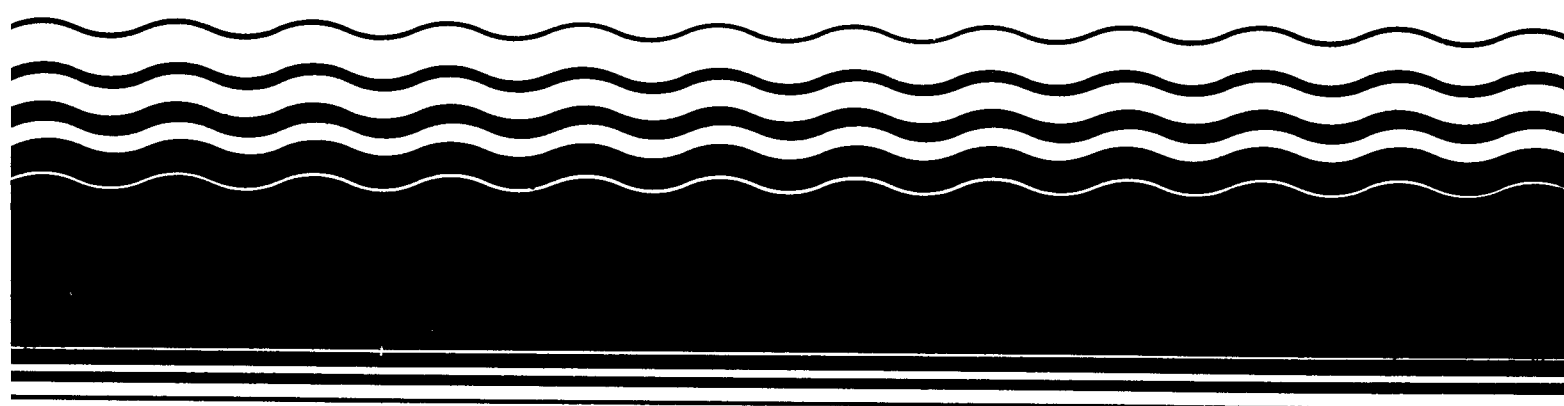




PA-Score Software

Users Manual and Tutorial Version 1.0



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PA-Score Software USERS MANUAL & TUTORIAL

VERSION 1.0

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Solid Waste and Emergency Response
Office of Emergency and Remedial Response
Hazardous Site Evaluation Division
Washington, DC 20460**



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CHAPTER 1

GETTING STARTED

1.1 Introduction: PA-Score Software Package

The PA-Score software package is comprised of the PA-Score and PA-Print computer programs and this users manual. The PA-Score software package has been developed by EPA Headquarters to assist preliminary assessment (PA) evaluations by generating an upper bound estimate of the Hazard Ranking System (HRS) score and associated documentation for a site.

The PA-Score computer program (PA-Score) assists investigators in meeting PA evaluation requirements. PA-Score performs PA calculations from raw data to calculate site scores. The PA-Print computer program (PA-Print) generates PA scoresheets and the Potential Hazardous Waste Site Preliminary Assessment form. The users manual provides instructions to install and use PA-Score and PA-Print.

1.2 PA-Score Computer Program

PA-Score is the principle component of the PA-Score software package. PA-Score was designed to:

- Computerize the scoring system for the PA
- Provide a user-friendly menu screen system for completing site scores
- Minimize mathematical scoring errors
- Provide a useful tool for PA scenario scoring

PA-Score facilitates evaluation of site-related information including waste quantities and waste characteristics, physical parameters of the site, population data, and sampling information. In addition, PA-Score allows the user to enter administrative and site characteristics information onto EPA's Potential Hazardous Waste Site Preliminary Assessment form, which has been incorporated into PA-Score programming. Through PA-Score, most of the required information concerning a PA site is contained in a single site file (electronic or paper). PA-Score also allows the user to fully document site scoring using a documentation editor and referencing feature. The user can enter descriptive narrative rationales for scoring decisions and can reference the documents from which data were generated for scoring.

PA-Score requires the user to be familiar with PA guidance (Guidance for Performing Preliminary Assessments Under CERCLA, OSWER Directive 9345.0-01A); however, help screens are available throughout the program to offer instruction in entering data and program usage. In addition, the structure of PA-Score data entry is diagrammed in Appendix A. These diagrams help identify user location within the program. PA-Score is not intended as a substitute for PA training or guidance. Rather, it is intended to facilitate the evaluation of a site and preparation of site documentation.

1.3 Users Manual & Tutorial

The user's manual consists of three parts. Chapter 1, "GETTING STARTED," introduces you to the software package and takes you through the procedures necessary to install the PA-Score software on your computer. Chapter 2, "TUTORIAL," provides an initial step-by-step lesson in the use of PA-Score by "walking" you through a series of screens, entering and editing data. Chapter 3, "PRINTING," provides instruction in the use of PA-Print, which performs printing functions for PA-Score information.

This manual assumes you have some familiarity with the IBM PC-type platform. Evaluation of a site with PA-Score requires little, if any, knowledge of the Disk Operating System (DOS). However, limited use of

DOS will be necessary to install PA-Score software onto your computer, and to maintain the site files you create. In addition, technical knowledge of your printer may be necessary to produce quality printouts using PA-Print. If you are unfamiliar with DOS, consult with others in your office for basic instruction. If you are unfamiliar with your printer, contact your systems administrator.

The tutorial is designed to show how best to use the PA-Score and PA-Print programs. It is not intended to provide instruction on conducting PA's. PA guidance has been developed by EPA to provide instruction in performing PA evaluations. The example site file used in the tutorial is entirely fictitious.

If you have questions or comments regarding the operation of the PA-Score and PA-Print programs, contact your EPA Regional computer contact.

1.4 Hardware Requirements

PA-Score software requires an IBM PC or compatible computer. Specific minimum hardware requirements are as follows:

- 384K of RAM (random access memory)
- 1.0MB of available memory
- MS-DOS 3.1.

Site files may be saved/stored on double-density or high-density diskettes (3.5" or 5.25"). However, due to their size, the programs can only be run from a high-density diskette or a hard drive. PA-Print will support most printers (EPSON, IBM, Hewlett-Packard) and printer types (dot-matrix, laser).

EPA recommends that PA-Score and PA-Print be run from a hard disk as this greatly enhances each program's operation and calculation speed. PA-Score site files may be kept on either the hard disk or a floppy diskette.

PA-Score and PA-Print were designed as single-user interactive programs. Therefore, their local area network (LAN) compatibility is limited. The programs cannot be used as a multi-user application; however, they can be loaded into a LAN environment and used by one user at a time (see Appendix B).

1.5 Software Installation

To install PA-Score and PA-Print, start from the DOS prompt. The DOS prompt will consist of a letter (the disk drive currently active) often followed by a colon, backslash, and/or names of subdirectories on your disk (A>, C:\>, C:\FILES> are some examples of DOS prompts). If you do not see the DOS prompt, you may be using one of numerous menu "shell" programs (LAN users see Appendix B for installation instructions). Most LANs have an "Exit to DOS" option that will allow you to operate from the DOS prompt. The hard disks on many computers that use menu software have a certain subdirectory structure that is maintained by a systems administrator. If you are unfamiliar with how your particular computer is set up, consult your systems administrator.

To install PA-Score and PA-Print on a hard disk.

1. Insert the PA-Score Software diskette into drive A:, then type **A:** and press the **<ENTER>** key. If drive B: is the correct size and format for the PA-Score Software diskette, then type **B:** and press the **<ENTER>** key.

2. At the A> prompt (or B> prompt if you are using drive B:), type **INSTALL** and press the <ENTER> key. A subdirectory named C:\PASCORE will be created and all files needed to run PA-Score and PA-Print will be copied into that subdirectory.
3. To start the programs, type **PASCORE** or **PAPRINT** at the C:\PASCORE prompt, then press the <ENTER> key.

After installation, compare the contents of the PASCORE subdirectory you created with the list of "PASCORE Subdirectory Files" given in Appendix C. If the two do not correspond, perform the installation procedures again or contact your systems administrator. If the contents of the enclosed PA-Score Software diskette do not correspond to the list of "PA-Score Software Diskette Files" given in Appendix C, contact your EPA Regional computer contact.

If you must run PA-Score and PA-Print from a floppy diskette, insert the PA-Score Software disk in drive A:. Type **PASCORE** at the A> prompt to access PA-Score or type **PAPRINT** to access PA-Print.

1.6 File Management

PA-Score file management includes site file naming conventions, maintenance, and security. Site file names can be made of up to eight characters (do not include spaces in the file name). EPA suggests that the first eight letters of the official site name be used; however, your office may want to develop naming conventions based on site identification numbers, cost accounting codes, etc. The site's full name (up to 29 characters) and CERCLIS number will be displayed (as you entered them) on the PA-Score file system screen to allow for additional identification. Note that you will not be able to alter the ".PAS" suffix in the site name while in the PA-Score program. PA-Score uses this suffix to identify a file as a PA-Score file. Any site file with a different suffix will not be accessible by PA-Score (or PA-Print).

A plan for the maintenance of PA-Score site files should be established. EPA recommends that site files be maintained on both floppy diskette and hard disk. While PA-Score evaluation of a site is in progress, the site evaluator should retain a floppy diskette copy of the site file. Upon completion of PA-Score evaluation, a floppy diskette copy of the site file should be included with the site report and PA-Score printout. In addition, a protected (see security below) copy of the site file should be maintained in the PASCORE subdirectory on the hard disk with other completed PA-Score site files.

PA-Score includes a password protection feature to ensure the security of site data (see Section 2.2).

CHAPTER 2

TUTORIAL

2.1 Introduction: PA-Score Computer Program

This chapter provides instruction in the basic operation of PA-Score by taking you through a series of screens and by providing examples of how to enter and edit data. Certain conventions are used in describing required user actions (what you must do). Words appearing in boldface indicate specific keyboard actions. The words <ENTER>, <END>, <HOME>, <Delete>, <Insert>, <PgUp>, <PgDn>, and <F1>, <F2>, <F3>, etc., indicate individual keys that you must press. Four additional keys which you will often use are called the *cursor keys*, and are marked on your keyboard by arrows pointing up, down, left, and right. These are used to move the *cursor* or *highlight* to a particular point on the screen. The phrase "CURSOR to the Targets column for the Air Pathway" means "use the appropriate cursor key(s) to move the highlight to the Air Pathway Targets value." In cases where words or numbers are to be typed, actions will be indicated by phrases such as "Type landfill #1" meaning "type the words 'landfill #1'."

If you have correctly followed the procedures listed under Section 1.5, "Software Installation," you should be able to access PA-Score. To begin...

Type PASCORE.
Press <ENTER>.

You should now see the PA-Score title screen shown below:

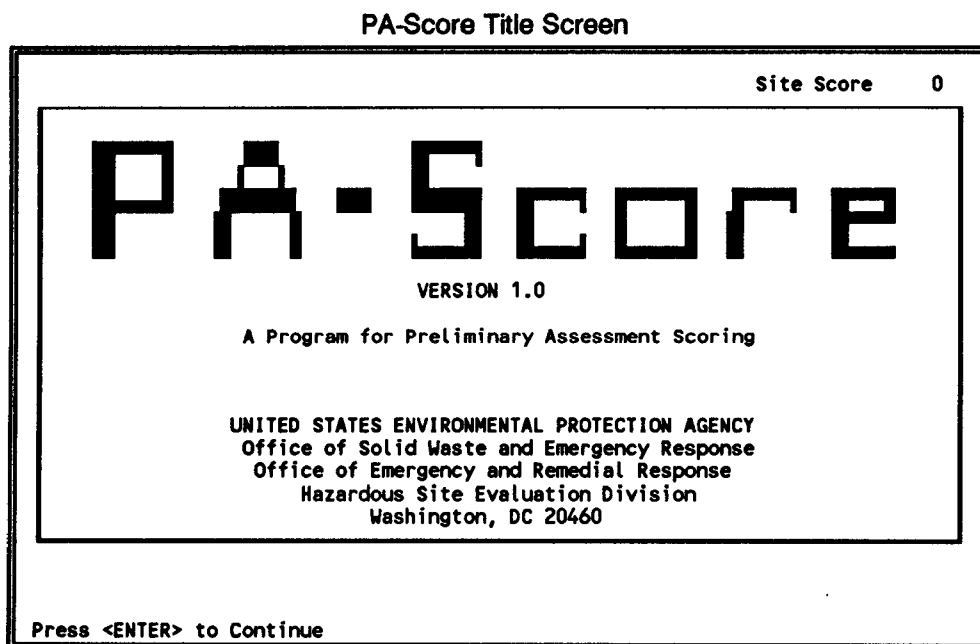


Figure 1

If you do not see the PA-Score title screen, return to the software installation section.

