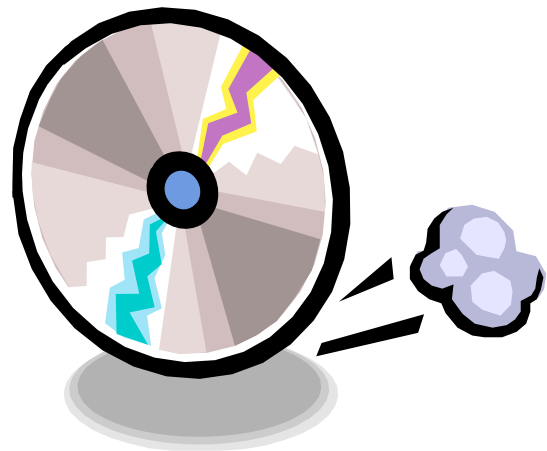


CHAPTER 3

Using the MAERS Software

In This Chapter:

- MAERS Computer Requirements
- Software Installation Instructions
- Startup
- Receiving Your Database
- Connecting to Your Database
- The Tool Bar
- The Menu Bar
- Backing Up Your Database



CHAPTER 3: Using the MAERS Software

MAERS reports may be submitted either electronically or by paper copy. This workbook provides guidance on electronic submittals using the MAERS software. Submitting electronically has many advantages, including the ability to update information from the previous year's report; an electronic completeness check to evaluate data; utilities to look up Source Classification Codes, material codes, and emission factors; as well as the ability to generate a summary report of the source information in the database.

MAERS SOFTWARE COMPUTER REQUIREMENTS

To take full advantage of the MAERS software it is suggested that you have, at a minimum, the following computer capabilities:

- Operating System: 32-bit Windows NT, 2000, XP, or Vista
- Processor: Pentium 133 MHz
- RAM: 64 MB
- Hard Disk Storage: 90 MB available for MAERS
- Monitor: SVGA – 800 x 600 pixels, 256 color
- Internet Service: Any Internet service provider that offers browsing and e-mail services



SOFTWARE INSTALLATION INSTRUCTIONS

The MAERS 2008.0 software is distributed and installed via CD, which may be obtained from the DEQ, Air Quality Division (AQD). Contact any AQD district office for a copy of the CD. Follow the steps below to install the software.

1. Insert the MAERS 2008.0 CD into your CD drive.
2. If the "Auto Play" feature on your CD drive is enabled the computer will detect the presence of the CD in the CD drive and start the installation process automatically. Follow the screen prompts once the initial setup screen appears (Figure 3-1).

If the "Auto Play" feature is not enabled, use Windows Explorer or File Manager to access your CD drive and locate the directory "\SOFTWARE." Double click the "SETUP.EXE" file to execute the installation software.

3. Follow the setup software instructions to establish your software and database locations on your PC. If during the software installation you choose a location other than the default, be sure to **remember the drive and directory you choose for the database location**. It will be needed later to properly place your database during its download, or move/copy from another location.

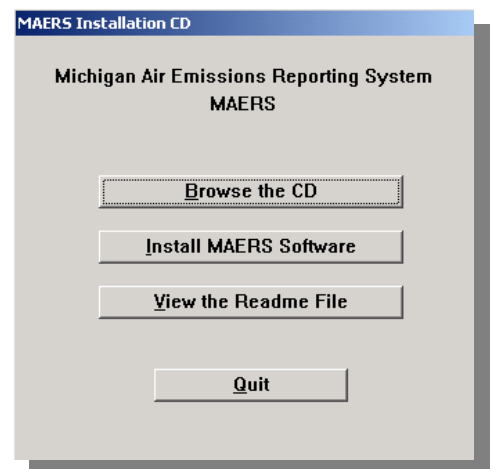


Figure 3-1: Initial Setup Screen

Software Location

MAERS software is designed to run from local PC disk drives, not network drives. Although alternate local drives are offered, **it is strongly recommended that you use the default drive and directory locations specified in the software setup.** The default drive is C: and the required subdirectory for the software is “\AQD_APPS\MAERS.” This directory is created for you by the setup routine supplied with the MAERS software.

Database Location

The default recommended database location is “C:\AQD_APPS\MAERS\DATABASE.” You can specify a different data directory, but using the default will make it easier to resolve problems should they occur.

