

CSR OMNIBUS UPDATING: Protocol Summary -Amendments to CSR Schedule 10

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Protocol Summary

1. Update the list of prescribed substances in the existing CSR Schedule 10 by adding or removing substances based on 2015 United States Environmental Protection Agency (USEPA) Region 3, 6 and 9 Regional Soil Screening Levels (RSLs), [1].
2. For those substances from step 1 above for which sufficient toxicological information is available to create a matrix of soil standards, move the substance to Omnibus Schedule X, Part 1 (Matrix Soil Standards) and derive matrix standards in accordance with the omnibus protocol established for deriving matrix soil standards¹.
3. For those substances from step 1 above for which sufficient toxicological information is available to only derive either a human health or an ecological health protective generic soil standard, derive the respective generic soil standard for inclusion in Schedule X Part 2 or Part 3.²
4. Add substances and corresponding human health and ecological health new omnibus derived or retained existing generic soil standards from CSR Schedule 4 to Schedule X Part 2 and Part 3.³
5. For the remaining updated Schedule 10 substances from step 1- 4 above, set the Schedule X, Part 2 and Part 3 to equal the corresponding 2015 USEPA RSL, [1].⁴

¹ See “CSR OMNIBUS UPDATE: Protocol Summary - Amendments to Schedule 4 and 5 Human Health Protection Soil Standards”, February, 2016 for details related to the derivation of omnibus updated human health protection matrix soil standards.

² See “CSR OMNIBUS UPDATE: Protocol Summary - Amendments to Schedule 4 and 5 Human Health Protection Soil Standards”, February, 2016 and “CSR OMNIBUS UPDATE: Protocol Summary – Amendments to Schedule 5 Environmental Protection, Matrix Soil Standards”, February, 2016 for details related to the derivation of omnibus generic soil standards

³ See “CSR OMNIBUS UPDATE: Protocol Summary - Amendments to Schedule 4 and 5 Human Health Protection Soil Standards”, February, 2016 for details related to the derivation of new omnibus generic soil standards and the retention of existing CSR Schedule 4 generic soil standards for use in Schedule X Part 2 and part 3.

⁴ Note that step 4 has the effect of updating the generic soil standards for both the prescribed substances carried over from the existing CSR Schedule 10 and setting generic soil standards for those new prescribed substances added to Schedule X Part 1 and Part 2.

6. Update the generic soil standards for the prescribed substances of Schedule X Part 2 obtained from step 2 above to reflect 2015 USEPA Regional Screening Levels, Residential and Industrial RSLs adjusted as follows:
 - i. for substances deemed to be carcinogenic based on USEPA RSLs, adjust the ingestion specific USEPA RSL to equal the CSST Protocol [2] human health incremental lifetime cancer risk (ILCR) of 1 in 100,000⁵ and
 - ii. for substances deemed to be either non-threshold or threshold based on USEPA RSLs, adjust the USEPA RSL to reflect the CSST Protocol [2] 20% soil exposure apportionment used in the derivation of soil standards.
 - iii. for each land use, where both non-threshold and threshold standards were calculated, adopt as the new final CSR standard for the substance, the most stringent of the threshold or non-threshold standards, as the CSR Schedule X standard.

7. In the case where Wildlands and Residential_{High Density} generic soil standards cannot be derived in accordance with omnibus protocols for Schedule X, Part 2 listed substances, set the Schedule X, Part 2 generic soil standards as follows:
 - i. for Wildlands_{Natural}, Wildlands_{Reverted}, Residential_{High Density}, and Parkland land uses, set the standards to equal 2x the adjusted USEPA Residential RSL
 - ii. for Agricultural and Residential_{Low Density} land uses, set the standards to equal the adjusted USEPA Residential RSL
 - iii. for Commercial and Industrial land uses, set the standards to equal the adjusted USEPA Industrial RSL.

8. For those substances listed in the new omnibus Schedule X, Part 1, 2 and 3 and for which USEPA drinking water RSLs are available, move the substance to Omnibus Schedule W (water standards) and set the corresponding Schedule W drinking water standard for the substance in accordance with to the omnibus protocol established for deriving drinking water standards.⁶

9. Repeal the existing CSR Schedule 10.

Associated Omnibus Updating Documents

Details related to the proposed changes to CSR Schedule 10 are available in the ministry's 2015 Draft Discussion Document entitled "CSR OMNIBUS UPDATE: Proposed Amendments to Schedule 10". [2]

⁵ USEPA Regional Screening Levels (RSLs) for carcinogenic substances are calculated based on a human health incremental lifetime cancer risk (ILCR) of 1 in 1,000,000.

⁶ See "CSR OMNIBUS UPDATING: Protocol Summary - Amendments to CSR Schedule 6", February, 2016 for details related to the derivation of omnibus water standards.

Details related to the ministry's response/decisions on stakeholder comment received on the proposed changes to CSR Schedule 10 are available in 2015, "Omnibus Updating of CSR Standards Draft Discussion Documents – Land Remediation Response to Stakeholder Comment." [3]

Next Cycle Revisions

1. Consider adopting soil and drinking water guidelines and standards obtained from other agencies (e.g. European Union, Australia, etc.) in addition to US EPA Regional Screening Levels, in setting future generic soil and drinking water standards for use in Schedule X, Part 2 and Part 3.

References

- [1] US Environmental Protection Agency (USEPA). (2015). [Regional Screening Levels for Chemical Contaminants. Screening Levels for Chemical Contaminants. RSL Tables.](#) (as of January 2015). US Environmental Protection Agency.
- [2] British Columbia. (2015). [CSR OMNIBUS UPDATING: Proposed Amendments to Schedule 10.](#) Ministry of Environment. June, 2015.
- [3] British Columbia. (2015). [CSR OMNIBUS UPDATING: Proposed Amendments to Schedule 10. Omnibus Updating of CSR Standards Draft Discussion Documents – Land Remediation Response to Stakeholder Comment](#)