

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

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

Reviewer Name:		Brad Helland, PE
Sections of Document Reviewed:		SMS sections 173-204-200, -500 - 590
Document Version/Date:		November 2011
Page Number	Line Number	Comment
General comment	NA	Integrating protection of human health into the SMS is critical for all stakeholders, including the regulated community, to have confidence in the predictability and outcome of cleanup. Ecology has done an outstanding job of considering diverse opinions in its effort to balance incentivizing cleanup with more flexible cleanup standards while maintaining protective goals. Ecology is to be commended on investing so much effort in convening advisory groups and crafting rule language based on a large body of scientific information and a wide array of stakeholder values. Allowing the use of regional background in determining sediment cleanup standards while maintaining conservative risk-based goals is a welcome paradigm shift in stewardship of natural resources and protection of human health and the environment. The effect of this new approach will depend largely on how regional background is defined and applied to setting cleanup standards and on how actions beyond those required to meet cleanup standards are defined, implemented and allocated. A watershed-based approach to ecosystem services, in addition to cleanup standards subject to this rule revision, is a key element in advancing the protection of Puget Sound and other waters of the State.
General comment	NA	I support Ecology's decision to issue freshwater sediment standards consistent with the current marine standards, including both chemical and biological criteria with biological testing override and allowance for development of site-specific bioassay-based criteria. Development of the proposed criteria using the floating percentile method provides scientifically defensible criteria based on updated science and regional data reflecting mixtures of contaminants typical in the NW. This approach is more accurate in predicting toxicity compared to other SQVs.
General comment	NA	Some commenters have expressed concerns that the rule language is not clear enough to implement as an ARAR. The issue with ARARs is not clarity as much as it is about discretion. EPA (and DOJ) arguments against SMS as ARAR now rest largely on the fact that the rule allows too much agency discretion, and thus doesn't qualify as a requirement. I don't support this argument, but the agency should think carefully about the balance between flexibility and the ability to apply SMS as an ARAR.
9	1	The rule would benefit from better definitions of what "source" and "source control" mean, particularly with respect to stormwater conveyances. While part 400 of the SMS contemplates discharges, the more far-reaching work required to address point source contamination that has been released and collected in conveyance systems prior to discharge should be emphasized. At large sites, effective source control work often dwarfs in-water remediation, so it merits more emphasis in rule and guidance. Emphasis should be placed on upland remediation, tracing releases through conveyance systems, distinguishing urban nonpoint loads from point sources, and determining what level of source control is practicable. I understand that section 400 was not the focus of this rule revision, but source control cannot be effectively separated from sediment cleanup, especially when cleanup standards are in the area between regional and natural background.
9	17	WAC 173-204-200(5) defines "applicable state and federal laws" but local requirements are also specified in citations in the RI scope section (p. 32, line 64), the FS section (p. 36, line 178), the sediment cleanup standards section (p. 40, line 49 and p. 41, line 67), and the selection of cleanup actions section (p. 60, line 28 and p. 61, line 54). Clarify definition to include local laws that are more stringent (if such exist) than state law.
10	58	The new definition of contaminated sediment would include a large portion of all sediments in Washington. Most stations would be categorized as station clusters of potential concern. Is Ecology prepared to maintain a significantly expanded list of all contaminated sediment stations?
11	68	The definition of ENR should not use the term "capping" because this is the term reserved for an engineered structure designed to isolate contaminants and be stable under site-specific conditions. Given such a large inventory of contaminated sediments, how will Ecology manage the discrepancy between contaminated sites undergoing cleanup and the inventory of "contaminated" sediments?
11	81	"Maximum Allowable Level" means the maximum allowed concentration of any hazardous substance and level of biological effects permissible at the site. Does this mean you can't cap MAL concentrations under any circumstances?
12	99	Natural recovery definition should specify "cleaner" sediments rather than "clean" sediments because depositing sediments are likely to meet the proposed definition of "contaminated sediment," even with all practicable source control.