The “File Transfer Center” (Page 3-4) gives you detailed information on how to receive and send databases. Your MAERS software comes with a Practice Database intended to give you an opportunity to learn and experiment with the MAERS software without modifying your official data. The Practice Database is supplied on the MAERS CD, and is provided as an option during the software installation process. Data entered in the Practice Database cannot be transferred to your MAERS Database, nor can it be accepted and audited by AQD.

Uninstalling MAERS

To uninstall MAERS, go to the Control Panel and select **Add/Remove Programs**. There will be a listing for MAERS Version 2005.0.0 that will remove the software and its registration. Do **NOT** delete the MAERS software directory as this will delete your databases and will not remove registered files.

During uninstall, you may receive a dialogue box asking to remove the shared file “XCEEDZIP.OCX.” This file is used by MAERS to compress your database before uploading. It’s a self-registering file that is stored in your Windows System directory and is designated as a file that may be shared with other software. It should be safe to remove this file.

Also, you may receive notification that other files may be shared. If you are in doubt, it is acceptable to keep these files on your computer. They take up very little space and are harmless.

If You Find Software Errors

The Air Quality Division has made every effort to deliver a quality product. However, like any software package, it is inevitable that errors may still be discovered. If you find any errors, please do the following:

1. Record the error message. You can print the message or write down the error message number.
2. Note the series of keystrokes or actions taken just prior to receiving the error.
3. Try to close down your MAERS software without saving the data. If the error is severe, not saving the data could prevent corruption of your database.
4. Notify, preferably by e-mail, the DEQ, Air Quality Division district office for your facility (see Appendix D for contact information). Include the items you recorded in steps 1 and 2 above with your e-mail. District staff will forward your e-mail to technical staff knowledgeable in the construction of the software.

STARTUP

The MAERS software may be started using either of the following methods:

Method 1: Double click on the MAERS icon on the desktop.



Method 2: Click on the **Start** button from the task bar. When the **Programs** submenu appears, select **DEQ Applications**. From the DEQ Applications submenu, select “MAERS v2006.0.0.”

When MAERS starts, no database will be open. The Start menu will appear giving three menu options: **File**, **Tasks**, and **Help** as shown in Figure 3-2. Each of these menu items are explained beginning on page 3-9.



Figure 3-2: The Start Menu

RECEIVING YOUR DATABASE

Before you can begin working on your MAERS report, you have to download your source’s database. When the MAERS software is started for the first time it contains only a PRACTICE database; not your source’s database. To receive your database, follow the steps below.

Note: *You must have access to the Internet to do this. If you do not have Internet access, contact your Air Quality Division district office to obtain a CD with your database on it.*

1. Choose **Tasks** on the menu bar and select **File Transfer Center**. You will see the screen in Figure 3-3. Select the option to **Receive database file from AQD** and click on **Next**.

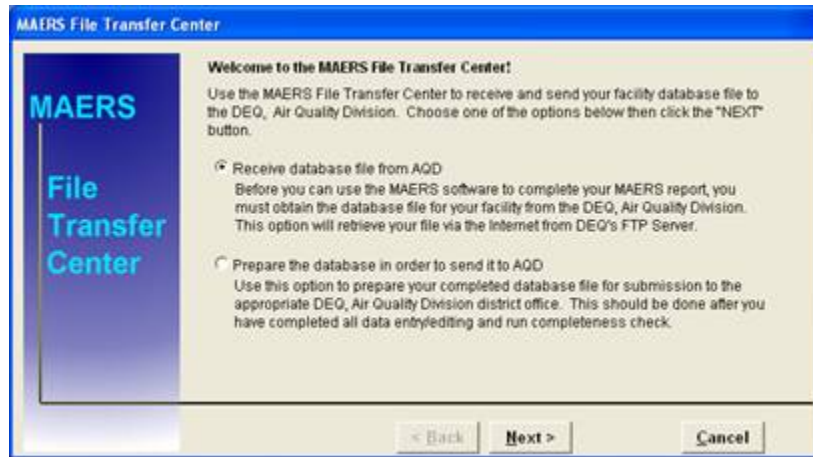


Figure 3-3: The File Transfer Center

2. A screen will appear that will allow you to download your database in two different ways (Figure 3-4). The automatic download method is preferred and should be tried first. If the automatic download does not work, select the manual download option. Read the instructions and click on the **Next** button to continue. Depending on which download option you select you will be provided with further instructions. If automatic download was selected, you will eventually see a screen like the one in Figure 3-5.

