

Instructions for Using the J&E Model Site-specific Screening Levels Macro

The EPA's Johnson and Ettinger (J&E) Model SG-ADV workbook was used to calculate site-specific screening levels based on the incremental lifetime cancer risks (ILCRs), and the non-cancer hazard indexes (non-cancer HIs). The process was automated using a macro to insert each detected chemical and to output the results.

Running the Macro

1. Open the J&E Model workbooks: *SG-ADV-Feb04_SiteSpecific_Screening.xlsx*. The inputs, shown in Table 3, have been entered into the "DATENTER" sheet of each workbook. A few notes about the inputs:
 - When run, the J&E Model macro will automatically fill in one CAS No. in cell E6 of the "DATENTER" sheet.
 - The Indoor Air Exchange Rate (ER) used is 1/h, as discussed in Appendix E.
 - The average vapor flow rate (Q_{soil}) is the default (20 L/m) as discussed in Appendix E.
2. Open the workbook that contains the macro: *Site-specific Screening Levels.xlsm*. This is where the macro is run and the results from the J&E Model workbooks are stored.
3. To run the macro, select the Developer tab¹ in the Excel Ribbon and click on Macros.²
4. With *JEModel_ScreeningLevel* highlighted, click on Run.
5. The macro will automatically insert CAS number for one chemical at a time into the "DATENTER" sheet of the J&E Model workbooks. The macro then outputs the soil gas concentration associated with a non-cancer HI of 1 and ILCR of 10^{-6} from the "RESULTS" sheet into the *Site-specific Screening Levels.xlsm* workbook.

¹ To enable the Developer Tab, go to Excel Options. Under the Popular options check the box next to show Developer tab in the Ribbon.

² Macros must be enabled in Excel to run a macro. To enable them, go to Excel Options and then select the Trust Center. Click on Trust Center Settings and then select Macro Settings. Additionally, for the macro to run properly, formulas must be set to calculate automatically. This is the default setting, however, it can be changed in the Excel Options under Formulas. The box under Workbook Calculation should be checked for Automatic. These instructions are for Excel 2007 and may not be relevant to older versions.