
San Francisco Bay Regional Water Quality Control Board

Environmental Screening Levels

FREQUENTLY ASKED QUESTIONS

1. How often are the ESLs revised?

The ESLs are revised periodically to reflect changes in toxicity factors, changes in our understanding of the fate and transport of contaminants, and other developments in environmental risk assessment. The revision schedule is dictated by practical considerations and limited staff resources. Our practice has been to make minor changes without fanfare (e.g., fix errors, update a toxicity factor) and to publish major updates as needed – generally every few years. We also prioritize items that need updating which means that lower priority items, for example certain references for seldom-used screening levels, may not be addressed in the next update but at some point in the future. Because the ESLs are “evergreen,” they are never “final.” We also use the term “interim final” to reflect that situation. If you think you found an error or have suggestions for new topics or clarifications to be included in a future update, please let us know by contacting Uta Hellmann-Blumberg (phone: 510-622-5047 or uhellmann-blumberg@waterboards.ca.gov). We appreciate comments from users and try to address them or incorporate them in future updates to the extent possible.

2. How do I know if I have the most recent version of the ESLs?

The most recent version of the ESLs will be available on the website: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml. The filename of the ESL files will include the date of the revision. The date of the revision also appears in the footer of any printed ESL tables.

3. How can I find out about updates?

If you would like to be notified when new ESL updates are available, you may subscribe to our Listserv on the following web page (Environmental Screening Levels are the third checkbox from the top): http://www.waterboards.ca.gov/resources/email_subscriptions/reg2_subscribe.shtml

4. Which are the official ESL documents?

The 2013 update separated the User’s Guide (text) from the lookup tables, which are now published in two separate pdf files titled “Summary” and “Detail”. In addition, there is an Excel Workbook with interactive features (formerly “surfer”), a cover memo highlighting new features of the most recent update and this FAQ document.

5. What does it mean when a cell in an ESL table has “No Value” instead of a number?

Sometimes one or more pieces of information are not available. For example, if a toxicity factor is missing, human health risk screening levels that require this toxicity factor cannot be calculated.

6. What is the depth of soil gas samples?

There is no fixed depth for soil gas samples. Rather, sufficient soil gas sampling should be performed to laterally and vertically delineate the VOC vapors and determine the vapor source (vadose zone soil and/or groundwater). Further information is presented in the DTSC October 2011 *Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*.

7. Why are there no subslab ESLs?

The 2005 and 2008 ESLs contained 1:1,000 and 1:2,000 attenuation factors for soil gas in residential and commercial setting, respectively. They directed users to apply soil gas ESLs based on these attenuation factors to both the subslab and the underlying soil. The February 2013 ESLs use slightly more conservative attenuation factors to derive soil gas ESLs, to be consistent with DTSC's 2011 vapor intrusion guidance, but intentionally omit subslab ESLs. Why: DTSC's suggested 1:20 attenuation factor between indoor air and subslab may not be appropriate for sites in our region. It is based on EPA's empirical data for sites across the country, many of which have different conditions than are found in our region (e.g., basements and long/cold winters [indoor heating season] that can emphasize the advective flow component of vapor intrusion). As a practical matter, we think that most sites will exceed subslab screening levels based on the 1:20 attenuation factor, meaning that most sites will need to perform Tier 2 assessments. Therefore, the February 2013 ESLs omit subslab ESLs and the cover memo recommends a Tier 2 (site specific) assessment to derive subslab screening levels, as needed. This rationale will be included in the updated User's Guide. The science behind these attenuation factors is still in a state of flux, and we will include (Tier 1) subslab screening levels in the ESLs in the future once there is more of a consensus about what they should be.

8. Where can I find an ESL for asbestos?

The hazards posed by airborne asbestos fibers differ from those of typical chemicals addressed in the ESLs. Several aspects of asbestos are addressed by the DTSC fact sheet http://www.dtsc.ca.gov/HazardousWaste/upload/OAD_FS_Asbestos.pdf or by the Air Resources Board at <http://www.arb.ca.gov/toxics/asbestos/asbestos.htm> .

9. The ESLs for compound X changed last month. The Regional Board had approved our work plan six months ago. The cleanup goals are based on the old ESLs. Do we have to submit a new work plan?

Existing work plans do not have to be changed just because an ESL update was posted. ESLs incorporate the knowledge and priorities of the time they are posted and are considered reasonably protective for a typical site in the San Francisco Bay Area but they are recommendations, not cleanup numbers. If a new approach or new information about a chemical becomes available, the ESLs for one or more chemicals can change. Most changes are fairly minor. In contrast, the cleanup numbers in the work plan are agreed-upon numbers that guide the cleanup effort.