To continue from the PA-Score title screen...

Press <ENTER>.

General Information Screen

Site Score 0

GENERAL INFORMATION

EPA developed PA-Score to assist site assessment investigators by automating preliminary assessment (PA) evaluation scoring.

PA-Score performs PA scoring calculations from raw data entered by the user and allows site investigators to easily test different scoring scenarios. PA-Score can also be used to generate PA scoresheets, documentation, and EPA's Potential Hazardous Waste Site Preliminary Assessment form.

For program assistance consult the PA-Score Software "Users Manual & Tutorial" or call your EPA Regional computer contact.

Press <ENTER> to Continue

Figure 2

This screen provides some general information concerning the functions of PA-Score. To continue with PA-Score...

Press <ENTER>.

2.2 File System

You should now be at the PA-Score file system screen shown below:

File System Screen

Site Score 0				
PA-Score Data Files -> C:\PASCORE\				
Name	Date	Time	Size	Site Name CERCLIS Number
PALMETTO	08/17/91	16:58	14264	Palmetto Landfill SCD123456789
ENTER-Select F2-Chdir F3-New File F4-Copy F5-Passwd F6-Delete End-Exit				

Figure 3

The file system enables you to create, select, save, delete, copy, or password protect PA-Score site files in any directory or on diskette. Information in the directory includes filenames, dates and times that the files were last saved, and file sizes (in bytes). To the right of the middle bar is the name of each site and its CERCLIS number (as you have entered them). You should apply a standard method for naming site files. Section 1.6 of this manual discusses file management.

The status line at the bottom of the screen indicates which actions and functions are available from a screen (in this case, <F3> function key to create a new file, <F6> function key to delete a file, and so on). The status line also provides brief user instructions (on-screen help), such as: "Enter Data" and "ENTER-Select."

One of the functions displayed on the status line for the file system screen is "F5-Passwd." PA-Score allows the user to password protect site files. The password protection feature is accessed from the file system screen using the <F5> function key. You may protect a site file at any stage in a PA-Score evaluation. The password protection is activated the first time you exit PA-Score after having selected a password. The next time anyone enters the program and attempts to access the protected site file they are prompted for the password. If they do not provide the correct password, access to that site file is denied. A password may be up to eight characters in length and cannot be changed once assigned.

To retrieve the file for this tutorial...

CURSOR to the PALMETTO filename.
Press <ENTER>.

2.3 General Operation

You should now be at the Summary Screen, the "main menu" of PA-Score:

Summary Screen				
Palmetto Landfill		PALMETTO.PAS		Site Score 56
PA-Score Version 1.0				
Pathway	Likelihood of Release	Targets	Waste Characteristics	Pathway Score
Ground Water	550	246	32	52
Surface Water				100
Drinking Water	550	5	32	1
Human Food Chain	550	300	32	64
Environmental	550	300	32	60
Soil Exposure				2
Resident	550	5	18	1
Nearby		1		1
Air	500	52	18	6
ENTER-Select F7-Summary F8-Files F9-Info F10-Help End-Previous				

Figure 4

The Summary Screen is a menu with choices of factor categories within pathways (or threats for Surface Water and Soil Exposure) such as Air Pathway Likelihood of Release, Ground Water Pathway Likelihood of Release, Drinking Water Threat Targets, etc. As you move the cursor around this screen (using the cursor keys), notice that if you try to enter a number, PA-Score "beeps" to alert you that data entry is inappropriate at your location. Note that whenever the cursor is a solid "block" (on some monochrome screens it will appear as an underline), PA-Score is displaying a calculated value, one that cannot be overwritten or entered directly by the user and can only be changed by editing "raw" data.

Note that when you start a new file, only zeros will appear on this screen until you enter data. Because the PALMETTO file already has data entered, you see the scores displayed above. The "ENTER-Select" prompt on the status line (in the lower left corner of the screen) indicates that you must press <ENTER> if you want to enter new data or edit previously entered data. For example...

CURSOR to the "Targets" column for the Air Pathway.
Press <ENTER> to select the item.

By selecting Air Pathway Targets, the following is displayed:

Air Targets Screen

Palmetto Landfill		PALMETTO.PAS		Site Score	56
Air Pathway -> Targets					
TARGETS	Suspected Release	No Suspected Release	References		
3. PRIMARY TARGET POPULATION 0 person(s)	0				
4. SECONDARY TARGET POPULATION	0	6			
5. NEAREST INDIVIDUAL	0	20			
6. PRIMARY SENSITIVE ENVIRONMENTS	0				
7. SECONDARY SENSITIVE ENVIRONS.	0	21			
8. RESOURCES	0	5			
T =	0	52			
ENTER-Select			F10-Help End-Previous		

Figure 5

You can now see factor-category and factor-level detail of the Air Pathway Targets value that was displayed on the Summary Screen. Note that choosing an item from the Summary Screen takes you from general information to specific. This is the concept behind operation of the PA-Score program--a hierarchy of menus with the Summary Screen at the apex. Appendix A provides diagrams of the structure of PA-Score which portray the relative position of PA-Score data-entry screens. If you become "lost" in the program, these diagrams can help you locate your position in the hierarchy of screens.

As you can see, the cursor is located at the Secondary Target Population value position and is not flashing. Also, the status line prompt in the lower left corner of the screen says "ENTER-Select." This means that you should press <ENTER> to access another screen to enter data for this factor. To enter data for Secondary Target Population...

Press <ENTER>.

Air Secondary Target Population Screen

Palmetto Landfill		PALMETTO.PAS	Site Score 56
Air Pathway -> Targets -> Secondary Target Population			
Distance Categories	Population	References	Value
Onsite	0	7,18	0
Greater than 0 to ¼ mile	32	7,18	1
Greater than ¼ to ½ mile	40	7,18	1
Greater than ½ to 1 mile	188	17,18	1
Greater than 1 to 2 miles	437	17,18	1
Greater than 2 to 3 miles	2560	17,18	1
Greater than 3 to 4 miles	4732	17,18	1

Enter Data
F10-Help End-Previous

Figure 6

Notice that the cursor at the population position is flashing. In addition, the status line prompt says "Enter Data." This means that you may enter data at this location. If you are uncertain which people can be evaluated for this factor, use the <F10> key to access help screens which provide basic information and instructions about each factor. Help is available throughout the program.

Press <F10>.

Air Secondary Target Population Help Screen

Air Pathway Secondary Population Table

In "Population" column enter number of people located in each distance category.

In "References" column, enter the number(s) of the reference(s) that document the secondary populations.

After entering data for all secondary populations, press <END> to return to Air Targets Summary Screen.

N.A. will automatically be displayed for the distance categories up to 1/4 mile if a release is suspected. Primary targets are any residents, workers, and students on or within 1/4 mile of the site.

Press any key to exit Help

Figure 7

To exit the help screen...

Press **any** key.

To enter population data...

CURSOR to the "Onsite" distance category value.
Type 50.
Press <ENTER>.

Notice that in the far column a recalculation is instantly performed giving you the new population value for that distance interval. Also note that a "References" column appears here and on other data entry screens.

2.3.1 Reference Feature

To record a new reference...

CURSOR to the references column of the "Onsite" distance category.
Type 1.
CURSOR one space to the right (the cursor will stop flashing).

Note that the status line (bottom left of screen) says "F2-Edit References."

Press <F2>.

The reference list will appear displaying previously entered references. Note that Reference 1 is the U.S. Geological Survey topographic maps of the area. Reference citations are entered by typing directly into the three line space opposite the "No." column. The citation is restricted to three lines of text. References may also be deleted (reference numbering will not be affected by the deletion), with the message "reference deleted" displayed in the location of the deleted reference. (Entry of more than 75 references may cause memory overload difficulties which could cause the system to terminate.)

Reference List

Palmetto Landfill		PALMETTO.PAS	Site Score	56
No.	PA-Score Reference List -> References			
1	U.S. Geological Survey, 7.5-minute topographic quadrangle maps of South Carolina; Angleton, 1963, photorevised 1983; Palmetto, 1975; Winchester, 1975; Danvers, 1963.			
2	U.S. Environmental Protection Agency, "Standard Operating Procedure to Determine Site Latitude and Longitude Coordinates," 1991. Calculation worksheet for Palmetto Landfill.			
3	U.S. Department of Commerce, "The Climatic Atlas of the United States," 1983, pp. 7, 10.			
4	Jennifer Doe, Manager for Smith and Moore Disposal Services, telephone conversation with Joe Brown, XYZ Corporation, May 1, 1991. Re: Palmetto Landfill Operations.			
5	Joseph Brown, XYZ Corporation, Photodocumentation Log of Palmetto Landfill Preliminary Assessment, May 7, 1991.			
Enter Data		F10-Help End-Previous		

Figure 8

The <PgUp>, <PgDn>, and cursor keys are used for moving through the list of references. To exit the reference list...

Press <END>.

To return to the Summary Screen...

Press <HOME>.

At this point, note the importance of the <END> and <HOME> keys. Pressing <END> from any place in the program moves you one screen back in the program hierarchy; pressing <HOME> returns you to the Summary Screen.

Summary Screen				
Palmetto Landfill		PALMETTO.PAS		Site Score 57
PA-Score Version 1.0				
Pathway	Likelihood of Release	Targets	Waste Characteristics	Pathway Score
Ground Water	550	246	32	52
Surface Water				100
Drinking Water	550	5	32	1
Human Food Chain	550	300	32	64
Environmental	550	300	32	60
Soil Exposure				2
Resident	550	5	18	1
Nearby		1		1
Air	500	57	18	6
ENTER-Select F7-Summary F8-Files F9-Info F10-Help End-Previous				

Figure 9

As you can see, the Summary Screen displays the new Air Targets value from the scoring information you entered.

2.3.2 Preliminary Assessment Form

Note the status line and the "<F9>-Info" function. Every time you create a new site file you should first enter site administrative and characteristics information. To enter this information...

From the Summary Screen...

Press <F9>.

Page one of the Potential Hazardous Waste Site Preliminary Assessment Form (Preliminary Assessment form) will appear (see next page).

Preliminary Assessment Form

Palmetto Landfill		PALMETTO.PAS		Site Score 57	
POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM			IDENTIFICATION		
			State: SC	CERCLIS Number: SCD123456789	
			CERCLIS Discovery Date: 6/10/90		
1. General Site Information					
Name: Palmetto Landfill			Street Address: 6250 Palmetto Drive		
City: Angleton	State: SC	Zip Code: 22222	County: Palmetto	Co. Code: 12	Cong. Dist: 21
Latitude: 18° 28' 43.0"	Longitude: 66° 7' 33.0"	Approx. Area of Site: 10 acres		Status of Site: Inactive	
Enter Data			PgDn-Next End-Previous		

Figure 10

The Preliminary Assessment form allows you to type in site information and to choose characteristics from pop-up menus for certain standard items. For example...

CURSOR to 'Status of Site'.

Press <ENTER>.

The following pop-up menu will appear:

Preliminary Assessment Form Pop-Up Menu

Palmetto Landfill		PALMETTO.PAS		Site Score 57	
POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASS			IDENTIFICATION		
			State: SC	CERCLIS Number: SCD123456789	
			CERCLIS Discovery Date: 6/10/90		
1. General Site Informa					
Name: Palmetto Landfill			Street Address: 6250 Palmetto Drive		
City: Angleton	State: SC	Zip Code: 22222	County: Palmetto	Co. Code: 12	Cong. Dist: 34
Latitude: 18° 28' 43.0"	Longitude: 66° 7' 33.0"	Approx. Area of Site: 10 acres		Status of Site: Inactive	
ENTER-Select			PgDn-Next End-Previous		

Figure 11

To select a characteristic...

