

COMPASS v1.1 Readme



OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

Minimum System Requirements

- 133 MHz or higher Pentium-compatible CPU
 - 64 megabytes (MB) of RAM
 - 20 MB of free hard disk space
 - Windows 2000/XP
 - Internet Explorer 4.0 or higher
 - Local administrator rights to install
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Installation Instructions

- Close all open applications
- Run COMPASS v1.1 Setup.exe
- Follow the onscreen instructions
- Run COMPASS from your start menu

NOTE: If the COMPASS setup program requires you to reboot your system to update critical Windows system files, re-run COMPASS v1.1 Setup.exe.

COMPASS Features

This version of COMPASS has the following features:

- Site setup allows the user to add many contaminants to the site, from six contaminant series which include uranium ore, processed natural uranium, enriched/depleted uranium, Th-230, natural thorium (Th-232), and Ra-226, to over 80 single radionuclides. In addition, the published NRC screening values for surface soil and building surfaces are included in the software. If you are experimenting with COMPASS or refreshing yourself with MARSSIM concepts, simply use the NUREG-1505 area factors as defaults for selected radionuclides.
- The Data Quality Objectives (DQO) wizards allow the user to create a survey plan for the selected site for either surface soil or building surfaces. This process includes key MARSSIM concepts such as

surrogate radionuclides, the unity rule, Sign and WRS test calculations, prospective power curves, and elevated measurement comparison (EMC) considerations.

- The Data Quality Assessment (DQA) wizards allow the user to evaluate their survey results using the parameters specified in the DQA wizard. This process includes performing the Sign or WRS test, creating a retrospective power curve, and performing the EMC.
 - The COMPASS wizards include a feature called training cards. These training cards change automatically as the user progresses through each wizard providing extra guidance. These training cards can be enabled/disabled at will.
 - After each wizard is complete, COMPASS creates a report, in HTML format, that can be re-printed at any time.
 - COMPASS now interfaces with the prominent D&D program Visual Sampling Plan (VSP) to leverage the step-by-step MARSSIM planning of COMPASS with the proven graphical capabilities of VSP. VSP can be downloaded at <http://dqa.pnl.gov>.
 - Entered sites, DQA plans, and DQA reports can now be deleted from the COMPASS database.
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COMPASS Changes Since v1.0

The following changes have been made since the initial (v1.0) release of COMPASS:

- A program error during program startup has been corrected.
- An error during data entry on the DQA wizards has been corrected.
- COMPASS program interface elements now use current system settings.
- Corrected a display error on the DQA Wizard for Building Surfaces where the activity fraction total would display a rounded value instead of the actual value, preventing the user from moving to the next step.
- During the EMC of the DQA Wizard for Building Surfaces, COMPASS no longer attempts to determine an area factor for hard-to-detect contaminants (HTDC).
- Less-than values can now be properly entered during data entry and import for the DQA wizards.
- Corrected an error that occurred during the EMC calculation of the DQA wizards when the sensitivity was not adequate for multiple contaminants.
- Visual Sampling Plan (VSP) can now be used in conjunction with COMPASS to enhance site planning and assessment. COMPASS can run VSP in a special COMPASS mode after each wizard is complete.

Alternatively, VSP can be run from Advanced Options under Site Planning.

- All COMPASS reports are now created in HTML format which can be viewed at anytime from Site Planning.
 - COMPASS now supports multiple inferred contaminants for a surrogate contaminant.
 - Data entered during the COMPASS wizards can now be deleted from Advanced Options under Site Planning.
 - Entry of individual measurements on background materials has been removed from the DQO Wizard for Building Surfaces. Instead, the mean and sigma values for each material are now entered. The instrument IDs have also been removed and COMPASS now asks for an instrumentation description and activity area when needed.
 - The ability to correct building surface measurements for ambient gamma background when using the Sign test has been added to the DQO Wizard for Building Surfaces.
 - A help topic on the process of double sampling for Class 1 survey units that fail the statistical test even though the mean is less than the $DCGL_w$ has been added.
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Contact Information

For help with COMPASS, feel free to contact us.

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