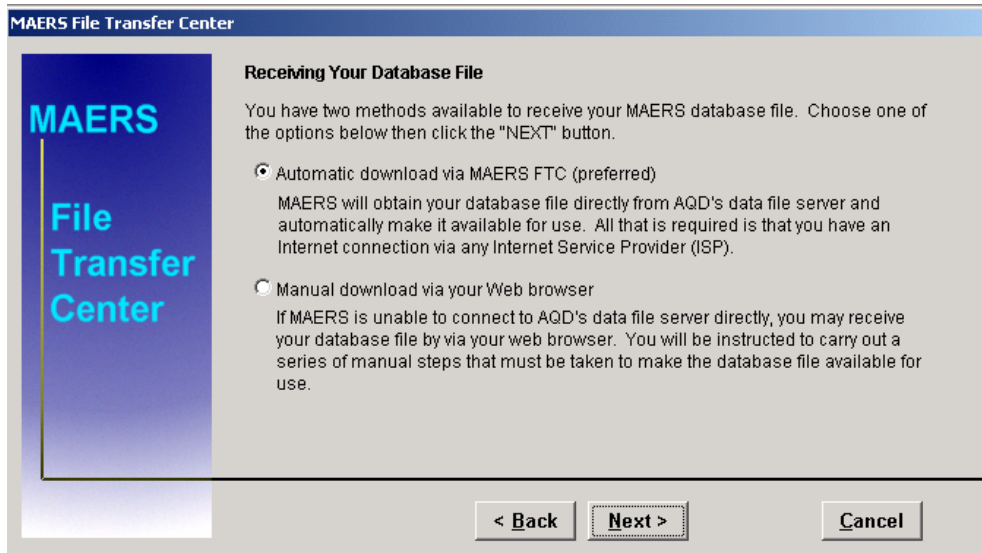


Figure 3-4: Downloading Selections

3. When you are ready to receive your database, fill in the information dialog box shown in Figure 3-5. Then, click on the **Receive** button and your database will begin downloading (receiving your database may take up to 20 minutes). You may cancel the download by clicking on the **Cancel** button.

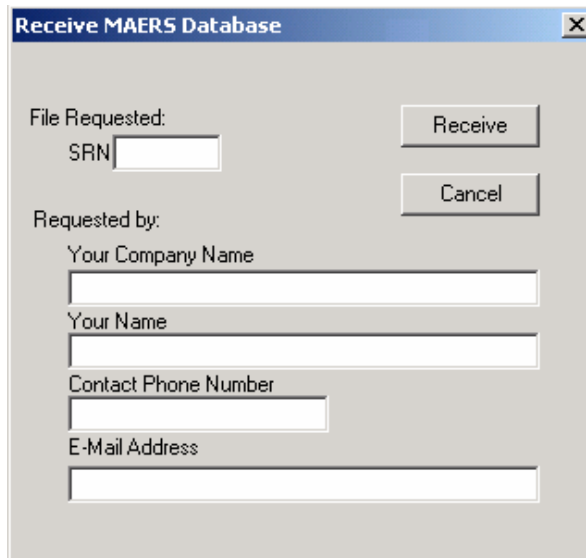


Figure 3-5: Source Information Dialog Box

CONNECTING TO YOUR DATABASE

Once you have received your database, you may connect to it using the **Source Explorer**. Follow the steps below to connect to your database:

1. Choose **Tasks** on the menu bar select **Source Explorer**. Figure 3-6 shows the dialog box that will be displayed. For most facilities, only your SRN and the PRACTICE database should appear. The practice database may be used if you would like to practice entering information on the forms; however, the **practice database cannot be submitted to the AQD**.

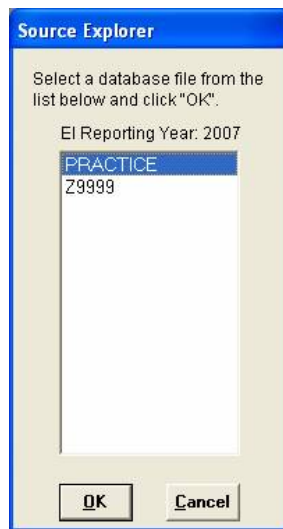


Figure 3-6: Source Explorer

2. Click on your SRN and your database will open. Once connected to a database, the menu bar and tool bar will appear as in Figure 3-7. The name of the current database is shown in the title bar. If “PRACTICE” is in the window title, it means that you are in the practice database.