CURSOR to the desired choice.
Press **<ENTER>**.

The Preliminary Assessment form includes nine pages (screens) of information. To progress to the next screen of the form use the **<PgDn>** key. To return to a previous screen, press **<END>**. Press **<HOME>** to return to the Summary Screen.

Note that programming considerations limit cursor movement and affect logical flow of data entry within the form.

Press **<HOME>**.

2.3.3 Site Summary Feature

Note the status line and the "**<F7>-Summary**" function. This function is used to access a list of questions designed to help you reach a conclusion about the relative risk of the site and the need for further site assessment activity. To access the summary questions...

From the Summary Screen...

Press **<F7>**.

The following screen will appear:

Summary Questions Screen

Palmetto Landfill	PALMETTO.PAS	Site Score 57
SUMMARY		Part 1 of 3
<p>1. Is there a high possibility of a threat to any nearby drinking water well(s) by migration of a hazardous substance in ground water? (y/n) Yes</p> <p>If yes, identify the well(s).</p> <p style="padding-left: 40px;">There are six private wells within 1/4 mile of the site. They are screened in the surficial Jacksonville aquifer. TCE is the hazardous substance of concern.</p> <p>If yes, how many people are served by the threatened well(s)? 18</p>		
F1-Toggle		PgDn-Next End-Previous

Figure 12

Questions are answered yes **<Y>** or no **<N>** and explanations for the answers can be provided, when appropriate.

The site summary consists of three screens of questions. To proceed to other screens of the questionnaire use the <PgDn> key.

To return to the Summary Screen...

Press <HOME>.

2.3.4 Exiting and Saving Site Files

To save the changes that you have made to the file...

From the Summary Screen...

Press <END>.

PA-Score Save/Exit Pop-Up Menu

Palmetto Landfill		PALMETTO.PAS		Site Score	57
PA-Score Version 1.0					
Pathway	Likelihood of Release	Targets	Waste Characteristics	Pathway Score	
Ground Water				52	
Surface Water				100	
Drinking Water				1	
Human Food Chain				64	
Environmental				60	
Soil Exposure				2	
Resident	550	5	18	1	
Nearby		1		1	
Air	500	57	18	6	

Save / Exit

Return to PA-Score

Save changes and continue

Exit to DOS, save changes

Exit to DOS, ignore changes

ENTER-Select F7-Summary F8-Files F9-Info F10-Help End-Previous

Figure 13

CURSOR to "Save changes and continue" (if you are finished, select "Exit to DOS, Save Changes").

Press <ENTER>.

The following screen will appear:

Save File Option Pop-Up Menu

Palmetto Landfill		PALMETTO.PAS		Site Score	57
PA-Score Version 1.0					
Pathway	Likelihood of Release	Targets	Waste Characteristics	Pathway Score	
Ground Water				52	
Surface Water				100	
Drinking Water				1	
Human Food Chain				64	
Environmental				60	
Soil Exposure				2	
Resident				1	
Nearby				1	
Air				6	

ENTER>Select

Figure 14

CURSOR to "Save file with new name."

Press **<ENTER>**.

Type your first name (8 or fewer characters, no spaces in name).

Press **<ENTER>**.

A copy of the tutorial file (with modifications) has now been made under your name. The next time you access the File System (either when you start PA-Score or by pressing **<F8>** from the Summary Screen) you will see this file. Note that you need to save the file when exiting the program or when accessing a new file.

To this point, the Tutorial has covered the basics of operating the PA-Score program. You have learned how to access any screen in PA-Score by using the cursor keys and **<ENTER>**, how to return to previous screens by pressing **<END>**, or return to the Summary Screen by pressing **<HOME>**. You have also learned how to access Help (**<F10>**), the Reference List (**<F2>**), the Preliminary Assessment form (**<F9>** from the Summary Screen) and the site Summary questions (**<F7>** from the Summary Screen). The rest of this Tutorial shows how to apply these basics to the screens for each pathway.

2.4 Waste Characteristics

The hierarchy of menus allows you maximum flexibility in data input; you may enter any piece of data at any time. However, in accordance with PA guidance, EPA recommends entering source and waste information first.

If you saved your file and exited PA-Score after completing the General Operation section, retrieve your file by following the procedures outlined in Section 2.2 of the tutorial.

Starting at the Summary Screen...

CURSOR to the "Waste Characteristics" column (any pathway).
Press <ENTER>.

Regardless of the pathway you started from, you will see the following screen:

Sources Screen

Palmetto Landfill		NAME.PAS	Site Score	57
Waste Characteristics -> Sources				
Source Name	Source Type	References	WQ Value	
1 Palmetto Landfill	Landfill	4	7.69E+01	
			WC =	18
Enter Data		F10-Help End-Previous		

Figure 15

The Sources Screen lists all the sources defined for the site.

To add a new source to the site:

CURSOR to the second row of the "Source Name" column.
Type **Sludge Pond**, then
CURSOR to the "Source Type" column.
Press <ENTER>.

Source Type Pop-Up Menu

Palmetto Landfill		NAME.PAS	Site Score	57
Waste Characteristics -> Sources				
Source Name	Source Type	References	WQ Value	
Landfill	Landfill	4	7.69E+01	
Surface Impoundment			0.00E+00	
Drums				
Non-Drum Containers				
Contaminated Soil				
Waste Pile				
Land Treatment				
Other				
			WC =	18
ENTER>Select		F10-Help End-Previous		

Figure 16

A pop-up menu of source types will appear.

CURSOR to "Surface Impoundment."
Press <ENTER>.

Those words should now appear in the source type column.

This screen also displays the waste quantity value for each source. To enter a waste quantity for the new source...

CURSOR to the "WQ Value" column.
Press <ENTER>.

Hazardous Waste Quantity Pop-Up Menu

Palmetto Landfill		NAME.PAS	Site Score 57
Waste Characteristics -> Sources			
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> Source Name Hazardous Waste Quantity Constituent Wastestream Volume Area </div>	Source Type	References	WQ Value
	Landfill	4	7.69E+01
	Surface impoundment		0.00E+00
WC =			18
ENTER-Select		F10-Help End-Previous	

Figure 17

A pop-up menu appears which lists the four tiers by which waste quantity can be categorized. If the data are available, all four tiers may be scored for a particular source. PA-Score will utilize the site waste quantity value for the tier that scores highest. To select a tier in which to record waste quantity data for your source...

CURSOR to "Volume"
Press <ENTER>.

A waste quantity data entry screen will appear on which the amount of waste can be recorded for your source. Volume and area waste quantities are entered in the same manner.

Volume/Area Quantities Screen

Palmetto Landfill			NAME.PAS		Site Score 57	
Waste Characteristics -> Sources -> Volume / Area Quantities						
Source Name	Volume Quantity	Units	Ref.	Area Quantity	Units	Ref.
1 Palmetto Landfill				6.00E+00	acres	*
2 Sludge Pond						

Enter Data
F10-Help End-Previous

Figure 18

In the volume column...

Type **20000**.
Press **<ENTER>**.

The quantity of waste you entered is now expressed in scientific notation, with the units (cubic feet) to the right. You may select the units associated with the volume quantity by cursoring to the "Units" column and pressing **<ENTER>** to access a pop-up menu. To exit the screen and return to the main source list...

Press **<END>**.

Note that the status line indicates to press **<END>** to go to the previous screen.

Using the procedure described above, add a wastestream value for the sludge pond.

CURSOR to the WQ Value column of the source screen (you are already there).
Press **<ENTER>**.
CURSOR to "Wastestream."
Press **<ENTER>**.
Type **1E10** (10,000,000,000) in the wastestream column.
Press **<ENTER>**.
Press **<END>**.

A wastestream quantity is now calculated for your source. Constituent quantity may be entered in the same manner as wastestream quantity and both must be entered in pounds. Note that the overall waste characteristics (WC) value has now increased to 100.

Remember, the hazardous waste quantity information that you entered is evaluated for all pathways. Therefore, you need only enter source information once; it will be applied to all pathways. Note that for all pathways except soil exposure, a waste characteristics score less than 32 defaults to 32 if any primary targets are identified.

Press <HOME>.

All pathway scores and the site score now reflect the additions you have made while in the Waste Characteristics section of the program.

2.5 Likelihood of Release

The Likelihood of Release factor category is evaluated in the same manner for the ground water, surface water, and air pathways: by completing a "Criteria List" which appears on screen and is designed to assist you in hypothesizing whether release of a hazardous substance is suspected. Answers to all of the questions may not be available during the PA. Also, these criteria are not all-inclusive; briefly enter any other criteria that help shape your hypothesis next to the "Other criteria?" question. The list records your professional judgment in evaluating these criteria.

To access the Likelihood of Release factor category for the ground water pathway...

From the Summary Screen...

CURSOR to the Ground Water Likelihood of Release position.
Press <ENTER>.

Ground Water Likelihood of Release Criteria List		
Palmetto Landfill	NAME.PAS	Site Score 73
Ground Water Pathway -> Likelihood of Release -> Criteria List		
Are sources poorly contained? (y/n/u)		Y
Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)? (y/n/u)		Y
Is waste quantity particularly large? (y/n/u)		N
Is precipitation heavy? (y/n/u)		Y
Is the infiltration rate high? (y/n/u)		N
Is the site located in an area of karst terrain? (y/n)		N
Is the subsurface highly permeable or conductive? (y/n/u)		Y
Is drinking water drawn from a shallow aquifer? (y/n/u)		Y
Are suspected contaminants highly mobile in ground water? (y/n/u)		Y
Does analytical or circumstantial evidence suggest ground water contamination? (y/n/u)		Y
Other criteria? (y/n)	Y	wastes deposited below water table
SUSPECTED RELEASE? (y/n)		Y
Summarize the rationale for Suspected Release		*
Enter Data		F10-Help End-Previous

Figure 19

This is the Criteria List for the Ground Water Pathway Likelihood of Release factor category. Each question can be answered with a yes <Y>, no <N>, or unknown <U>, unless otherwise specified. You can move the cursor freely within the screen, and answers may be changed if desired. Note that all questions must be answered before PA-Score will permit you to advance to the next part of the program. After all questions have been answered...

Press <ENTER>.

PA-Score will then advance to a Likelihood of Release screen where additional data are required.

Ground Water Likelihood of Release Value Screen

Palmetto Landfill		NAME.PAS	Site Score	73
Ground Water Pathway -> Likelihood of Release Value				Ref.
Do you suspect a release? (y/n)		Yes		
Is the site located in karst terrain? (y/n)		No		
Depth to aquifer (feet):		0		
Distance to the nearest drinking water well (feet):		300	7,13	
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References	
1. SUSPECTED RELEASE	550			
2. NO SUSPECTED RELEASE		0		
LR =	550	0		

Enter Data F10-Help End-Previous

Figure 20

The first two questions reflect the responses given on the previous screen. In this case, the score given for Likelihood of Release (550) reflects a suspected release scored on the Criteria List.

Press <HOME>.

The Likelihood of Release Criteria Lists are similar for each pathway. To view the Surface Water Pathway Likelihood of Release Criteria List...

CURSOR to any Surface Water Threat Likelihood of Release position.
Press <ENTER>.

Surface Water Likelihood of Release Criteria List

Palmetto Landfill	NAME.PAS	Site Score 73
Surface Water Pathway -> Likelihood of Release -> Criteria List		
Is surface water nearby? (y/n/u)		Y
Is waste quantity particularly large? (y/n/u)		N
Is the drainage area large? (y/n/u)		N
Is rainfall heavy? (y/n/u)		Y
Is the infiltration rate low? (y/n/u)		N
Are sources poorly contained or prone to runoff or flooding? (y/n/u)		Y
Is a runoff route well defined (e.g.ditch/channel to surf.water)? (y/n/u)		Y
Is vegetation stressed along the probable runoff route? (y/n/u)		Y
Are sediments or water unnaturally discolored? (y/n/u)		Y
Is wildlife unnaturally absent? (y/n/u)		U
Has deposition of waste into surface water been observed? (y/n/u)		N
Is ground water discharge to surface water likely? (y/n/u)		Y
Does analytical/circumstantial evidence suggest surf.water contam.?(y/n/u)		Y
Other criteria? (y/n)	Y leachate and runoff discolored	
SUSPECTED RELEASE? (y/n)		Y
Summarize the rationale for Suspected Release		*
<div style="display: flex; justify-content: space-between;"> Enter Data F10-Help End-Previous </div>		

Figure 21

This is the Criteria List for the Surface Water Pathway Likelihood of Release factor category.

