

RACER 2004 Version 6.0.0

INTRODUCTION

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Thank you for using the RACER 2004 system. This file contains important information that is not included in the Help system. Please read these notes for further information on the system.

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RELEASE COMPONENTS

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This release includes six new technology models for Decontamination and Decommissioning (D&D) of facilities and equipment that have been contaminated with radioactive substances. In addition, this release includes modifications to several existing environmental and sitework technology models, along with other system modifications. In particular, this release includes:

NEW D&D TECHNOLOGIES

- \* D&D, Conduit, Pipe & Ductwork
- \* D&D, Rad Contaminated Buildings
- \* D&D, Removal, Attached Hazardous Materials
- \* D&D, Removal, Unattached Hazardous Materials
- \* D&D, Size Reduction
- \* D&D, Specialty Process Equipment

UPDATED ORDNANCE AND EXPLOSIVES TECHNOLOGIES

- \* OE Site Characterization and Removal Assessment
- \* OE Removal Action

UPDATED ENVIRONMENTAL TECHNOLOGIES

- \* Remedial Investigation
- \* RCRA Facility Investigation

- \* Site Inspection
- \* Capping
- \* Trenching mini-model (affects Bioventing, Oil/Water Separation, Storage Tank Installation, Soil Vapor Extraction and Trenching/Piping technology models)
- \* Bioslurping
- \* Restoration Advisory Board
- \* UXO Active Range Planning
- \* Remedial Design (Detail Method)
- \* Operations & Maintenance
- \* Residual Waste Management

#### UPDATED SITEWORK TECHNOLOGIES

- \* Demolition, Buildings
- \* Demolition, Pavements
- \* Parking Lots
- \* Resurfacing Roadway/Parking Lots
- \* Sanitary Sewer
- \* Trenching/Piping

#### OTHER CHANGES

- \* Entire help revised and converted to HTML format
- \* Help topics written and revised for the new and updated technologies listed above
- \* Assemblies have been added to the database for the new D&D technologies
- \* Changes to the Media and Approach dropdown lists on the Phase Element screen
- \* The Remedial Action Wizard has been modified to include options for the new D&D technologies
- \* Revisions to the Select Technology screen for the new D&D technologies
- \* Existing template categories added to Template Compactor Utility
- \* Template Compactor Utility incorporated into Import/Export process

\* Import process now displays a window that shows the name changes made by imported Preference items

\* Level Names changed under Preferences are also shown on pop-up screens and menus

#### SYSTEM REQUIREMENTS

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The minimum system requirements for this software are:

- \* Pentium 400 MHz Processor (600 MHz or above recommended)
- \* 128 MB RAM (256 MB or above recommended)
- \* 60 MB free hard disk space (100 MB or above recommended)
- \* CD-ROM Drive
- \* Microsoft Windows 98, 2000 or NT (Service Pack 5 or later) Operating System  
NOTE: Microsoft Windows XP and Microsoft Office XP are NOT supported
- \* Microsoft Excel 97 or 2000

#### INSTALLATION

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To install RACER 2004, the user must have sufficient administrative rights on the machine to permit software installation. Estimates created in RACER 2002 or RACER 2003 can be upgraded for use in RACER 2004. Please contact Earth Tech as indicated at the end of this document if you need to upgrade from RACER 2001 (or earlier).

Installation of the service release is handled by an InstallShield Wizard. To initiate the installation:

1. Close all other applications and backup your current RACER database before starting the installation.
2. Insert the RACER 2004 CD or download the software from Earth Tech's or your organization's ftp site. If you are downloading the software from an ftp site, please refer to the DOWNLOADING FROM AN FTP SITE section for instructions.
3. If you are using the RACER 2004 CD, Setup automatically launches the InstallShield on most machines. If this does not occur, double click SETUP.EXE. The Setup program automatically creates the directories you need for the system.
4. Answer the questions prompted by the Setup program. For further explanation of the prompts, please refer to the "Installation Notes" that accompany the software in the Supporting Documentation folder.
5. The default database location has changed and the RACER database is now located under the user's directory in the C:\Documents and Settings\john.doe\Application Data\Earth Tech\RACER 6.0 (where john.doe is the user's system ID).

If you have RACER estimates that need to be upgraded, you will need to manually upgrade your database after the installation and registration process is complete. Use the Change Database feature under the File menu in RACER and use the "Look in:" field to navigate to the old RACER.mdb file. Please refer to the Installation Notes for additional instructions. The upgrade process transfers data from the RACER database created in a previous version to a new database capable of storing parameter data for the new technologies and functionality. Unit costs have been updated for this release of RACER and the user will have the option to update their project costs to the 2004 cost database at the end of the upgrade process.