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12	117	Non-anthropogenically affected definition needs to be modified to state not “significantly” affected by human activity. Because persistent contaminants of anthropogenic origin have been globally distributed, by definition all surface sediments would have an anthropogenic component. The only sediments not anthropogenically affected would have been deposited prior to the industrial revolution (i.e., likely beneath the biologically active zone). Alternatively, a different term could be used in place of “non-anthropogenically affected” such as natural background, as defined in MTCA.
13	148	“Calculation of regional background must exclude areas with an elevated level of contamination due to the direct influence of known or suspected contaminant sources including, but not limited to, areas within a sediment cleanup unit.” Intent here is not clear: “areas within a sediment cleanup unit” may mean selected areas with elevated concentration or it may mean all area within a site unit. If the intent is to exclude the entire unit, this conflicts with the desire to make large units. Might some units include relatively uncontaminated areas? If not, the construction of a site unit may become unnecessarily complex.
19	107	Sediment cleanup standards are defined with respect to active remediation alone. While precaution against biased selection of cleanup actions is understandable, the benefit of entirely excluding passive remediation to attain cleanup standards is unclear. This exclusion of natural recovery (defined in the proposed rule as a passive cleanup action) conflicts with MTCA’s definition of natural attenuation insofar as natural attenuation is considered an “active remedial measure” if it meets the departments expectations in WAC 173-340-370(7). Monitored natural recovery (MNR) is a commonly used approach to meeting regulatory requirements and has been demonstrated to be effective under the appropriate circumstances. As proposed, it appears that MNR would only be allowed in closing the gap between an approved cleanup standard and the sediment cleanup objective (often MTCA natural background). Under many circumstances, this exclusion would result in selecting active cleanup actions that could be more disruptive than MNR while achieving similar outcomes. Ecology should allow the use of MNR to attain cleanup standards under carefully prescribed criteria.
19	131	More clarity around how Ecology would determine whether a previous cleanup action is sufficiently protective would be very useful. A citation in rule or law would be optimal.
29	37	I support the change from “voluntary” cleanup action to include Ecology review. Contaminated sediment sites are generally complex and require meaningful and timely interaction between Ecology and the cleanup proponent. Sediment cleanup is generally expensive, and appropriate regulatory oversight should reduce likelihood of rework. What remains unspecified is how Ecology will manage such cleanups in the absence of an Agreed Order or Consent Decree.
33	82	When the cleanup objective is equal to MTCA natural background, it is unclear how a site boundary, particularly in an urban area, would be defined. Establishing a site boundary could be a considerable undertaking if all contaminant concentrations above natural background need to be delineated. What statistical calculations would be appropriate in determining where the sediment cleanup objectives and maximum allowable levels would be met? Would Ecology be open to a demonstration of where the extent of a release becomes statistically indistinguishable from the surrounding environment?
36	Footnote 72	Replace “duplicity” with “duplication.”
39	11	Achieving cleanup standards 10 years from the <i>beginning</i> of construction is a significant departure from existing rule and practice. Wouldn’t it be more efficient for all parties to promulgate constraints on restoration time frame rather than going through the separate process of establishing an SRZ? Has Ecology ever authorized an SRZ? Is Ecology prepared to undertake authorization of SRZs in urban bays and complex cleanup sites where remedies are likely to take longer than 10 years to attain standards? The workload could be significant and impede the progress of cleanup. Also applies to language on p. 61, line 33.
40	41	Reference is made to “conditions in subsection (e)” but there are no conditional statements in that subsection. Suggest instead the following: “The sediment cleanup objective shall be at least as stringent as all of the following, except as specified in subsection (e).” This comment also applies to section 571(3).
41	59	The maximum allowable level (MAL) is at least as stringent as several criteria listed, including 1×10^{-5}

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43 43	37 31	“total site risk.” Also, the “regional background consideration” specifies the MAL will not exceed regional background. This construction of the MAL will not result in a two-tiered approach because 1) the most stringent criteria in the proposed MAL and the proposed sediment cleanup objective will be indistinguishable, and 2) setting a ceiling on the MAL does not establish a sufficient maximum value. The MAL needs to be the highest of the cited criteria if a two-tiered approach is to be maintained in the SMS.
41	Footnote 92	The second sentence is unclear. More importantly, the 10-yr post-construction period to comply with standards should be maintained.
59	16	The K_{ow} criteria are inconsistent between WAC 173-333-320(2)(b) and the proposed section 524(2)(a)(ii).
61 Or 60	43 29	Selection criteria now appear consistent with the intent of MTCA, but the disproportionate cost analysis methodology, which is current practice, is not reflected in the proposed language. Cite the MTCA DCA process, possibly with modifications for sediment cleanup.