



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

HERO is pleased to announce our second “Quarterly Updates from HERO” – July 8, 2015

1. Updates to Human Health Risk Assessment (HHRA) Note 3. The update to HHRA Note is described below with a link to the entire HHRA Note:

HHRA Note 3 – DTSC has developed modified screening levels based on the U.S. EPA Regional Screening Levels (RSLs) for use in the human health risk assessment process at hazardous waste sites and permitted facilities. This revision of HHRA Note 3 incorporates HERO recommendations based on review of the May 2014 through January 2015 releases of the RSL tables for soil, tapwater, and indoor air. Note 3 also includes updates consistent with the 6 February 2014 USEPA memorandum “Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors” and that memo’s subsequent incorporation into the 30 September 2014 update to HERO HHRA Note 1. For the majority of the approximately 800 listed chemicals, HERO recommends the values listed in the USEPA RSL tables. However, for approximately 200 chemicals that differ significantly (greater than three-fold) from values calculated using CalEPA toxicity criteria and risk assessment procedures, HERO recommends a different screening level, those are listed in HHRA Note 3 tables. The updated HHRA Note 3 can be found at:

<http://www.dtsc.ca.gov/AssessingRisk/upload/HHRA-Note-3.pdf> and  
<http://www.dtsc.ca.gov/assessingrisk/humanrisk2.cfm>.

2. June 2015 USEPA Regional Screening Levels (RSLs). The USEPA released the latest version of the RSLs. The RSL tables can be found at: <http://www.epa.gov/region9/superfund/prg/>. Below is a list of *What’s New* in the June 2015 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 [file](#)) is a comparison of the previous toxicity database to the current. This spreadsheet [file](#) (or this pdf [file](#)) 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 [file](#)) is a comparison of the previous summary table to the current for TR=1E-06 and THQ=0.1.
- Chemicals with new toxicity values due to new [Cal EPA](#) updates are:
  - tris(2,3-dibromopropyl)phosphate
- The RSL workgroup coordinated with the Vapor Intrusion Screening Level ([VISL](#)) workgroup to ensure a consistent approach to volatility. For more information consult the VISL Calculator [User’s Guide](#). The following criteria are now used to define a chemical as volatile in the RSLs: 1) vapor pressure greater than 1 mm Hg or 2) Henry’s Law constant greater than 0.00001 atm-m<sup>3</sup>/mole. There are now over 100 chemicals newly classified as volatile. Chemical-specific parameters were added to the database for use in calculating volatilization factors for the new volatiles.
- While adopting the new volatility rule, seven chemical type classifications were corrected to distinguish between volatiles and semivolatiles as well as to distinguish between organic and inorganic compounds.
- The construction worker averaging time for cancer was changed from (50 weeks/yr \* 7 days/week) to 365 days per year to be consistent with all the other cancer equations.
- Corrections were posted to the [OSWER Directive](#) for child and adult worker surface area available for soil contact. A [FAQ](#) has been provided. [Items 22 and 23](#) are the source of the documentation.
- [FAQs](#) were added for asbestos and use of the T (total time over which construction occurs, in seconds) variable in the volatilization factor equations.
- [User Guide](#) was updated in section 5.18 regarding the assessment of TCE for less than chronic situations. Additional chemical parameter sources were added to section 2.4.1 and 2.4.2. Section 4.13.4 has new text describing the definition and treatment of volatile compounds.
- Vapor pressure was added to the [Generic Tables](#) in the Chemical Specific Parameters supporting table.

3. **Coming July/August 2015** - Revised Preliminary Endangerment Assessment Guidance Manual (PEA Guidance Manual). This version of the PEA Guidance Manual will incorporate comments received since releasing the October 2013 version.

4. HERO has revamped our external website. Revisions include adding Quick Links – “What’s New At HERO” and “Risk Assessment News.” HERO continues to work on improving our external website. Check it out at: <http://www.dtsc.ca.gov/AssessingRisk/index.cfm>.

5. USEPA recently released two guidance documents to support vapor intrusion assessment and mitigation activities. DTSC is currently in the process of reviewing these guidance documents. Links to the documents can be found at: <http://www.epa.gov/oswer/vaporintrusion/> and <http://www.epa.gov/oswer/vaporintrusion/guidance.html#EO12866OSWERVERI>

- [\*\*Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air \(PDF\)\*\*](#) (June 2015). This document is intended for use at any site being evaluated by EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, or the corrective action provisions of the Resource Conservation and Recovery Act (RCRA), as amended; it is also intended for use by EPA’s brownfield grantees, or state agencies acting pursuant to CERCLA or an authorized RCRA corrective action program where vapor intrusion may be of potential concern. It is applicable to both residential and non-residential settings.
- [\*\*Technical Guide For Addressing Petroleum Vapor Intrusion At Leaking Underground Storage Tank Sites \(PDF\)\*\*](#) (June 1015). This document is intended for use at any site subject to petroleum contamination from underground storage tanks where vapor intrusion may be of potential concern. It is applicable to both residential and non-residential settings.

Please contact your site toxicologist if you have any questions.

Thank you,

HERO