RACER 2004 (version 6.0.0) will upgrade databases from RACER 2002 (versions 4.0.0 and 4.1.0) and RACER 2003 (versions 5.0.0 and 5.0.1). It also supports import files from RACER 2002 (versions 4.0.0 and 4.1.0), RACER 2003 (versions 5.0.0 and 5.0.1), and RACER 2004 (version 6.0.0).

#### DOWNLOADING FROM AN FTP SITE

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If you are downloading RACER 2004 from an ftp site, please follow these steps:

1. Make a new folder on your hard drive for the download file.
2. Navigate to the ftp site and locate a file named RACER2004.zip.
3. Save RACER2004.zip to the new folder on your hard drive. Please be patient. The file is large and the download will require some time.
4. When downloading is complete, unzip the file into the new folder. A number of third-party products are available to perform this function.
5. Verify that your Windows Explorer setting enables you to view file extensions. See your system administrator for assistance.
6. Locate a file named SETUP.EXE directly under the root of the new folder. Double click this file to begin installation of RACER 2004. Caution: DO NOT double click the file named SETUP.EXE under the RACER subfolder of your new folder. Doing so will result in installation errors.

#### REGISTRATION NUMBER

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You will be required to enter a registration number after installing RACER 2004 (version 6.0.0), even if you already had RACER 2002 or RACER 2003 installed on your machine. The registration number is located on the white label affixed to the RACER CD. If you do not have a registration number because you used the ftp site to download the software, please contact Earth Tech as indicated at the end of this document to request a registration form. Once Earth Tech receives your registration form, Earth Tech will send you a registration number.

#### VALIDATION KEY

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You will be required to obtain a Validation Key after installing RACER 2004 (version 6.0.0), even if you already had RACER 2002 or RACER 2003 installed on

your machine. Please contact Earth Tech as indicated at the end of this document to obtain a Validation Key.

#### UPGRADING EXISTING ESTIMATES

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If you have RACER 2003 estimates you want to upgrade to RACER 2004, make a new folder named C:\Documents and Settings\john.doe\Application Data\Earth Tech\RACER 5.0 (where john.doe is the user's system ID). For RACER 2002 estimates, use RACER 4.0 rather than RACER 5.0 as the folder name. Copy your existing database(s) into the new folder. If you cannot see these folders, you will need to adjust your Windows Explorer settings so that you can see hidden files and folders.

When RACER 2004 is started up for the first time after installation, the database will contain no estimates. Select File | Change Database on the main menu and navigate to your database in the folder created above. RACER will then bring your estimates into the RACER 2004 database. Repeat this process for each of your existing databases.

If you experience difficulty upgrading your estimates, it may be caused by lacking read and write privileges to the folder in which your existing estimates are located. Please see your system administrator for assistance.

#### KNOWN ISSUES

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The known issues in RACER 2004 are:

1. Assembly prices have been updated for RACER 2004, and are currently under review. Adjustments may be needed in some assemblies

2. The Soil Type was not being properly stored and retrieved in the Trenching/Piping model in RACER 2003 and earlier releases. This problem has been corrected for RACER 2004, and previous estimates will use the default value. Please check your estimates and change the soil type as appropriate.

3. The O&M Run-time percentage is being applied twice to the costs over time. To calculate the correct operations and maintenance costs, either use a run-time percentage of 100% or take the square root of the actual run-time fraction and use this value as the run-time percentage in Step 8.

4. If an Active Report is saved and the path name where the file is saved has a period (.) anywhere in the name, the file will not be saved. To ensure the report is saved properly, make sure the location path does not have any periods.

5. Residual Waste quantities may not have been calculated correctly in RACER 2003 during import and copy operations. You will want to ensure that the quantities are correct in RACER 2004 before running the Residual Waste Management Report or the Residual Waste Management technology model. You can do this by re-typing or re-selecting a secondary parameter in any of the following technology models used in your estimates:

- \* Air Sparging
- \* Bioventing
- \* Decontamination Facilities

- \* Discharge to POTW
- \* Drum Staging
- \* Excavation
- \* Free Product Removal
- \* French Drain
- \* Groundwater Extraction Wells
- \* Groundwater Monitoring Well
- \* Heat Enhanced Vapor Extraction
- \* In Situ Biodegradation (Saturated Zone)
- \* Infiltration Gallery
- \* Injection Wells
- \* Monitoring
- \* Natural Attenuation
- \* OE Removal Action
- \* Oil/Water Separation
- \* Permeable Barriers
- \* Petroleum UST Site Assessment
- \* RCRA Facility Investigation
- \* Remedial Investigation
- \* Site Inspection
- \* Slurry Walls
- \* Soil Vapor Extraction
- \* Soil Washing
- \* Special Well Drilling & Installation
- \* Storage Tank Installation
- \* Trenching/Piping
- \* UST Closure / Removal

CONTACTING EARTH TECH

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If you have any questions or comments about RACER 2004 (version 6.0.0), please contact us.

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