Press <ENTER>.

Surface Water Likelihood of Release Value Screen

Palmetto Landfill	NAME.PAS	Site Score 73
Surface Water Pathway -> Likelihood of Release Value		Ref.
Do you suspect a release? (y/n)	Yes	
Distance to surface water (feet):	250	5,7
Flood frequency (years):	1-10	
What is the downstream distance (miles) to:		
a. the nearest drinking water intake?	N.A.	12
b. the nearest fishery?	0.0	15
c. the nearest sensitive environment?	0.1	1
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release
1. SUSPECTED RELEASE	550	0
2. NO SUSPECTED RELEASE	0	550
LR =	550	0
References		
<div style="display: flex; justify-content: space-between;"> Enter Data F10-Help End-Previous </div>		

Figure 22

The Surface Water Pathway Likelihood of Release Value Screen asks for data on distance to surface water, flood frequency, and distance to the nearest drinking water intake, fishery, and sensitive environment. Note that if there is no target for a particular threat you must enter a distance greater than 15 miles for that threat (not a zero).

In this example, drinking water intakes are not located within the 15 mile target distance limit, so 16 miles was entered, producing an "N.A." display.

Press <HOME>.

The Likelihood of Release screens for the other pathways are similar, with questions pertinent to the particular pathway. For example, the following figures show the Likelihood of Exposure screen for the soil exposure pathway (does not have a Criteria List) and the Likelihood of Release screens for the air pathway:

Soil Exposure Likelihood of Exposure Value Screen

Palmetto Landfill		NAME.PAS	Site Score	73
Soil Exposure Pathway -> Likelihood of Exposure Value				Ref.
Do any people live on or within 200 ft of areas of suspected contamination? (y/n)			No	7
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination? (y/n)			No	7
Is the facility active? (y/n)			No	7
LIKELIHOOD OF EXPOSURE		Suspected Contamination	References	
1. SUSPECTED CONTAMINATION		LE = 550		

Enter Data
F10-Help End-Previous

Figure 23

Air Likelihood of Release Criteria List

Palmetto Landfill	NAME.PAS	Site Score	73
Air Pathway -> Likelihood of Release -> Criteria List			
Are odors currently reported? (y/n/u)			N
Has release of a hazardous substance to the air been directly observed? (y/n/u)			N
Are there reports of adverse health effects (e.g., headaches, nausea, dizziness) potentially resulting from migration of hazardous substances through the air? (y/n/u)			N
Does analytical/circumstantial evidence suggest a release to air? (y/n/u)			N
Other criteria? (y/n)			N
SUSPECTED RELEASE? (y/n)			N
Summarize the rationale for Suspected Release			*
<div style="display: flex; justify-content: space-between;"> Enter Data F10-Help End-Previous </div>			

Figure 24

Air Likelihood of Release Value Screen

Palmetto Landfill	NAME.PAS	Site Score	73
Air Pathway -> Likelihood of Release Value			Ref.
Do you suspect a release? (y/n)		No	
Distance to the nearest individual (feet):		300	7
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References
1. SUSPECTED RELEASE	0		
2. NO SUSPECTED RELEASE		500	
LR =	0	500	
<div style="display: flex; justify-content: space-between;"> Enter Data F10-Help End-Previous </div>			

Figure 25

2.6 Documentation Editor

From the Summary Screen...

CURSOR to the Ground Water Pathway Likelihood of Release position.
Press <ENTER>.

Ground Water Likelihood of Release Criteria List

Palmetto Landfill	NAME.PAS	Site Score	73
Ground Water Pathway -> Likelihood of Release -> Criteria List			
Are sources poorly contained? (y/n/u)			Y
Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)? (y/n/u)			Y
Is waste quantity particularly large? (y/n/u)			N
Is precipitation heavy? (y/n/u)			Y
Is the infiltration rate high? (y/n/u)			N
Is the site located in an area of karst terrain? (y/n)			N
Is the subsurface highly permeable or conductive? (y/n/u)			Y
Is drinking water drawn from a shallow aquifer? (y/n/u)			Y
Are suspected contaminants highly mobile in ground water? (y/n/u)			Y
Does analytical or circumstantial evidence suggest ground water contamination? (y/n/u)			Y
Other criteria? (y/n)		Y	wastes deposited below water table
SUSPECTED RELEASE? (y/n)			Y
Summarize the rationale for Suspected Release			*
Enter Data		F10-Help End-Previous	

Figure 26

Each Criteria List requests that you "Summarize the rationale for Suspected Release." Text summarizing your rationale can be entered using the documentation editor. To access the documentation editor...

CURSOR to the "Summarize the rationale for Suspected Release" position.

The status line now displays a "F3-Documents" message.

Press <F3>.

The documentation editor screen allows you to type in text explaining the suspected release rationale. Note that the editor does not have word processing capabilities (i.e., underline, bold, block, etc.). The text screen will scroll to allow unlimited entry of text; however, the PA Scoresheet printouts are limited to 20 - 25 lines for printing documentation text.

Palmetto Landfill	NAME.PAS	Site Score	73
PA-Score Documentation Editor			
In the space below summarize the site, source, and pathway considerations that led to the decision concerning a suspected release to ground water.			Y
A release of hazardous substances from Palmetto Landfill to the Jacksonville aquifer is suspected due to the trenching method of waste disposal, shallow depth to aquifer, and documented deposition of TCE wastes (Reference 4, Reference 10). Due to the relatively high conductivity (16 ft/day) (Reference 9) potential for migration of contaminants is high.			Y N Y N N Y Y Y
Refs: 4, 9, 10			Y *

ESC-Switch
End-Previous

Note that the documentation screen also provides brief guidance on documentation requirements. It is a good practice to record references for documentation statements.

Press <ESC>.

Press <F2> to access the reference list.

Press <END> twice to return to the Criteria List, then

Press <HOME> to return to the Summary Screen.

2.7 Targets

27

2.7.1 Ground Water Pathway Targets

To evaluate Ground Water Targets...

From the Summary Screen...

CURSOR to the Ground Water Targets position.
Press **<ENTER>**.

Ground Water Targets Screen

Palmetto Landfill		NAME.PAS	Site Score	73
Ground Water Pathway -> Targets				
TARGETS	Suspected Release	No Suspected Release	References	
3. PRIMARY TARGET POPULATION 18 person(s)	180		* *	
4. SECONDARY TARGET POPULATION Are any wells part of a blended system? (y/n) N Document apportionment.	11	0		
5. NEAREST WELL	50	0		
6. WELLHEAD PROTECTION AREA(WHPA)	0	0		
7. RESOURCES	5	0		
T =		246	0	
ENTER-Select		F10-Help End-Previous		

Figure 28

This screen summarizes ground water target values, including primary and secondary target populations, nearest well, Wellhead Protection Area, and resources. Note that the values appear in the "Suspected Release" column as a result of the decision recorded in the Likelihood of Release Criteria List. Each target factor is accessed by cursoring to the specific factor and pressing **<ENTER>**. For example, to record information for primary target population...

CURSOR to the "Primary Target Population" position.
Press **<ENTER>**.

Ground Water Primary Targets Criteria List

Palmetto Landfill	NAME.PAS	Site Score	73
Ground Water Pathway -> Primary Targets -> Criteria List			
Is any drinking water well nearby? (y/n/u)			Y
Has any nearby drinking water well been closed? (y/n/u)			U
Has any nearby drinking water user reported foul-tasting or foul-smelling water? (y/n/u)			U
Does any nearby well have a large drawdown/high production rate? (y/n/u)			N
Is any drinking water well located between the site and other wells that are suspected to be exposed to a hazardous substance? (y/n/u)			U
Does analytical or circumstantial evidence suggest contamination at a drinking water well? (y/n/u)			Y
Does any drinking water well warrant sampling? (y/n/u)			Y
Other criteria? (y/n)	N		
PRIMARY TARGET(S) IDENTIFIED? (y/n)			Y
Summarize the rationale for Primary Targets			*
Enter Data		F10-Help End-Previous	

Figure 29

This is the Ground Water Pathway Criteria List for Primary Targets. The questions must be answered in the same manner as the Likelihood of Release Criteria List. If you do not identify primary targets in the Criteria List, you will be restricted from entering any primary target data.

Press <ENTER>

Ground Water Target Populations Screen

Palmetto Landfill	NAME.PAS	Site Score	73	
Ground Water Pathway -> Targets -> Population				
Secondary Target Population Distance Categories		Population Served	Reference	Value
0 to ¼ mile		0		0
Greater than ¼ to ½ mile		62	13	3
Greater than ½ to 1 mile		98	13	2
Greater than 1 to 2 miles		156	13	3
Greater than 2 to 3 miles		194	13	2
Greater than 3 to 4 miles		116	13	1
Primary Target Population Drinking Water Well ID	Dist. (miles)	Population Served	Reference	Value
1 JJ Jones Well	0.10	3	1	30
2 5 Wells w/in 1/4 mile rad	0.25	15	7,14	150
Total Primary Target Population Value				180
Total Secondary Target Population Value				11
Enter Data		F10-Help End-Previous		

Figure 30

The screen above contains tables in which to enter primary and secondary target population data, and automatically calculates the values for each. To enter primary target information...

CURSOR to the data entry space below "5 Wells w/in 1/4 mile rad" (the listing will scroll).
Type **Municipal Well #1**.
CURSOR to the "Dist." (distance) column.
Type **0.2**.
CURSOR to the "Population Served" column.
Type **500**.
Press **<ENTER>**.

The Primary Target Population value will be automatically recalculated to reflect your changes.

To enter secondary target information...

Press **<END>** twice.
CURSOR to the "Secondary Target Population" position.
Press **<ENTER>**.

Secondary target population information can then be entered.

CURSOR to the "Greater than 1 to 2 miles" position.
Type **700**
Press **<ENTER>**.

The value for that distance will now recalculate to reflect that population. To return to the Ground Water Pathway Targets Screen...

Press **<END>**.

Note that the target values reflect new data entered. In addition, the screen asks whether any wells are part of a blended system and, if so, to show apportionment. For blended systems, answer yes (**<Y>**) to the question, and document the apportionment by pressing **<F3>** from the reference column position opposite the question. This advances you to the documentation editor where you enter apportionment calculations. This same function is available for surface water pathway drinking water targets, and is used in the same manner (see Section 2.6).

To evaluate Wellhead Protection Area(s)...

CURSOR to Wellhead Protection Area (WHPA).
Press **<ENTER>**.

The following pop-up menu appears:

Ground Water Wellhead Protection Area Pop-up Menu

Palmetto Landfill		NAME.PAS	Site Score	73
Ground Water Pathway -> Targets				
TARGETS	Suspected Release	No Suspected Release	References	
3. PRIMARY TARGET POPULATION 518 per	Designated WELLHEAD PROTECTION AREA No WHPA is present within 4 miles of site		13	
4. SECONDARY TARG Are any wells blended system Document appor	Neither of conditions below holds, but a WHPA is present within 4 Miles			
5. NEAREST WELL	A source lies within or above a WHPA or			
6. WELLHEAD PROTE	A primary target well is identified within a WHPA			
7. RESOURCES	5	0		
T =	5252	0		
<div style="display: flex; justify-content: space-between;"> ENTER-Select F10-Help End-Previous </div>				

Figure 31

CURSOR to "A source lies within or above a WHPA."
Press <ENTER>.

Note the change in the target value. To return to the Summary Screen...

Press <HOME>.

2.7.2 Surface Water Pathway Targets

Surface water targets are divided by pathway threats into Drinking Water, Human Food Chain, and Environmental. The following screens illustrate how to evaluate targets in each surface water threat. To evaluate drinking water targets...

From the Summary Screen...

CURSOR to the Surface Water Pathway Drinking Water Threat Targets position.
Press <ENTER>.

