



LOWER MINNESOTA RIVER WATERSHED DISTRICT

Executive Summary for Action

Lower Minnesota River Watershed District Board of Managers Meeting

Wednesday, May 18, 2022

Agenda Item

Item 6. J. – MPCA Soil Reference Values (SRVs)

Prepared By

Linda Loomis, Administrator

Summary.

The MPCA has been working for several years to revise allowances for chemicals found in soil. SRVs are a screening tool used to evaluate potential human health risks from exposure to contaminated soil. This concerns the LMRWD management of dredge material.

The MPCA released new guidance for SRVs April, 22, 2022. The SRV spreadsheet contains generic SRVs for the Residential/Recreational and Commercial/Industrial land use categories. 2022 changes are summarized below:

- 42 new chemicals added to the SRV table.
- Updates to some existing SRVs based on new toxicity values or other chemical information. Changes of note:
 - **Lead:** residential SRV dropped to 200 parts per million (ppm; from 300); industrial SRV dropped to 460 ppm (from 700). This change is based on EPA software that models the SRV to be protective to a certain level of lead in blood. EPA adopted a new blood lead reference value last year (5 micrograms per deciliter), so the SRV changed accordingly.
 - **Hexavalent chromium:** residential SRV dropped to 2.3 ppm (from 11); no change to industrial SRV (62). This change is most relevant for sites where hexavalent chromium is suspected to be present, based on past or present property use.
 - **Mercury:** residential SRV dropped to 2.7 ppm (from 3.1); no change to industrial SRV (3.1).
 - **Manganese:** residential SRV dropped to 730 ppm (from 2,100); industrial SRV dropped to 10,000 ppm (from 26,000). The updated residential SRV may be below background concentrations in some (but not all) areas of Minnesota. If manganese is a soil contaminant of concern at a site, coordinate with MPCA project staff to determine if an appropriate site-specific background level is needed.
- Adjusted number rounding of two exposure assumptions (body weight and surface area), which resulted in a small increase for a number of SRVs.

The MPCA plans to update the SRVs annually. The LMRWD will be evaluating the impact this may have to the LMRWD management of dredge material. Links to the MPCA guidance document and spreadsheet are provided below.

Attachments

[Soil Reference Value Technical Support Document](#)

[SRV Spreadsheet](#)

Recommended Action

No action recommended – For information only