

Landau Associates

Landau Associates has the following comments with respect to suggested revisions and updates to the MTCA rule during the upcoming rulemaking process:

1) Application of Surface Water Cleanup Levels to Groundwater: Surface water quality standards (e.g., Chapter 173-201A WAC) are often used as an ARAR in developing groundwater cleanup levels for groundwater that discharges to surface water, including most Puget Sound shoreline sites. This is reasonable when linked to a conditional point of compliance at the location of groundwater discharge to surface water. However, we have run into instances where Ecology PMs have required that groundwater cleanup levels be set at the surface water standard and be achieved throughout the site or at a conditional point of compliance upgradient of the shoreline rather than at a conditional point of compliance at the shoreline. There is not a reasonable technical rationale for requiring compliance with surface water criteria upgradient of the point of groundwater discharge to surface water, especially for criteria based on human ingestion of aquatic organisms, since no exposure can occur. This issue could be addressed through a revision to WAC 173-340-720(8), subsections c and d. It appears that this issue is at least partially the result of the MTCA regulation not explicitly providing an opportunity to apply different cleanup levels to different areas of the site for the same media. One approach to addressing this issue could be formally adopting an operable unit approach similar to CERCLA, discussed below. Or the changes suggested in item 3 below could be adopted. Additionally, the regulation should specifically provide an opportunity to establish a groundwater concentration protective of surface water based on attenuation (i.e. a groundwater cleanup level protective of surface water that is higher than the surface water criteria) similar to 173-340-720(8)(e) but regardless of the use of a conditional point of compliance. Attenuation is often significant in highly biologically active zones near the groundwater to surface water interface and at tidally influenced sites subject to significant hydrodynamic dispersion, and it is not always possible to install monitoring points immediately adjacent to a surface water body. The regulation should allow for demonstration or modeling of attenuation between the nearest groundwater monitoring point and the surface water interface and establishment of groundwater criteria based on the resulting attenuation factor.

2) Clarification of the use of multiple cleanup levels for the same media type: The regulation should clarify that multiple cleanup levels and points of compliance for an affected media can be established, if warranted, based on changes in receptors, pathways and other considerations within a site.

3) Adoption of Operable Units: MTCA does not provide for the establishment of operable units to define cleanup levels, remedial actions, and multiple points of compliance within a site. Ecology PMs often accept the functional equivalent of operable units for shoreline sites, drawing the line between upland media and aquatic media. This probably is considered acceptable under the current rule because the affected media change from soil and groundwater (upland) to sediment (aquatic). Formally adopting an operable unit approach would allow greater flexibility for larger, more complex sites where the receptors and/or exposure pathways can vary for a given media, and the establishment of differing cleanup levels and point of compliance, and implementation of differing cleanup actions, are appropriate. Ecology should consider amending the regulation to allow for the use of an operable unit approach when warranted.

a. Example: A site has a potable groundwater source that discharges to a fresh water river. The development of groundwater cleanup levels would need to consider potable water criteria and

surface water quality criteria (protection of aquatic organisms, human consumption of water and fish). Under the current regulation, Ecology may require that the most conservative groundwater cleanup level be applied throughout the site. For a number of COCs the cleanup level protective of surface water would be the more conservative criteria, and as such, would become the groundwater cleanup level for the entire site even though the exposure that the criteria is based on only occurs where groundwater discharges to surface water. What would be more appropriate would be to establish a cleanup level based on drinking water criteria throughout the upland portion of the site and establish a groundwater cleanup level at the shoreline based on surface water quality criteria. This variation in cleanup levels could be easily addressed by establishing an operable unit for protection of surface water at the shoreline and establishing a groundwater operable unit based on drinking water criteria throughout the remainder of the site.

4) Risk-Based Cleanup Levels: the rule would benefit from having a mechanism for allowing the development of exposure risk-based cleanup levels for circumstances that are not adequately addressed by MTCA Method A, B or C cleanup levels. The regulation should be modified to allow the development of exposure risk-based cleanup levels for all media. Below are a couple of examples of situations that would benefit from greater flexibility in developing exposure risk-based cleanup levels:

a. Example - Vapor Intrusion. Many vapor intrusion sites involve commercial buildings. The current regulations allow for some modifications to the Method B air cleanup levels, but the allowable modifications are limited and do not directly address commercial exposure. The rule would benefit from a better established process for evaluating vapor intrusion risk for various building types and uses. Because vapor intrusion is building-specific, it would make sense to have a process for calculating either building-specific or use-specific cleanup levels applicable to commercial buildings.

b. Example - Surface Water Bodies Without Aquatic or Potable Water Exposure. A mechanism for developing surface water cleanup levels for surface water bodies, such as stormwater ponds and ditches, that are clearly not intended for potable water use and do not contain fish, should be provided. The current modified Method B cleanup level development approach [WAC 173-340-730(3)(c)] does not adequately address this condition, and Ecology typically requires the application of standard Method B cleanup levels or in many cases state surface water standards developed under WAC 173-201A.

5) Restoration Timeframe: The current structure of evaluating the restoration timeframe for cleanup alternatives separate from the disproportionate cost analysis results in redundancies in the feasibility study since most of the restoration timeframe criteria are addressed in one manner or another within the DCA, or are essentially the outcome of the DCA (i.e., practicability of a shorter restoration timeframe). The FS process should be streamlined by adopting a restoration timeframe as one of the DCA criteria rather than having it as an additional evaluation step in the FS process.

6) Dispute resolution: Ecology should implement an independent dispute resolution process to formally resolve disagreements between PLPs and the agency regarding implementation of the MTCA regulation. While the dispute resolution process does not necessarily belong in the regulation itself, Ecology should formally adopt an administrative policy or program procedure for independent dispute resolution. The process should allow PLPs to formally appeal decisions made by the Department with respect to requirements at all stages of the MTCA process. Independent dispute resolution should be administered by a third party not affiliated with the Department of Ecology and should provide for fair and impartial written decisions based on the facts and law.