Target Distance Limit Warning Message

Palmetto Landfill		NAME.PAS	Site Score	73
Nearest Drinking Water Intake is Outside the 15 mi Target Distance Limit				
Pathway	of Release	Targets	Characteristics	Score
Ground Water	550	5272	100	100
Surface Water				100
Drinking Water	550	5	100	3
Human Food Chain	550	300	100	100
Environmental	550	300	100	60
Soil Exposure				4
Resident	550	5	100	3
Nearby		1		1
Air	500	57	100	35
Press <ENTER> to Continue F7-Summary F8-Files F9-Info F10-Help End-Previous				

Figure 32

The Target Distance Limit Warning message appears because the distance to the nearest drinking water intake was entered as 16 miles on the Surface Water Likelihood of Release Value Screen (see Section 2.5). To view the Drinking Water Targets Screen, follow the message on the status line "Press <ENTER> to Continue."

Press <ENTER>.

The following screen appears:

Surface Water Drinking Water Targets Screen

Palmetto Landfill		NAME.PAS	Site Score	73
Surface Water Pathway -> Drinking Water Threat Targets				
TARGETS	Suspected Release	No Suspected Release	References	
3. Determine the water body type, flow (if applicable), and number of people served by each drinking water intake.			*	
4. PRIMARY TARGET POPULATION	0			
5. SECONDARY TARGET POPULATION Is any intake part of a blended system? (y/n) N	0	0		
6. NEAREST INTAKE	0	0		
7. RESOURCES	5	0		
T =		5	0	
ENTER-Select F10-Help End-Previous				

Figure 33

The Surface Water Drinking Water Targets Screen provides a summary of target values including primary and secondary target populations, nearest intake, and resources. Before entering target data, you must first complete the Drinking Water Threat Targets Criteria List.

To access the Drinking Water Threat Targets Criteria List...

From the "Primary Target Population" location...

Press <ENTER>.

Surface Water Drinking Water Targets Criteria List

Palmetto Landfill	NAME.PAS	Site Score	73
Surface Water Pathway -> Drinking Water Threat Targets -> Criteria List			
Is any drinking water intake nearby? (y/n/u)			N
Has any intake, fishery, or recreational area been closed? (y/n/u)			N
Does analytical or circumstantial evidence suggest surface water contamination at or downstream of an intake? (y/n/u)			N
Does any drinking water intake warrant sampling? (y/n/u)			N
Other criteria? (y/n)			N
PRIMARY INTAKE(S) IDENTIFIED? (y/n)			N
Summarize the rationale for Primary Intake(s)			*
<div style="display: flex; justify-content: space-between;"> Enter Data F10-Help End-Previous </div>			

Figure 34

All questions must be answered to advance to the Drinking Water Intakes Screen. After answering all questions in the Drinking Water Targets Criteria List...

Press <ENTER>.

Because no primary targets were identified, you have returned to the Drinking Water Targets Screen.

CURSOR to the "Secondary Target Population" position.

Press <ENTER>.

The following screen appears:

Surface Water Drinking Water Intakes Screen

Palmetto Landfill		NAME.PAS		Site Score 73	
Surface Water Pathway -> Drinking Water Threat Targets					
Intake Name	Primary (y/n)	Water Body Type/Flow	Population Served	Ref.	Value
1			0		0
Total Primary Target Population Value					0
Total Secondary Target Population Value					0
Enter Data			F10-Help End-Previous		

Figure 35

For each Surface Water Threat, PA-Score allows the entry of both primary and secondary targets on the same screen. This allows you to test the scoring ramifications of evaluating a target under both scenarios. For this threat, an intake is entered by typing in its name, identifying it as primary or secondary (by typing <Y> or <N> or by using the <F1> key as a toggle), selecting the water body type or flow where the intake is located (from a pop-up menu), and entering the population served by the intake. PA-Score will then calculate the appropriate value based on the data/selections entered. Note, if an intake is identified as "Primary," no water body type is selected; a value based only on the population served is calculated. Finally, the yes or no response in the "Primary" column must agree with whether you identified primary targets on the Criteria List.

To select water body type or flow...

Move the **CURSOR** to the "Water Body Type/Flow" column.
Press <ENTER>.

The following pop-up menu appears:

Surface Water Drinking Water Intakes: Water Body Type Pop-Up Menu

Palmetto Landfill		PALMETTO.PAS		Site Score 57	
Surface Water Pathway -> Drinking Water Threat Targets					
Intake Name	Primary (y/n)	Water Body Type/Flow	Population Served	Ref.	Value
Water Body Type		OR	Flow Characteristics		
minimal stream			< 10 cfs		0
small to moderate stream			10 to 100 cfs		
moderate to large stream			> 100 to 1,000 cfs		
large stream to river			> 1,000 to 10,000 cfs		
large river			> 10,000 cfs		
3-mile mixing zone of quiet flowing streams or rivers		10 cfs or greater			
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes		N/A			
Total Secondary Target Population Value					0
ENTER-Select			F10-Help End-Previous		

Figure 36

CURSOR to "10 to 100 cfs."
Press <ENTER>.

"Population Served" values can then be entered on this screen by typing data in that column.

Press <HOME>.

To evaluate the human food chain targets...

CURSOR to the Surface Water Pathway Human Food Chain Targets position.
Press <ENTER>.

Surface Water Human Food Chain Targets Screen

Palmetto Landfill		NAME.PAS	Site Score 73
Surface Water Pathway -> Human Food Chain Threat Targets			
TARGETS	Suspected Release	No Suspected Release	References
8. Determine the water body type and flow (if applicable) for each fishery.			
9. PRIMARY FISHERIES	300		
10. SECONDARY FISHERIES	N.E.	0	
T =	300	0	
<div style="display: flex; justify-content: space-between;"> ENTER>Select F10-Help End-Previous </div>			

Figure 37

As in all surface water threats, a series of screens will require you to answer questions and enter data regarding primary and secondary targets, in this case fisheries. The screen provides a summary of target values for primary and secondary fisheries. Before entering specific fisheries information in the Human Food Chain Fishery Screen, first access the Human Food Chain Targets Criteria List from this screen.

To access the criteria list...

Press <ENTER>.

Surface Water Human Food Chain Targets Criteria List

Palmetto Landfill	NAME.PAS	Site Score	73
Surface Water Pathway -> Human Food Chain Threat Targets -> Criteria List			
Is any fishery nearby? (y/n/u)			Y
Has any intake, fishery, or recreational area been closed? (y/n/u)			N
Does analytical or circumstantial evidence suggest surface water contamination at or downstream of a fishery? (y/n/u)			N
Does any fishery warrant sampling? (y/n/u)			Y
Other criteria? (y/n)		Y	Water draining to fishery discolored
PRIMARY FISHERY(IES) IDENTIFIED? (y/n)			Y
Summarize the rationale for Primary Fishery(ies)			*
Enter Data		F10-Help End-Previous	

Figure 38

After answering the questions...

Press <ENTER>.

The following screen appears:

Surface Water Human Food Chain Fishery Screen

Palmetto Landfill	NAME.PAS	Site Score	73	
Surface Water Pathway -> Human Food Chain Threat Targets				
Fishery Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 Wildlife Creek	Y	primary fishery	1	300
2 Ono River	N	1000-10000 cfs	6	12
3 Wildlife Creek Wetlands	Y	primary fishery	15	300
Total Primary Fisheries Value				300
Total Secondary Fisheries Value				0
Enter Data		F10-Help End-Previous		

Figure 39

For this threat, a fishery is entered by typing its name, identifying it as primary or secondary (by typing <Y> or <N> or by using the <F1> key as a toggle) and selecting the water body type or flow in which the fishery is located (from a pop-up menu). PA-Score then calculates the appropriate value based on data/selections entered. Note, if a fishery is identified as "Primary," no water body type is selected; a value of 300 is assigned and secondary fisheries are not evaluated. Further, a single primary fishery receives the maximum target value of 300; multiple primary fisheries are not additive. Finally, the yes or no response in the "Primary" column must agree with whether you identified primary targets on the Criteria List.

Press <HOME>.

To evaluate environmental targets...

CURSOR to the Surface Water Pathway Environmental Targets position.

Press <ENTER>

The following screen appears:

Surface Water Environmental Targets Screen

Palmetto Landfill		NAME.PAS	Site Score	73
Surface Water Pathway -> Environmental Threat Targets				
TARGETS	Suspected Release	No Suspected Release	References	
11. Determine the water body type and flow (if applicable) for each sensitive environment.				
12. PRIMARY SENSITIVE ENVIRONMENTS	300			
13. SECONDARY SENSITIVE ENVIRONS.	N.E.	0		
T =	300	0		

ENTER-Select
F10-Help End-Previous

Figure 40

As in the other surface water threats, a series of screens will appear requiring you to answer questions and enter data regarding primary and secondary targets, in this case sensitive environments. The screen provides a summary of target values for primary and secondary sensitive environments. Before entering specific sensitive environment information in the Sensitive Environments Screen, first access the Environmental Targets Criteria List from this screen.

Press <ENTER>.

Surface Water Environmental Targets Criteria List

Palmetto Landfill	NAME.PAS	Site Score	73
Surface Water Pathway -> Environmental Threat Targets -> Criteria List			
Is any sensitive environment nearby? (y/n/u)			Y
Has any intake, fishery, or recreational area been closed? (y/n/u)			N
Does analytical or circumstantial evidence suggest surface water contamination at or downstream of a sensitive environment? (y/n/u)			Y
Does any sensitive environment warrant sampling? (y/n/u)			Y
Other criteria? (y/n)		Y	Water draining into wetland discolored
PRIMARY SENSITIVE ENVIRONMENT(S) IDENTIFIED? (y/n)			Y
Summarize the rationale for Primary Sensitive Environment(s)			*
Enter Data		F10-Help End-Previous	

Figure 41

After answering the questions...

Press <ENTER>.

The following screen appears:

Surface Water Sensitive Environments Screen

Palmetto Landfill	NAME.PAS	Site Score	73	
Surface Water Pathway -> Environment Threat Targets				
Sensitive Environment Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 Wildlife Creek Wetlands	Y	primary sens.envir.	1	300
2 Bald Eagle Habitat	Y	primary sens.envir.	16	300
3 Salt Marsh Harvest Mouse	Y	primary sens.envir.	16	300
Total Primary Sensitive Environments Value				300
Total Secondary Sensitive Environments Value				0
Enter Data		F10-Help End-Previous		

Figure 42

For this threat, a sensitive environment is entered by typing its name, identifying it as primary or secondary (by typing <Y> or <N> or by using the <F1> key as a toggle), selecting the water body type or flow in which the sensitive environment is located (from a pop-up menu), and selecting the sensitive environment value (from a pop-up menu). PA-Score then calculates the appropriate value based on data/selections entered. Note, if a sensitive environment is identified as "Primary," no water body type or sensitive environment value is selected; a value of 300 is assigned and secondary sensitive environments are not evaluated. Further, a single primary sensitive environment receives the maximum target value of 300; multiple primary sensitive environments are not additive. Finally, the yes or no response in the "Primary" column must agree with whether you identified primary targets on the Criteria List.

Since all the sensitive environments listed are identified as primary targets in this example, the sensitive environment value pop-up menu is not accessible. However, if a new sensitive environment that is not identified as primary is added, the pop-up menu can be accessed.

CURSOR to the fourth row of the "Sensitive Environment Name" column.

Type **Cape Johnson Park**.

Enter an **N** in the "Primary" column.

CURSOR to the "Water Body Type/Flow" column.

Press <ENTER>.

CURSOR to "minimal stream".

Press <ENTER>.

CURSOR to the "Value" column.

Press <ENTER>.

The following pop-up menu appears:

Surface Water Sensitive Environment Types Pop-Up Menu

Sensitive Environment Types
Page 1 of 3

Critical habitat for Federally designated endangered or threatened species

Marine Sanctuary

National Park

Designated Federal Wilderness Area

Ecologically important areas identified under Coastal Zone Wilderness Act

Sensitive Areas identified under the National Estuary Program or

Near Coastal Water Program of the Clean Water Act

Critical Areas identified under the Clean Lakes Program of the Clean

Water Act (subareas in lakes or entire small lakes)

National Monument (air pathway only)

National Seashore Recreation Area

National Lakeshore Recreation Area

Total Primary Sensitive Environments Value

Total Secondary Sensitive Environments Value

300

0

ENTER-Select
F10-Help PgDn-Next End-Previous

Figure 43

CURSOR to "National Seashore Recreation Area."