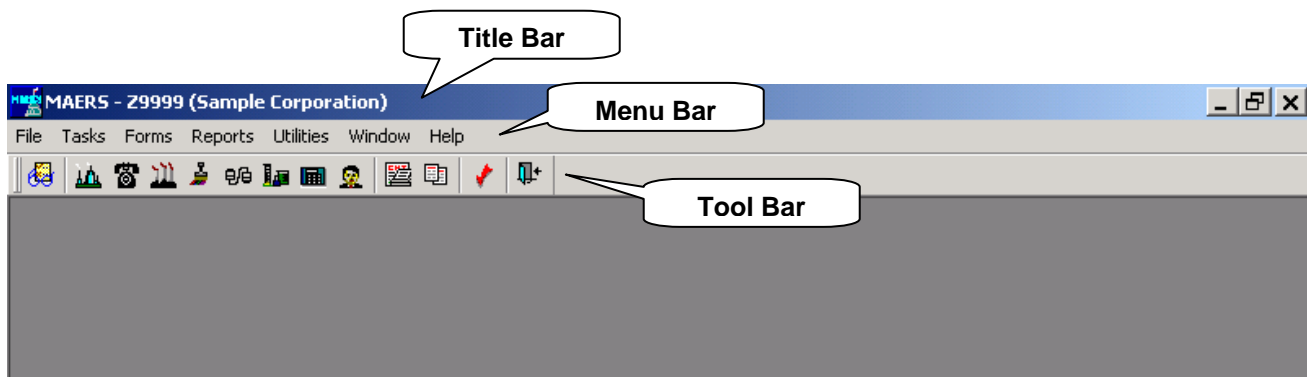


Figure 3-7: Open Database

THE TOOL BAR

When any form is open, the tool bar shown in Figure 3-8 will be displayed. Listed below are the functions executed by the icons on the Tool Bar:

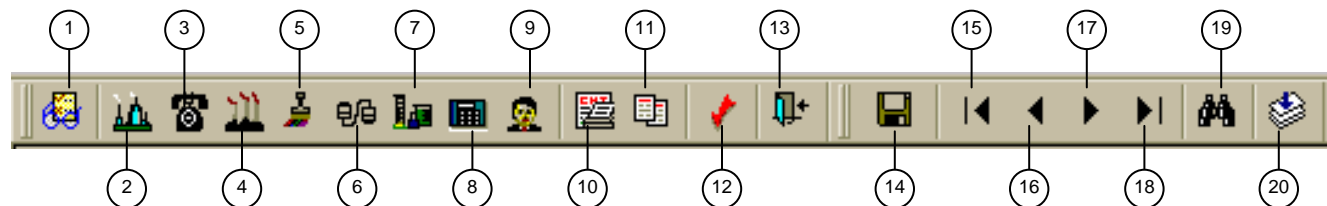


Figure 3-8: MAERS Tool Bar

1. **Source Explorer:** This icon is used to choose the database you would like to work on. If you have not received your database from AQD, the PRACTICE database will start automatically.
2. **Source Form:** This icon opens the S-101 Source Form.
3. **Contact Form:** This icon opens the S-102 Contact Form.
4. **Stack Form:** This icon opens the SV-101 Stack Form.
5. **Emission Unit Form:** This icon opens the EU-101 Emission Unit Form.
6. **Reporting Group Form:** This icon opens the Reporting Group Form.
7. **Activity Form:** This icon opens the A-101 Activity Form.
8. **Emission Form:** This icon opens the E-101 Emission Form.
9. **Operator Form:** This icon opens the O-101 Operator Form.
10. **Summary Report:** This icon opens the Source Summary Report. This report summarizes the information contained in the facility's database and can be generated to see what information has been entered or changed and which information may be missing.
11. **Print all Forms:** This icon allows you to pick a form to be printed from the list of available forms.
12. **Completeness Check:** This icon activates a completeness check that ensures there are reasonable responses in all required data fields. If there are any errors, they must be corrected and the Completeness Check must be rerun (see Chapter 15 for more information).
13. **Exit MAERS:** This icon shuts down the MAERS software.
14. **Save:** This icon saves any changes made to the current form.
15. **First:** This icon takes you to the first record on the current form.
16. **Previous:** This icon takes you to the previous record on the current form.
17. **Next:** This icon takes you to the next record on the current form.

