concentrations with the long-term goal of reducing concentrations in sediment to the SQS and/or natural background concentrations. If regional background is set at concentrations similar to natural background then the “glide path” becomes a “cliff face” which acts as a significant disincentive to cleanups due to the significant cost difference. In my view, regional background should incorporate contributions from all permitted discharges, storm sewers, and combined sewer outfalls, etcetera in an area proximate to a site because these represent the “background sources” that will re-contaminate the sediment at the cleanup site. Regional background should not include contributions from MTCA Cleanup sites or other hazardous waste sites (upland or sediment).
18	2364-2366	Recommend revising the citation to WAC 173-340-708 to identify the specific sections of WAC 173-340-708 that apply. WAC 173-340-708 includes various concepts and approaches that are not applicable to the SMS (e.g., discussion of indicator hazardous substance, cleanup levels vs. remediation levels, land uses [e.g., residential, commercial, agricultural], et cetera) that are not applicable to the SMS and may be confusing and misinterpreted by readers. If it is not practical to reference the specific subsections of WAC 173-340-708 that apply to the SMS, then the reference should be deleted from the

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		SMS and the necessary text should be included in the SMS.
19	2345	Recommend revising the citation to WAC 173-340-708 to identify the specific sections of WAC 173-340-708 that apply. If it is not practical to reference the specific subsections of WAC 173-340-708 that apply to the SMS, then the reference should be deleted from the SMS and the necessary text should be included in the SMS.
20	2390	Recommend revising the citation to WAC 173-340-708 to identify the specific sections of WAC 173-340-708 that apply. If it is not practical to reference the specific subsections of WAC 173-340-708 that apply to the SMS, then the reference should be deleted from the SMS and the necessary text should be included in the SMS.
21	2591	Recommend that Ecology include additional text/notes that clearly describe the information presented in Table V. For example, all acronyms, calculations, and comparisons should be transparently documented.
22	2677	Recommend that Ecology include additional text/notes that clearly describe the information presented in Table VII. For example, all acronyms, calculations, and comparisons should be transparently documented.
23	2720	The text states that “three endpoints” should be included in the suite of biological tests for freshwater sediment; however, Table VIII and Table IX only include two endpoints (i.e., mortality and growth). The text and/or Tables VIII and IX should be revised for consistency.
24	2677	Recommend that Ecology include additional text/notes that clearly describe the information presented in Table VIII. For example, all acronyms, calculations, and comparisons should be transparently documented.
25	2791-2793	Recommend that this sentence be revised as follows “Sediment cleanup objectives and cleanup screening levels based on protection of higher trophic level species shall not be established at concentrations that do not have the potential for minor adverse effects.”
26	2814-2815	Recommend that Ecology include the criteria/procedures for determining “Whether contaminants are present at the site that are known or suspected to have minor adverse effects on higher trophic level species.”
27	2819	This section should explicitly reference the RI/FS reports (WAC 173-204-550). In addition, I recommend revising/reorganizing this section to present the process for selecting the sediment cleanup action based on the remedial alternatives presented in the FS. The current text is confusing and many concepts that are vital to the remedy selection process are only included by reference. Recommend reorganizing this section consistent with the USEPA’s Nine Remedy Selection Criteria: Threshold Criteria – Must be met for a remedial alternative to be acceptable <ol style="list-style-type: none"> 1. Overall protection of human health and the environment 2. Compliance with applicable or relevant and appropriate requirements (ARARs) (unless a waiver is obtained) Balancing Criteria – Additional criteria used to help rank the remedial alternatives that meet the Threshold Criteria <ol style="list-style-type: none"> 3. Long-term effectiveness and permanence 4. Reduction of toxicity, mobility, or volume 5. Short-term effectiveness 6. Technical implementability 7. Cost Modifying Criteria – Criteria that may result in the selection of a less desirable (i.e., less desirable in terms of the Threshold and Balancing Criteria) remedial alternative as the remedy for a site. <ol style="list-style-type: none"> 8. State acceptance 9. Community acceptance
28	2906-2908	Recommend revising the following text as follows, “Cleanup actions shall not rely primarily on monitored natural recovery or institutional controls and monitoring where it is technically possible <u>practicable</u> to implement a more permanent cleanup action.”
29	2920-	Recommend revising this section to remove the reference to WAC 173-340-360 and explicitly include

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	2926	cost and other factors for selecting a cleanup action directly in the text. WAC 173-340-360 includes various concepts and approaches that are not applicable to the SMS (e.g., discussion of groundwater cleanup actions, cleanup actions for soils at current/future residential area, et cetera) and may be confusing and misinterpreted by readers.
30	2927-2938	Recommend deleting the hierarchy. The hierarchy significantly limits Ecology site manager's and PLP's ability to select technically practicable remedial alternatives for their site by imposing additional, unnecessary constraints on the long-term effectiveness evaluation. Remedy selection should be a site-specific process and the Nine Remedy Selection Criteria are sufficient for selecting the appropriate remedy for a site. For example, at some sites dredging and capping may be the best (as indicated by the screening performed in the FS) remedial alternative at one site, while enhanced natural recovery may be the best (as indicated by the screening performed in the FS) remedial alternative at another site.
31	2957-2958	There appears to be a typographical error in the following sentence "The department must authorize any restoration time frame longer than ten years after the start of the cleanup action." Should this sentence read, "The department must <u>may</u> authorize any restoration time frames longer than ten years after the start of the cleanup action.?"
32	2958	Recommend that "years after the start of the cleanup action" be defined in the SMS Rule. Does this mean after construction of the cleanup action has been completed? Recommend that the restoration time frame be triggered after construction of the cleanup action has been completed.
33	3096	Recommend that "potentially affected landowner" be defined in the SMS Rule. Does this mean a landowner whose property was impacted (i.e., contaminated) by releases from the site and, therefore, is being proposed as part of the sediment recovery zone? Or, does this mean a landowner whose property was not impacted by releases from a site but is located adjacent to the proposed sediment recovery zone?