To select another sensitive environment type, you may **CURSOR** through each selection, or press **<PgDn>** to review the selections more quickly (there are three pages of types).

Press **<ENTER>**.

The selected sensitive environment value appears in the table.

Press **<HOME>** to return to the Summary Screen.

2.7.3 Soil Exposure Pathway Targets

Populations and environments exposed to contamination via the soil exposure pathway are calculated in much the same manner as the other pathways.

From the Summary Screen...

CURSOR to the Soil Exposure Resident Threat Targets position.

Press **<ENTER>**.

The following screen appears:

Soil Exposure Resident Population Criteria List	
Palmetto Landfill	NAME.PAS Site Score 73
Soil Exposure Pathway -> Resident Population -> Criteria List	
Is any residence, school, or daycare facility on or within 200 feet of an area of suspected contamination? (y/n/u)	N
Is any residence, school, or daycare facility located on adjacent land previously owned or leased by the site owner/operator? (y/n/u)	N
Is there a migration route that might spread hazardous substances near residences, schools, or daycare facilities? (y/n/u)	N
Have onsite or adjacent residents or students reported adverse health effects, exclusive of apparent drinking water or air contamination problems? (y/n/u)	N
Does any neighboring property warrant sampling? (y/n/u)	N
Other criteria? (y/n)	N
RESIDENT POPULATION IDENTIFIED? (y/n)	N
Summarize the rationale for Resident Population	*
Enter Data F10-Help End-Previous	

Figure 44

This is the Soil Exposure Pathway Resident Population Criteria List. To demonstrate data entry of resident threat targets, answer "Yes" to all of the questions on the list. While this contradicts site information entered elsewhere in the program, it allows this tutorial to more fully demonstrate data entry.

Enter Y for all questions.

Make sure the answer to "Resident Population Identified?" is "Y" to evaluate resident threat targets. After all questions have been answered.

Press <ENTER>.

The following screen appears if you identified resident population on the Criteria List:

Soil Exposure Resident Population Targets Screen

Palmetto Landfill		NAME.PAS	Site Score 73
Soil Exposure Pathway -> Resident Population Threat Targets			
TARGETS	Suspected Contamination	References	
2. RESIDENT POPULATION 0 resident(s) 0 school/daycare student(s)	0		
3. RESIDENT INDIVIDUAL	0		
4. WORKERS	0		
5. TERRESTRIAL SENSITIVE ENVIRONMENTS	0		
6. RESOURCES	5		
T =	5		
<div style="display: flex; justify-content: space-between;"> ENTER>Select F10-Help End-Previous </div>			

Figure 45

PA-Score allows access to target factors based on answers given on the Criteria List and on the Likelihood of Exposure Value Screen (see Section 2.5). For example, if you indicate that people live or attend school or daycare on or within 200 feet of an area of suspected contamination, PA-Score allows you to enter the number of people under "Resident Population." Note that the cursor is flashing at the "Resident Population (residents)" position...

Type 12.

Press <ENTER>.

PA-Score then calculates the resident population value and the resident individual value.

Because the facility was recorded as inactive on the Soil Exposure Likelihood of Exposure Value Screen (see Section 2.5), access to the "Workers" position is not permitted. For an active site, information on workers is entered using a pop-up menu. If workers are reported present at the site on the Likelihood of Exposure Value Screen...

The pop-up menu appears from which you can select the number of workers.

Soil Exposure Workers Pop-Up Menu

Palmetto Landfill		NAME.PAS	Site Score	73
Soil Exposure Pathway -> Resident Population Threat Targets				
TARGETS		Suspected Contamination	References	
2. RESIDENT POPULATION 12 resident(s) 0 school/daycare stu		0		
3. RESIDENT INDIVIDUAL		0		
4. WORKERS		1 to 100 101 to 1,000 > 1,000		
5. TERRESTRIAL SENSITIVE ENVIRONMENTS		0		
6. RESOURCES		5		
T =		175		
ENTER-Select F10-Help End-Previous				

Figure 46

Values for soil exposure terrestrial sensitive environments are calculated based on the sensitive environment type. To access the sensitive environment screens...

CURSOR to "Terrestrial Sensitive Environments."

Press <ENTER>.

The following screen appears:

Soil Exposure Terrestrial Sensitive Environments Screen

Palmetto Landfill		NAME.PAS	Site Score	73
Soil Exposure Pathway -> Targets -> Terrestrial Sensitive Environments				
Terrestrial Sensitive Environment Name		Reference	Value	
1			0	
Total Terrestrial Sensitive Environments Value			0	
Enter Data		F10-Help End-Previous		

Figure 47

Type the sensitive environment name in the left column. To select sensitive environments...

CURSOR to the "Value" column.

Press **<ENTER>**.

The following pop-up menu appears:

Soil Exposure Terrestrial Sensitive Environment Types Pop-Up Menu

Terrestrial Sensitive Environment Types		Page 1 of 2
Terrestrial critical habitat for Federally designated endangered or threatened species		
National Park		
Designated Federal Wilderness Area		
National Monument		
Terrestrial habitat known to be used by Federally designated or proposed threatened or endangered species		
National Preserve (terrestrial)		
National or State terrestrial Wildlife Refuge		
Federal land designated for protection of natural ecosystems		
Administratively proposed Federal Wilderness Area		
Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding		
Total Terrestrial Sensitive Environments Value		0
ENTER-Select		F10-Help PgDn-Next End-Previous

Figure 48

To select the appropriate terrestrial sensitive environment type, simply **CURSOR** to the terrestrial sensitive environment you are evaluating and press **<ENTER>** or use the **<PgDn>** key to view page 2 of the pop-up menu.

Press **<HOME>**.

To evaluate the threat to nearby targets...

From the Summary Screen...

CURSOR to the "Soil Exposure Nearby Targets" position.
Press **<ENTER>**.

Soil Exposure Nearby Targets Pop-Up Menu

Palmetto Landfill		NAME.PAS		Site Score	88
PA-Score Version 1.0					
Pathway	Likelihood of Release	Targets	Waste Characteristics	Pathway Score	
Ground Water	550	5272	100	100	
Surface Water		Population Within 1 Mile		100	
Drinking Water	550	None		3	
Human Food Chain	550	1 - 10,000		100	
Environmental	550	10,001 - 50,000		60	
		>50,000			
Soil Exposure Resident Nearby	550	275	100	100	
		1		100	
				1	
Air	500	57	100	35	
ENTER-Select F7-Summary F8-Files F9-Info F10-Help End-Previous					

Figure 49

CURSOR to "1 - 10,000" option.
Press **<ENTER>**.

PA-Score calculates a nearby population threat value.

2.7.4 Air Pathway Targets

Populations and sensitive environments actually exposed to, or at risk of being exposed to, release of hazardous substances to the air are evaluated as in the other pathways; a Criteria List is used to determine primary and secondary target populations and environmental targets.

To access the Air Targets Screen...

CURSOR to the Air Pathway Targets position.
Press **<ENTER>**.

The following screen appears:

Air Targets Screen

Palmetto Landfill		NAME.PAS	Site Score	88
Air Pathway -> Targets				
TARGETS	Suspected Release	No Suspected Release	References	
3. PRIMARY TARGET POPULATION 0 person(s)	0			
4. SECONDARY TARGET POPULATION	0	11		
5. NEAREST INDIVIDUAL	0	20		
6. PRIMARY SENSITIVE ENVIRONMENTS	0			
7. SECONDARY SENSITIVE ENVIRONS.	0	21		
8. RESOURCES	0	5		
T =	0	57		
ENTER-Select		F10-Help End-Previous		

Figure 50

The cursor is positioned at the "Secondary Target Population" position. The secondary target population was evaluated in Section 2.3. To evaluate other air targets...

CURSOR to the "Secondary Sensitive Environs." position.
Press <ENTER>.

The following screen appears:

Air Secondary Sensitive Environments Screen

Palmetto Landfill		NAME.PAS	Site Score	88
Air Pathway -> Targets -> Secondary Sensitive Environments				
Sensitive Environment Name	Distance	Reference	Value	
1 Wildlife Creek Wetlands	0 - 1/4	1	6.2	
2 Bald Eagle Habitat	onsite	16	7.5	
3 Salt Marsh Harvest Mouse	onsite	16	7.5	
Total Secondary Sensitive Environments Value			21	
Enter Data		F10-Help End-Previous		

Figure 51

Space is provided to enter the sensitive environment name, and a pop-up menu is available from which to choose a distance category corresponding to the sensitive environment's distance from the site. Note, if a Suspected Release is identified, secondary targets are not evaluated within 1/4 mile of the site. PA-Score defaults to the >1/4 to 1/2 mile distance category.

To choose the type of sensitive environment...

CURSOR to the "Value" column.
Press **<ENTER>**.

The Sensitive Environments Screen appears:

Air Sensitive Environment Types Pop-Up Menu

Sensitive Environment Types		Page 3 of 3
Habitat known to be used by State designated endangered or threatened species		
Habitat known to be used by a species under review as to its Federal endangered or threatened status		
Coastal Barrier (partially developed)		
Federally designated Scenic or Wild River		
State land designated for wildlife or game management State designated Scenic or Wild River State designated Natural Area Particular areas, relatively small in size, important to maintenance of unique biotic communities		
State designated areas for protection/maintenance of aquatic life under the Clean Water Act		
Wetlands		
Total Secondary Sensitive Environments Value		21
ENTER-Select F10-Help PgDn-Next End-Previous		

Figure 52

Sensitive environment types are selected in the manner described in the Surface Water Environmental Threat Targets section (Section 2.7.2).

Press **<HOME>** twice to return to the Summary Screen.

Note, Air primary target population and primary sensitive environments can only be entered if a Suspected Release has been projected on the Air Likelihood of Release Criteria List. The data entry screens for these target factors are accessed from the Air Targets Screen and appear as follows:

Air Primary Target Population Screen

Palmetto Landfill	NAME.PAS	Site Score	88
Air Pathway -> Targets -> Primary Target Population			Ref.
Enter Number of Residents, Students, and Workers on and within 1/4 mile of the site of a suspected air release of hazardous substances			0
<div style="display: flex; justify-content: space-between;"> Enter Data F10-Help End-Previous </div>			

Figure 53

Air Primary Sensitive Environments Screen

Palmetto Landfill	NAME.PAS	Site Score	88
Air Pathway -> Targets -> Primary Sensitive Environments			
Sensitive Environment Name	Reference	Value	
1		0	
Total Primary Sensitive Environments Value			0
<div style="display: flex; justify-content: space-between;"> Enter Data F10-Help End-Previous </div>			

Figure 54

Note, primary sensitive environment types are selected in the same manner as secondary sensitive environments.

2.8 Conclusion

This tutorial has covered data entry for waste characteristics, the likelihood of release of hazardous substances to the environment, and the numbers and characteristics of targets exposed or potentially exposed to contamination. To save your file and exit PA-Score...

From the Summary Screen...

Press <END>.

PA-Score Save/Exit Pop-Up Menu

Palmetto Landfill		PALMETTO.PAS		Site Score 88
PA-Score Version 1.0				
Pathway	Likelihood of Release	Targets	Waste Characteristics	Pathway Score
Ground Water				100
Surface Water				100
Drinking Water				3
Human Food Chain				100
Environmental				60
Soil Exposure				100
Resident	550	275	100	100
Nearby		1		1
Air	500	57	100	36

Save / Exit

Return to PA-Score

Save changes and continue

Exit to DOS, save changes

Exit to DOS, ignore changes

ENTER-Select F7-Summary F8-Files F9-Info F10-Help End-Previous

Figure 55

CURSOR to "Exit to DOS, save changes."

Press <ENTER>.

To save your file under its current name...

Press <ENTER>.

You should now be at a DOS prompt or shell menu.

CHAPTER 3

PRINTING

3.1 Introduction: PA-Print Computer Program

The program to print PA-Score files is called **PA-Print**. It is a separate program from PA-Score and must be accessed from the DOS prompt. PA-Print retrieves the file(s) that you created with PA-Score and extracts entered or calculated data. The procedure for executing PA-Print is discussed below. Note that PA-Print is capable of producing PA scoresheets, a reference list, and the Preliminary Assessment form.