18. **Last:** This icon takes you to the last record on the current form.
19. **Browse:** This icon provides a summary of records for the part of the form that is currently active. The Browse window gives you a quick way to move through all of the records for the form displayed. Once you find the record that you want to work on, click on the row and press the “Return” button. You will be sent back to the form with the information of the selected record displayed on the window. The browse option is explained further in Chapter 4.
20. **Close Form:** This icon closes the current report or form.

THE MENU BAR



Figure 3-9: MAERS Menu Bar

The menu bar is the area of the window immediately beneath the window title (Figure 3-9). The menu bar contains the following items **File**, **Edit**, **Forms**, **Reports**, **Utilities**, **View**, **Window**, and **Help** (a **Tasks** menu bar item will appear in place of the **Edit** item when no forms are open). When you position the mouse cursor over one of these words and press the left mouse button, a list of options will display under the menu bar item. Alternatively, a menu bar item can be activated by using a “hotkey.” For example, the **File** menu bar item has an underscored letter “**F**.” The “**F**” represents the “hotkey” for this menu bar item. Pressing the <Alt> key simultaneously with the “**F**” key will activate the **File** menu bar options.

Once a menu bar item has been activated, additional menu choices under the menu bar item will appear in a drop-down list. To activate a particular menu choice, single click the left mouse button when the cursor is positioned over the desired menu choice. Alternatively, a menu choice may be activated by simultaneously pressing the hotkey for that choice.

Menu items that are not enabled are shaded a light gray to indicate that the particular feature is not available.

Ellipses (...) after a menu bar choice indicate that there is additional information to follow, such as a dialog box.

File Menu

The **File** menu provides for the closing, saving, and printing of forms and reports (see Figure 3-10). It also allows you to access the MAERS **Properties** dialog box and to exit the application. The File menu will vary depending on the form that is displayed. The **Print Forms** and **Exit** options are always available.



Figure 3-10: MAERS File Menu

- **Close:** The **Close** menu item allows you to close the window that is open. This may be a data entry form or a report.
- **Save:** The **Save** menu item is only available when there is a form or report open. Use it to save new or modified entries on forms.
- **Print Forms:** Use the **Print Forms** menu item to print the pages associated with a particular type of form. You may print all or some of the form types by holding down the CTRL key and clicking on each form type that you wish to print. For each form, you have the option to print any or all of the pages.
- **Properties:** The **Properties** window records the information generated during the installation of the application. There are three sections to the Properties sheet: **Installed**, **File Locations**, and **Database**. The information on each of the tabs is updated by MAERS and can be printed.
- **Exit:** The **Exit** menu item allows you to quit the MAERS application. Any unsaved changes in the forms will be brought to your attention before the application closes. You will then have the option to save your changes or reject them.

Task Menu (This menu only appears when no forms are open).

The tasks associated with preparing the emissions data are contained within the **Tasks** menu item (see Figure 3-11). These tasks include opening a database using the **Source Explorer**, editing the data by running a **Completeness Check**, assigning a password to the database using **Enter Password**, estimating emissions using **Calculate Emissions**, and doing a file transfer in the **File Transfer Center**.

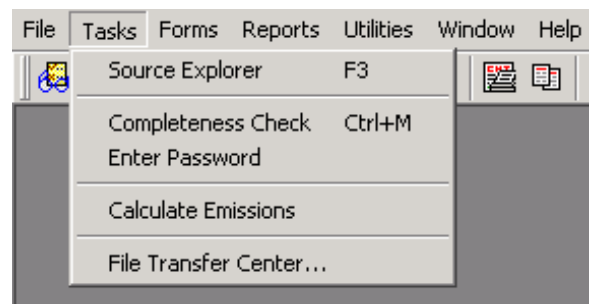


Figure 3-11: MAERS Tasks Menu

- **Source Explorer:** Use the **Source Explorer** to choose a database to work on. Most companies will only have one database, so the Source Explorer will automatically choose that database. However, consultants or companies with more than one facility may have multiple databases on their computers. The Source Explorer will provide a list box of the databases making it easier to pick the database to be worked on (see Figure 3-6 on page 3-6). After the database is selected, the source name will appear in the title at the top of the main window.

