



CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) HUMAN AND ECOLOGICAL RISK OFFICE (HERO)

HERO is pleased to announce our ninth “Quarterly Updates from HERO” – February 2018

1. Updated Human Health Risk Assessment (HHRA) Note 3 – DTSC-Modified Screening Levels (DTSC-SLs), January 2018. The update to the HHRA Note is described below with a link to the entire HHRA Note:

HHRA Note 3. The January 2018 Update to HHRA Note 3 incorporates changes adopted by the USEPA in their November 2017 Regional Screening Levels (RSLs). This includes updates to several toxicity criteria and chemical nomenclature. 1,3-Dichlorobenzene was removed from the all media tables. For the supporting soil appendix tables, chromate salts were not evaluated pending further review and inadvertent exclusions (cadmium [diet]) and inclusions (dibenz[a,h]anthracene and manganese [diet]) were corrected. For the tap water supporting appendix tables, seven analytes have been removed (boron trifluoride, chrysene, dibenz[a,h]anthracene, di-n-butyl phthalate, tert-butyl alcohol, toluene-2,4-diisocyanate, and toluene-2,6-diisocyanate). Finally, there is now a DTSC-SL for 1,2-dichloropropane in the ambient air summary table and supporting appendix.

The updated HHRA Note 3 can be found at: <http://www.dtsc.ca.gov/AssessingRisk/upload/HHRA-Note-3-January-2018.pdf> and <http://www.dtsc.ca.gov/assessingrisk/humanrisk2.cfm>.

2. November 2017 USEPA Regional Screening Levels (RSLs).

The USEPA released the latest version of the RSLs. The RSL tables can be found at:

<https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-november-2017>. Below is a list of ‘What’s New in the November 2017’ version of the RSLs:

- New [Tables](#) were generated that reflect changes in the toxicity and chemical-specific parameters as per the RSL hierarchies. This spreadsheet [file](#) (or this [pdf](#)) is a comparison of the previous toxicity database to the current. This spreadsheet [file](#) (or this [pdf](#)) is a comparison of the previous summary table to the current for TR=1E-06 and THQ=1.0. This spreadsheet [file](#) (or this [pdf](#)) is a comparison of the previous summary table to the current for TR=1E-06 and THQ=0.1.
- There are no chemicals with toxicity value changes due to [IRIS](#) updates.
- Chemicals with new toxicity values due to [ATSDR](#) updates are:
 - bromopropane, 1-,
 - glutaraldehyde,
 - diethyl-meta-toluamide, N,N (DEET) (subchronic only), and
 - nitrate and nitrite (subchronic only).
- Chemicals with new toxicity values due to [PPRTV](#) updates are:
 - DDD, p,p'- (DDD),
 - DDE, p,p'-,
 - lactonitrile,
 - toluic acid, p-,
 - diphenyl ether,
 - methyl-2-pentanol, 4-,
 - heptanal, n-,
 - difluoropropane, 2,2-
 - bromo-4-fluorobenzene, 1-,
 - bromo-3-fluorobenzene, 1-, and
 - *tert*-butyl formate (subchronic only).
- The chromates presented by [Cal EPA](#) (lead chromate, strontium chromate, barium chromate, sodium dichromate, and calcium chromate) were removed from the RSLs. The oral slope factors and inhalation unit risk factors presented were identical to chromium VI; however, application of the same GIABS for all salts was questionable. It was decided that chromium VI RSLs would be sufficient and if specific forms of chromate were reported from a laboratory, an appropriate GIABS should be derived and applied.
- The chemical, DDD, was renamed DDD, p,p'- (DDD).
- Bromofluorobenzene, p- was renamed Bromo-4-fluorobenzene, 1-.

- The dispersion constants for calculation of Q/C for PEF and VF (A, B, and C) for Casper, Wyoming were changed to 17.6482, 18.8138, and 217.039, respectively. In the Supplemental Soil Screening Guidance, Tables D-2 and D-3, as well as E-2 and E-3, contain identical ABC for every city except for Casper, Wyoming. Applying the assertion that Casper was to be the 100 percentile city for PEF and the 0 percentile city for VF, the correct ABC values were deduced.
- The [RSL Calculator](#) now presents the target risk and target hazard quotient on the main page. Additionally, the default target hazard quotient is now 0.1. A new pick list is also provided that contains many synonyms, is also searchable by CAS, and should remember the chemicals selected. When the calculator is run in site-specific mode, users will now have the option to change the system temperature for the VF and soil to groundwater models (see User's Guide section 4.9.9). Changing the temperature will trigger a change in the Henry's Law constant. Changes made in site-specific mode will now be displayed next to the default values in the output table of input parameters.

3. ITRC Online Free Course – Bioavailability of Contaminants in Soil: Considerations for Human Health Risk Assessment.

This online training course will include a discussion on the California Arsenic Bioaccessibility (CAB) Method discussed in the HERO HHRA Note 6.

Tuesday, February 13th – 10 a.m. to 12:15 p.m.

Thursday, May 3rd – 10 a.m. to 12:15 p.m.

Thursday, August 16th – 10 a.m. to 12:15 p.m.

Tuesday, November 27th – 10 a.m. to 12:15 p.m.

Registration: <https://clu-in.org/live/>

4. COMING SOON. Human Health Risk Assessment Note 8 – Recommendations for Evaluating Polychlorinated Biphenyls (PCBs) at Hazardous Waste Facilities and Contaminated Sites in California.

HERO will be releasing our latest HHRA Note 8 in the next several months. Note 8 presents common issues to consider during investigation and cleanup of PCBs for protection of human health at hazardous waste sites and permitted facilities. The Note will recommend strategies for addressing commonly encountered issues under the current regulatory framework and include a discussion on the Toxic Substances Control Act (TSCA) requirements and when to consult USEPA regarding management and cleanup of TSCA-regulated PCB materials.

5. HERO News E-List. HERO has created a list serve where subscribers will receive e-mail notifications regarding news on topics related to human and ecological risk assessment including HERO Quarterly Updates, new and updated HHRA Notes, new and updated EcoNotes, as well as other risk assessment guidance documents, presentations, and publications. The

To subscribe: 1) Go to the “E-Lists” tab near the upper right border of any DTSC or HERO web page; 2) Please read the instructions on signing up for E-Lists; 3) Scroll down until you see “**HERO News**”, click “**Subscribe**”, then fill out the requested information.

The direct link to the DTSC E-List sign-up page can be found at:

<http://www.dtsc.ca.gov/ContactDTSC/ELists.cfm>.

Please contact your site toxicologist if you have any site-specific questions or the contact person indicated in each HERO HHRA Note document for more general questions.

Thank you,

HERO