Note that some parts of the printing operation require familiarity with DOS and technical knowledge of your printer. Consult your systems administrator for first-time setup.

From the DOS prompt...

Type **PAPRINT**.
Press **<ENTER>**.

If the program has been properly installed, the following screen appears:

PA-Print File System Screen

Site Score 0					
PA-Score Data Files -> A:\					
Name	Date	Time	Size	Site Name	CERCLIS Number
PALMETTO	08/17/91	16:58	14264	Palmetto Landfill	SCD123456789
NAME	08/22/91	15:30	14392	Palmetto Landfill	SCD123456789
ENTER-Select F2-Change Directory F10-Help End-Exit					

Figure 56

This looks and operates much like the file system in the PA-Score program (see Section 2.2).

CURSOR to your NAME file.
Press **<ENTER>**.

PA-Print Menu Screen

Palmetto Landfill		NAME.PAS	Site Score 88
PRINTER = LPT1		PA-Score PA-Print	
<div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p style="text-align: center;">PA-Print Menu</p> <p>Select File</p> <p>Select Printer</p> <p>Select Printer Options</p> <p>Print PA Scoresheets</p> <p>Print Preliminary Assessment Form</p> <p>Print Reference List</p> <p>Reset the Printer File</p> <p>Exit</p> </div>			
ENTER-Select		F10-Help	

Figure 57

From the PA-Print menu you can select and configure your printer, and print PA scoresheets, reference list, and Preliminary Assessment form.

3.2 Printer Setup

The "PRINTER = " heading at the top of the screen indicates the location to which you are sending your printout (in this case LPT1). To see the different destinations to which you may print...

CURSOR to "Select Printer."
Press <ENTER>.

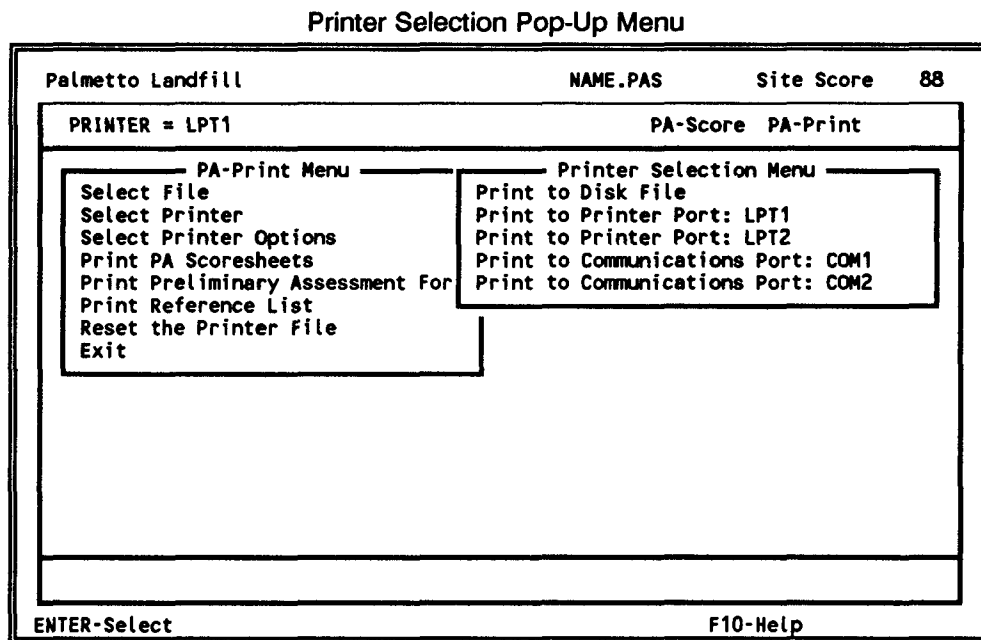


Figure 58

The printer selection menu allows you to send a file to a disk, modem, or printer port destination. Note that most printers are connected to the LPT1 port.

CURSOR to the "Print to Printer Port: LPT1" option.
Press <ENTER>.

Note the message on the status line requesting you reset the printer file to incorporate your printer choice. To reset the printer file...

Press <ENTER>.

CURSOR to "Select Printer Options."
Press <ENTER>.

Printer Options - Set Graphics Mode Pop-Up Menu

Palmetto Landfill		NAME.PAS	Site Score	88
PRINTER = LPT1		PA-Score PA-Print		
<div>PA-Print Menu</div> <div>Select File Select Printer Select Printer Options Print PA Scoresheets Print Preliminary Assessment Form Print Reference List Reset the Printer File Exit</div> <div>Set Graphics Mode</div> <div>1. ASCII Characters 0 - 255 2. ASCII Characters 0 - 127</div>				
ENTER-Select		F10-Help		

Figure 59

The printer options selection is where you tell PA-Print the capabilities of your printer. (Printer options can be saved to disk, so the following printer configuration procedures may only need to be performed once for each site file.) The "Set Graphics Mode" pop-up menu presents two options for ASCII characters. Some printers can reproduce "high order" ASCII characters such as the lines in the above screen, whereas other printers will produce nonsense characters, italic letters, or blanks. If your printer cannot reproduce high order ASCII characters, select "ASCII Characters 0 - 127." If you are unsure of your printer's capabilities, no harm will be done by choosing the high order option to find out...

CURSOR to the "ASCII Characters 0 - 255" option.
Press **<ENTER>**.

Printer Options - Tabstops Pop-Up Menu

Palmetto Landfill		NAME.PAS	Site Score 88
PRINTER = LPT1		PA-Score PA-Print	
<div style="border: 1px solid black; padding: 5px; width: 40%; float: left;"> PA-Print Menu Select File Select Printer Select Printer Options Print PA Scoresheets Print Preliminary Assessment Form Print Reference List Reset the Printer File Exit </div> <div style="float: right; width: 55%;"> <div style="border: 1px solid black; padding: 5px; margin-top: 20px;"> Tabstops in Printer Output ? YES NO </div> </div> <div style="clear: both;"></div>			
ENTER-Select		F10-Help	

Figure 60

The next option asks if you want tabstops used in the output (as opposed to spaces). Some printers evaluate tabs differently than others. Choose the "YES" option initially, but if problems appear in the alignment of columns in printouts, go through this procedure again and select the "NO" option.

CURSOR to the "YES" option.
Press <ENTER>.

Printer Options - Printer Control Codes Pop-Up Menu

Palmetto Landfill		NAME.PAS	Site Score 88
PRINTER = LPT1		PA-Score PA-Print	
<div style="border: 1px solid black; padding: 5px; width: 40%; float: left;"> PA-Print Menu Select File Select Printer Select Printer Options Print PA Scoresheets Print Preliminary Assessment Form Print Reference List Reset the Printer File Exit </div> <div style="float: right; width: 55%;"> <div style="border: 1px solid black; padding: 5px; margin-top: 20px;"> Change Printer Control Codes ? NO YES </div> </div> <div style="clear: both;"></div>			
RESET 27/69/ BOLD 27/40/115/51/66/ LIGHT 27/40/115/48/66/			
ENTER-Select			

Figure 61

The final printer option allows you to define "control codes" for alternating boldface and normal type in your printouts. Use of this capability is optional, but it produces a more readable printout. The codes shown above are for the Hewlett-Packard LaserJet II, III, and IIIp Series printers. Consult your printer manual for the codes appropriate for your printer. Printer control codes for IBM ProPrinter, EPSON, and OKIDATA printers are provided below. If your printer code information is not immediately available, you can proceed without entering any.

Printer Control Codes for Common Printers

Code Type	IBM ProPrinter/EPSON (emphasized)	OKIDATA (enhanced)
RESET	blank	blank
BOLD	27/69/	27/72/
LIGHT	27/70/	27/73/

CURSOR to the "YES" option if you want to enter different control codes.
Type in your appropriate control codes.
Press <ENTER>.

You have now configured the printer and are ready to print. To print PA scoresheets...

CURSOR to the "Print PA Scoresheets" option.
Press <ENTER>.

The scoresheets should now print. Messages on the status line will indicate the generation and printing of the scoresheets. You may abort a printing operation by pressing <ESC>.

Each time you print, you generate a printer file that must be erased, or reset, prior to any subsequent print operations. PA-Print prompts you each time a reset is necessary; however, you may also select "Reset the Printer File" to erase the contents of the print file that you have printed.

To exit PA-Print...

CURSOR to the "Exit" option.
Press <ENTER>.

Save Printer Configurations Pop-Up Menu

Palmetto Landfill		NAME.PAS	Site Score	88
PRINTER = LPT1		PA-Score	PA-Print	
<div>PA-Print Menu</div> <div>Select File Select Printer Select Printer Options Print PA Scoresheets Print Preliminary Assessment Form Print Reference List Reset the Printer File Exit</div>				
<div>Save Printer Configuration Changes ? NO YES</div>				
ENTER-Select		F10-Help		

Figure 62

If you make changes under "Select Printer" or "Printer Options," the program asks if you want to "Save Printer Configuration Changes ?" before exiting. If you make no changes you will exit directly to the DOS prompt.

CURSOR to "YES" to save changes.
Press **<ENTER>**.

You have now exited the PA-Print program and have returned to the DOS prompt. To return to PA-Score...

Type **PAScore**.