Your MAERS software comes with a practice database intended to give you an opportunity to learn and experiment with the MAERS software without modifying your official data. The practice

database is supplied on the MAERS CD, and is provided as an option during the software installation process. Data entered in the practice database cannot be transferred to your MAERS Database, nor can it be accepted and audited by AQD.

- **Completeness Check:** Use **Completeness Check** to edit the data in the database for errors. This ensures that there are reasonable responses in required data fields. If a field is incomplete or incorrect, the software will generate an error report. The error report will describe the problem and indicate which form and field must be corrected. For more information about how to use the Completeness Check, see Chapter 15.
- **Enter Password:** After all the source information has been updated in MAERS and the administrative completeness check has returned no errors, the database is ready to be submitted to the AQD. A password must be assigned to the database, and this password must be listed on form P-101. The password must be four to eight alphanumeric characters in length. Select **Enter Password** to enter your source password. The password may be changed later.
- **Calculate Emissions:** Select **Calculate Emissions** to start the Emissions Estimator. This tool will calculate the emissions for each emission unit in your MAERS report. Chapter 12 provides more information about how to use this function.
- **File Transfer Center:** The **File Transfer Center** allows you to send and receive database files to and from the DEQ, Air Quality Division. There are prompts to guide you through this process.

Edit Menu

The **Edit** menu is available when any form is open, and it will vary depending on the form currently being edited. **Cut**, **Copy**, and **Paste** functions allow the movement of text from one field to another or from other Windows software. They follow the standard Windows function for editing data from one data field to another.

Adding and Deleting Records: Use the **Edit** menu to add or delete information on a form (see Figure 3-12). This menu will change depending on the current form. The example shown in Figure 3-11 is for the A-101 Activity Form. When choosing delete, the current record you are positioned on will be deleted. The Form Completion Instructions included in Chapters 5 through 15 provide detailed explanations about how to add and delete information on a particular form.

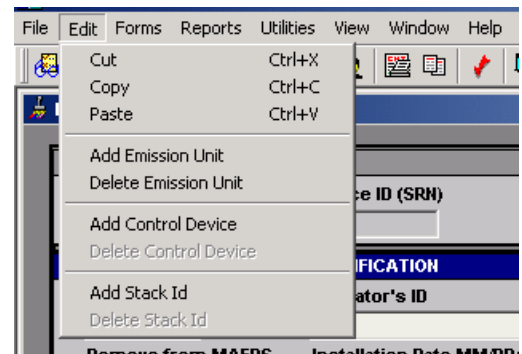


Figure 3-12: MAERS Edit Menu

Forms Menu

The **Forms** menu is used to access individual forms (see Figure 3-13). You may also access the forms using the icons on the Tool bar. Refer to Chapter 4 for more information about navigating through each of the forms.

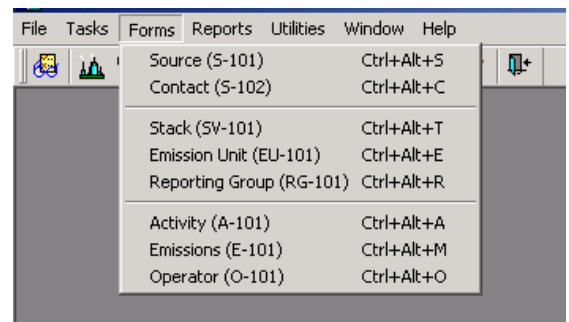


Figure 3-13: MAERS Forms Menu

Reports Menu

The MAERS software can generate a variety of reports to analyze your data (see Figure 3-14). Once the report is generated, you can print the report by choosing the **Print** menu item under the **File** menu. Chapter 14 provides information about each of the different reports that may be generated.

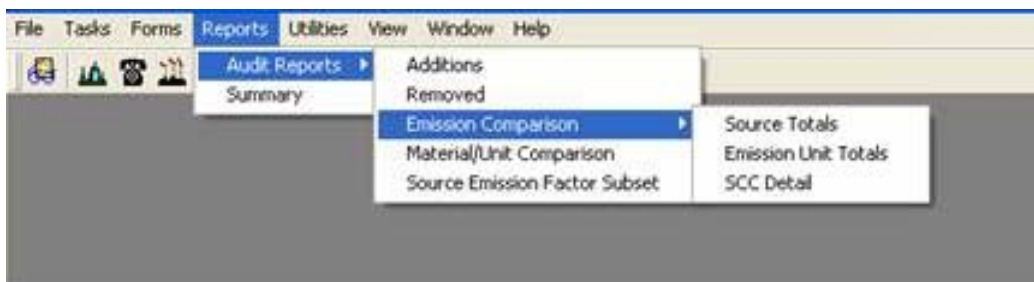


Figure 3-14: MAERS Reports Menu

Utilities Menu

From the **Utilities** menu you can access the reference tables used by the forms (see Figure 3-15). There are six tables available to look up information that may be needed in your MAERS report (they are described below).



