

"Readme" File for RISC5 v. 1.05

11 April 2012

Items changed/updated in this version:

1. The soil properties database had the values for air content and water content transposed. This version of the software will automatically install the corrected database in the RISC5UserDir. This will overwrite the old database file so if you have made updates to the soil properties database, then you will need to redo those changes in the database editor.
2. We still had a problem some languages regarding input of numeric data. Symptoms included inability to enter numeric data in anything other than scientific notation, ex. 1e-3 as opposed to .001 or ,001 i.e. inability to enter a value with either a decimal point or a comma as the fractional input part of the value in some parts of the program. This occurred in Step 3 when using "user-entered concentration data."
3. In the ecological model:
 - The wrong toxicity value (avian vs. mammalian) was displayed in the output. The correct value was used in the calculations.
 - The interface didn't display correctly when the screen size was changed too much.
 - The percentages for food intake were not working correctly under non-"period" decimal systems (see #2).

Version 1.04: 1 September 2011

Items changed/updated in this version:

1. There was a synchronization problem with the chemical database and the receptor databases which affected data entered in Step3a Degradation rates, Step3b Chemical Concentrations, Step3 DC Chemical Concentrations and Step 4 Ecological Receptor Concentrations.

This affects all users who have added or deleted chemicals or receptors in the database AFTER entering concentration data or receptor data to a project file. Concentration data and receptor data could be shifted to adjacent chemicals or receptors depending on the alphabetical position of the added items. **This was a fairly major upgrade and it will require some users to reenter some data from saved project files if they want to continue using a previously saved project file.**

Important information:

- User files created with databases that had no added or deleted chemicals or receptors are unaffected.
- User files created with the previous versions will retain all data except concentration data and receptor data. These data will be removed and the user will have to reenter this data. Saving the file after reentering the data will bring the file up to the new standard.
- New files entered from scratch with the new version will adjust properly even if new chemicals or receptors are added.
- Installing the new version will not require the user to update their chemical database again. That is, if the chemical database has been customized, this customized version will still be used by the new version of RISC5.

To use “old” saved project files (only for cases where chemicals or receptors have been added or deleted):

To use a previously saved project file: it is recommend that the user open the saved project file (using the old version of RISC5) and print out the summary of the model inputs (both in Step 3d, if used, and in Step 6 – these are the Excel output tables). Then install the new version of RISC5 (v. 1.04) and open the old project file. Go to the screens for concentration data and degradation rates (if used) and re-enter the concentration data and degradation rates. Then save the project file using the new version. If you have any questions, e-mail Lynn at LynnSpence@comcast.net.

2. A few problems have been reported with some languages regarding input of numeric data. Symptoms included inability to enter numeric data in anything other than scientific notation, ex. 1e-3 as opposed to .001 or ,001 i.e. inability to enter a value with either a decimal point or a comma as the fractional input part of the value in some parts of the program. There were also problems related to incorrect messages warning about being out of the min/max range for a particular entry and also incorrect blue backgrounds indicating a non default value when the number was indeed at the default value.

All of these problems have been resolved for all 'Regional and Language Options' that have reported a problem to date (Finnish, French, Italian, and Spanish). The number format problems seemed to affect settings mostly for other regions than 'English (United States)'. However, it is recommended that even 'English (United States)' users should upgrade to the new versions as some of the updates apply to all regions and languages.

As part of this fix, we have eliminated the warning message stating that the Comma/Decimal option was still under test.

3. A liability disclaimer is now shown during program installation. The user must “agree” before continuing.

4. In the Johnson and Ettinger model, the perimeter distance is calculated as 2 times the width of the foundation plus 2 times the length. This was not printing out correctly on the model output sheet (however the correct value was used in the code).

Version 1.03:

Items changed/updated in this version:

1. The Excel results were not being read into Excel correctly under the "Spanish (Spain)" language/cultural setting. The Excel macro in RISC5 was not interpreting the thousands and decimal separators correctly under this cultural setting. This has been fixed.
2. The master chemical database editor was not retaining changes that were made to the chemical profiles.
3. Changes made to the chemical properties in Step 1 (for the project file only), were not retained outside of Step 1. This has been corrected. If the chemical properties were modified in Steps 3c or 4c, the values are fine.
4. The new bioattenuation factor (in the Johnson and Ettinger model), was hard-wired to a value of "1" (no additional attenuation). This has been fixed. Now, if you enter a value of "0.1", for example, the indoor air concentrations are decreased and additional ten-fold. This parameter was added to RISC5 because some regulatory agencies and guidance documents allow an additional attenuation factor for petroleum hydrocarbons due to biodegradation.

Version 1.02:

Notes:

1. **If you have not** modified the RISC5 databases (using the database editor):
Before you install this update, please delete all of the files in the
C:\RISC5userDir\InputFiles directory.

If you have modified the RISC5 databases:

Delete the Excel files that you have not modified from the
C:\RISC5userDir\InputFiles directory.

2. To show results using Excel, in Step 6 and Step 3d, you need to make sure that your copy of Excel has "Macros Enabled". In Office 2003, this is accessed by choosing: "Tools", "Options", "Security", and then "Macro Security". Choose the "Medium security" setting.

Items changed/updated in this version (1.02):

1. The units on the screen for the unit risk factor (inhalation) were incorrect. This has been fixed. The correct values were used in the calculations.
2. For the groundwater volatilization model: adjusted the vadose zone thickness so that the capillary fringe is subtracted from the thickness of the vadose zone.

3. There was a problem in the cumulative calculation of clean-up levels for some soil cases. Some cases did not converge to a solution. This has been fixed.
4. There was a problem running the software with the "French" Windows Regional setting. This has been fixed.
5. Fixed the scroll bar in Step 5 for individual clean-up levels so that it displays correctly when running more than 8 chemicals.
6. There was a units problem in the groundwater to outdoor air model. This has been fixed and checked against version 4.
7. For machines running Office 2010, there was a problem in the Excel macro files (used to view results and to make charts.)
8. In Step 4, if you went back to step 4a, where you choose the exposure pathways, and chose a new exposure pathway, the software did not indicate that you should complete Step 4b. In some cases, the new exposure parameters were not used if you did not go back into Step 4b. This has been fixed.
9. In the models' input screens (Step 3a) that have degradation rates (i.e. unsaturated zone, saturated zone), the default degradation rates did not always appear. They do appear now – this was not a problem if you entered your own degradation rates.
10. Added inputs summary for the food web model along with more detailed output.

Version 1.01 – This was the original release version (no prior versions commercially available).