Figure 3-15: MAERS Utilities Menu

- SCC Lookup:** SCCs are identified by 4 levels of descriptions. When the **SCC Lookup** window is opened, the first level of description appears in a “tree view” presentation. Expand to the second level by either clicking on the plus (+) sign or by double-clicking on a first level description. You will notice the SCC building itself as you expand deeper into the tree. You can get to the third and fourth levels via the same navigation method. The fourth (and final) level provides the complete SCC. If the SCC has an associated material code or unit code, the material/unit code will appear in the fourth level next to the SCC description. If a material code is not associated with the SCC, the phrase "NO MATERIAL" will appear (see page 2-6 for more information about SCCs).
- Material Code Lookup:** The **Material Code Lookup** provides a list of all the available material codes used in the MAERS system. The list includes the material name, CAS (Chemical Abstract Services) number, and material code. The information is sorted by material name by default, with the most common fuels listed at the top. To sort the list by CAS Number or Material Code, place the mouse pointer over the column heading that you would like the list to be sorted on and click. Navigation through the list is provided by the vertical scrollbar on the right hand side of the listing.
- Emission Factor Lookup:** The **Emission Factor Lookup** provides a listing of all available emission factors used in the MAERS system. The list includes both EPA and State Emission Factors. The list is grouped and sorted by SCC. Within each SCC, the list is sorted by pollutant. The report includes the SCC, pollutant/unit code, factor type, factor and exponent, material/unit code, and control device codes. Both vertical and horizontal scrollbars are provided for navigation through the list.

The Source Emission Factor Subset report is displayed initially. This report shows all MAERS emission factors used in the database. This report can be printed by placing the mouse pointer over the “Print Subset Report” button and clicking. To view the entire list of MAERS emission factors for all SCC codes, click the “Entire List” radio button. The entire list of emission factors will be displayed. If a control device code is listed in columns “Control Device Code 1” or “Control Device Code 2”, it means the emission factor is controlled.

Window Menu

When more than one window or form is opened simultaneously, they can be arranged in different ways on the screen by activating the **Window** menu bar item (see Figure 3-16). Once the Window menu item has been selected, the user has the ability to **Cascade**, **Tile Horizontal**, **Tile Vertical**, or **Layer** the windows that are opened.

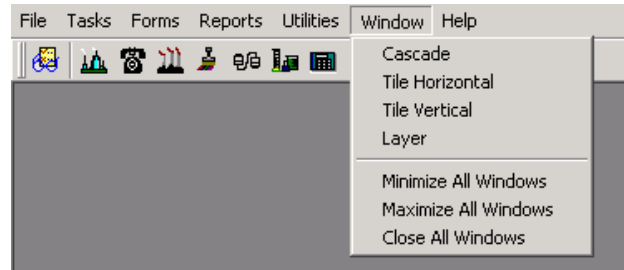


Figure 3-16: MAERS Window Menu

- **Close All Windows:** For certain functions, such as selecting a different database from the **Source Explorer**, all windows must be closed. This function provides a rapid way to close all open windows. If there is data that is yet to be saved on any form, a prompt to save the data will be displayed.

Help Menu

The **Help** menu item provides access to MAERS Help, the Software Users' Guide, and version information regarding the MAERS software (see Figure 3-17).



Figure 3-17: MAERS Help Menu

- **Help Topics:** The MAERS Software Users' Guide is included with the software in the form of a Window Help file format (see Figure 3-18).
- **About:** The **About** menu item displays version and copyright information for the software and associated materials (see Figure 3-19).

BACKING UP YOUR DATABASE

You should make a backup of your MAERS database before every session. You may use traditional methods which include manually copying your database file found in the MAERS database directory (see database installation instructions) to another location or using common backup software. When doing this, make sure MAERS is not running. These methods provide for making multiple backups that give you the best option to "historically" recover your database in case it becomes damaged.