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APPENDIX A

PA-SCORE COMPUTER PROGRAM STRUCTURE

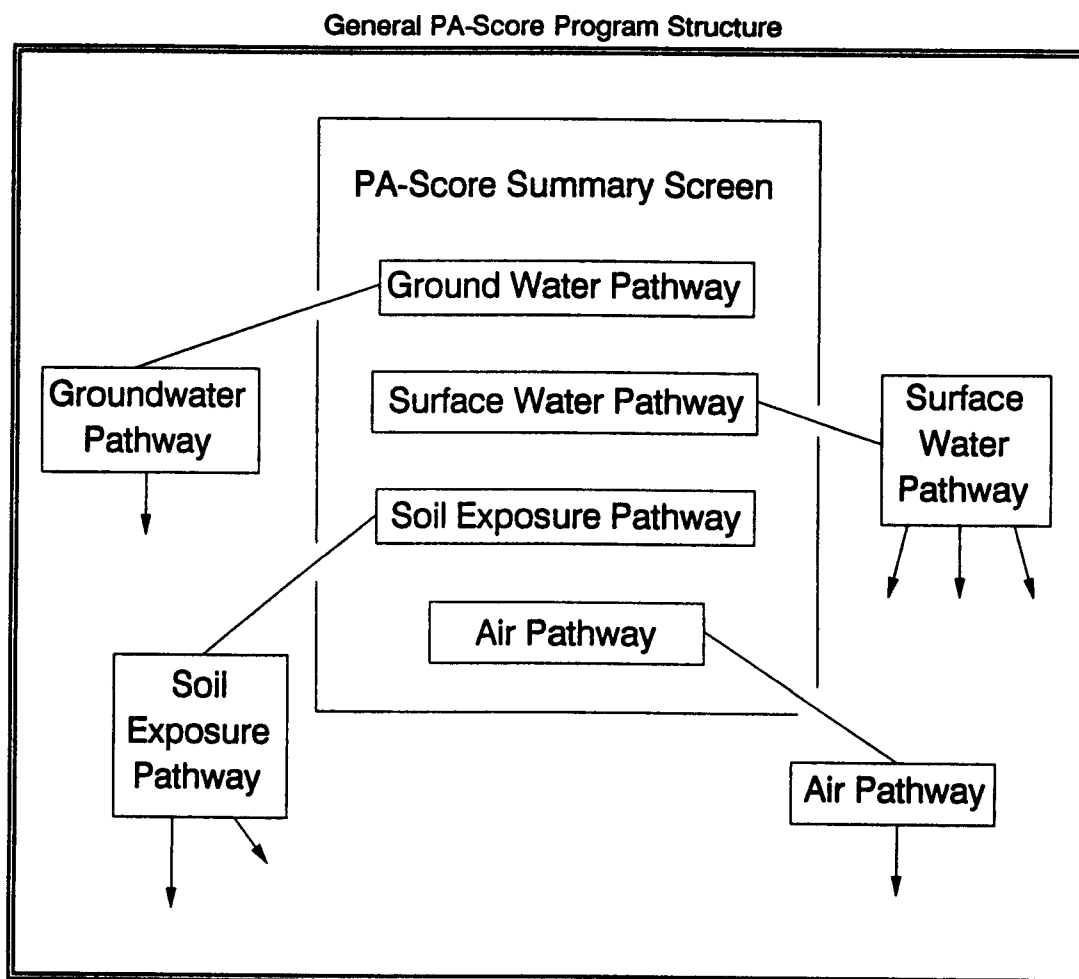


Figure A-1

PA-Score Program Structure: Ground Water Pathway

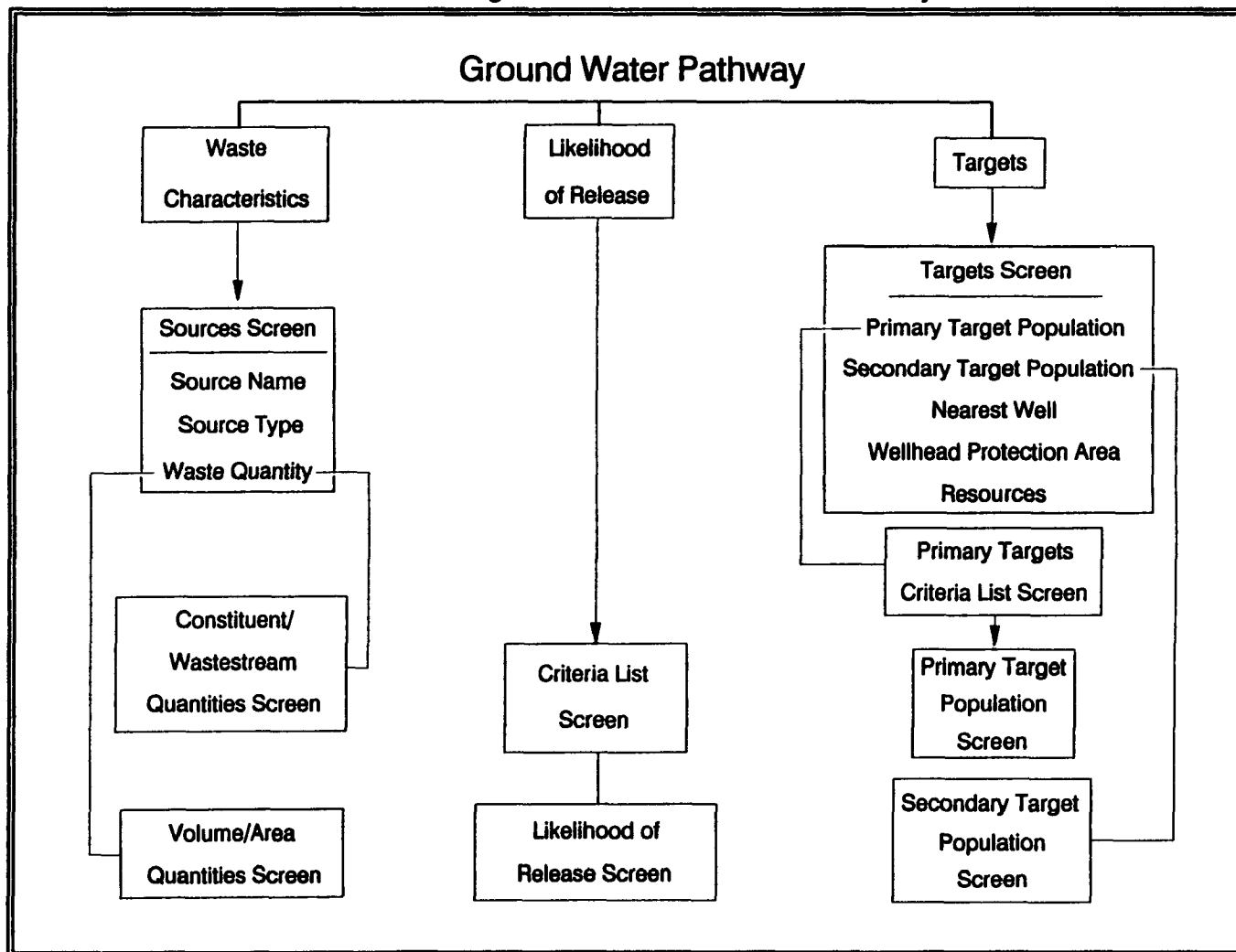


Figure A-2

PA-Score Program Structure: Surface Water Pathway

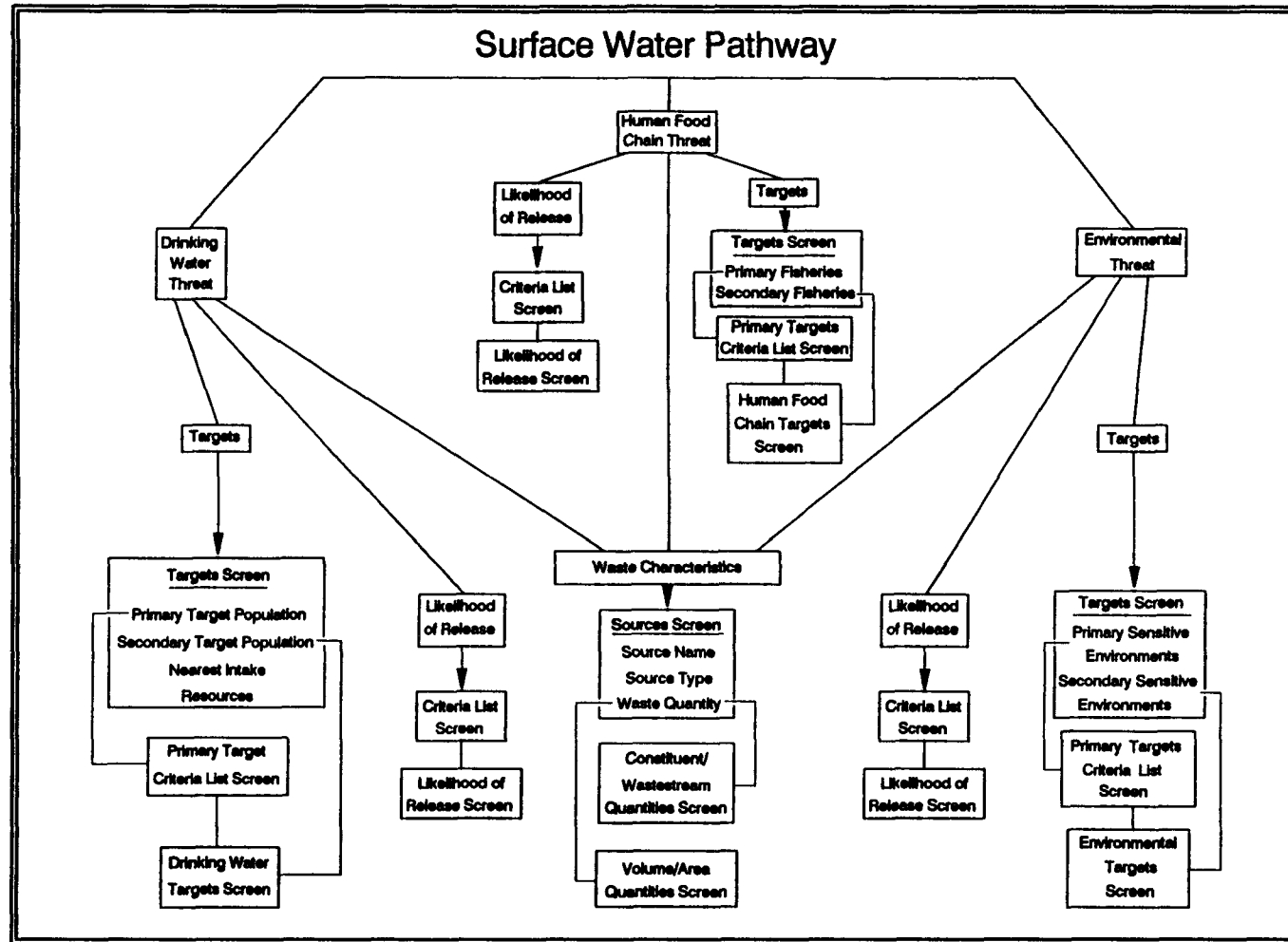


Figure A-3

PA-Score Program Structure: Soil Exposure Pathway

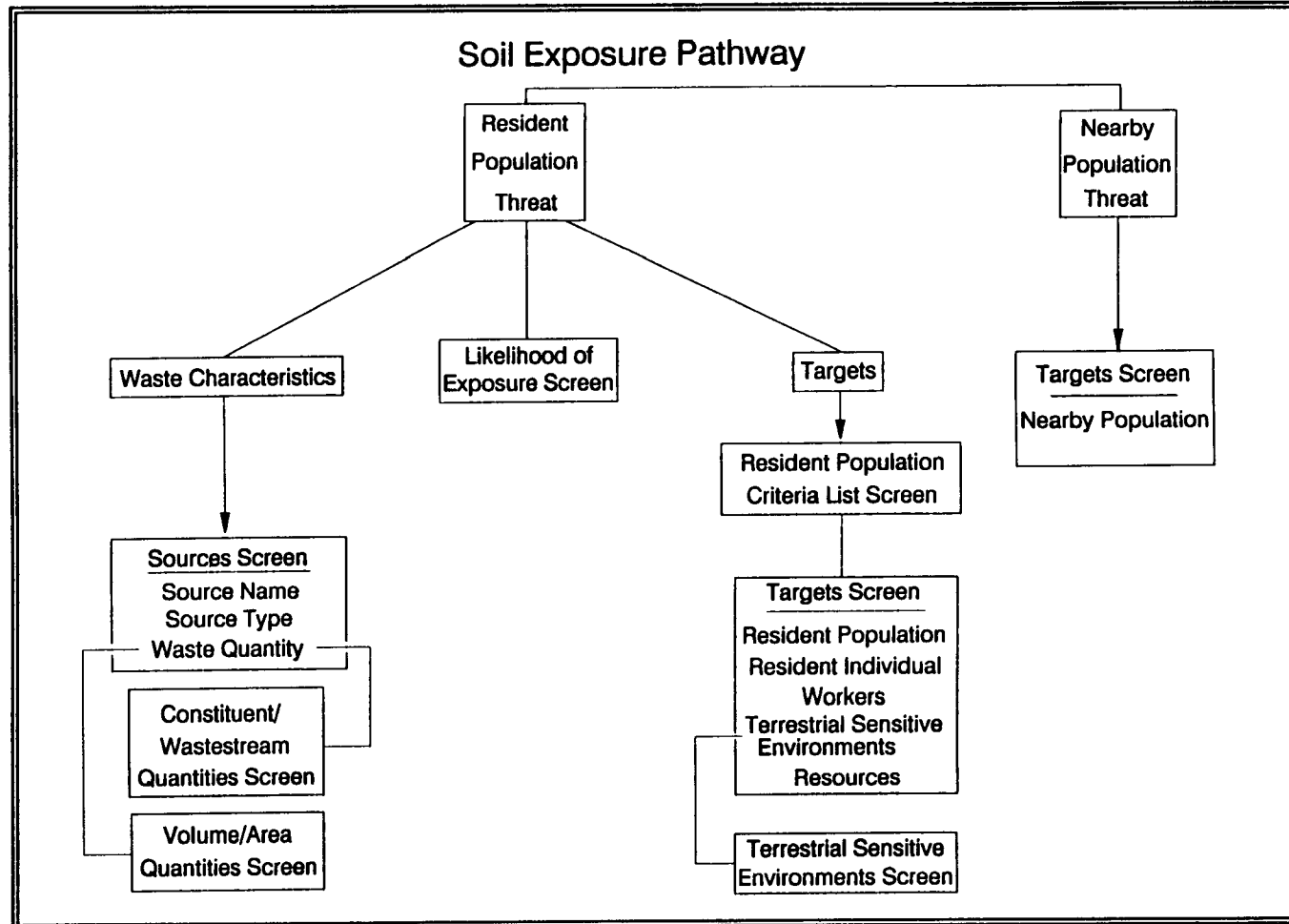


Figure A-4

PA-Score Program Structure: Air Pathway

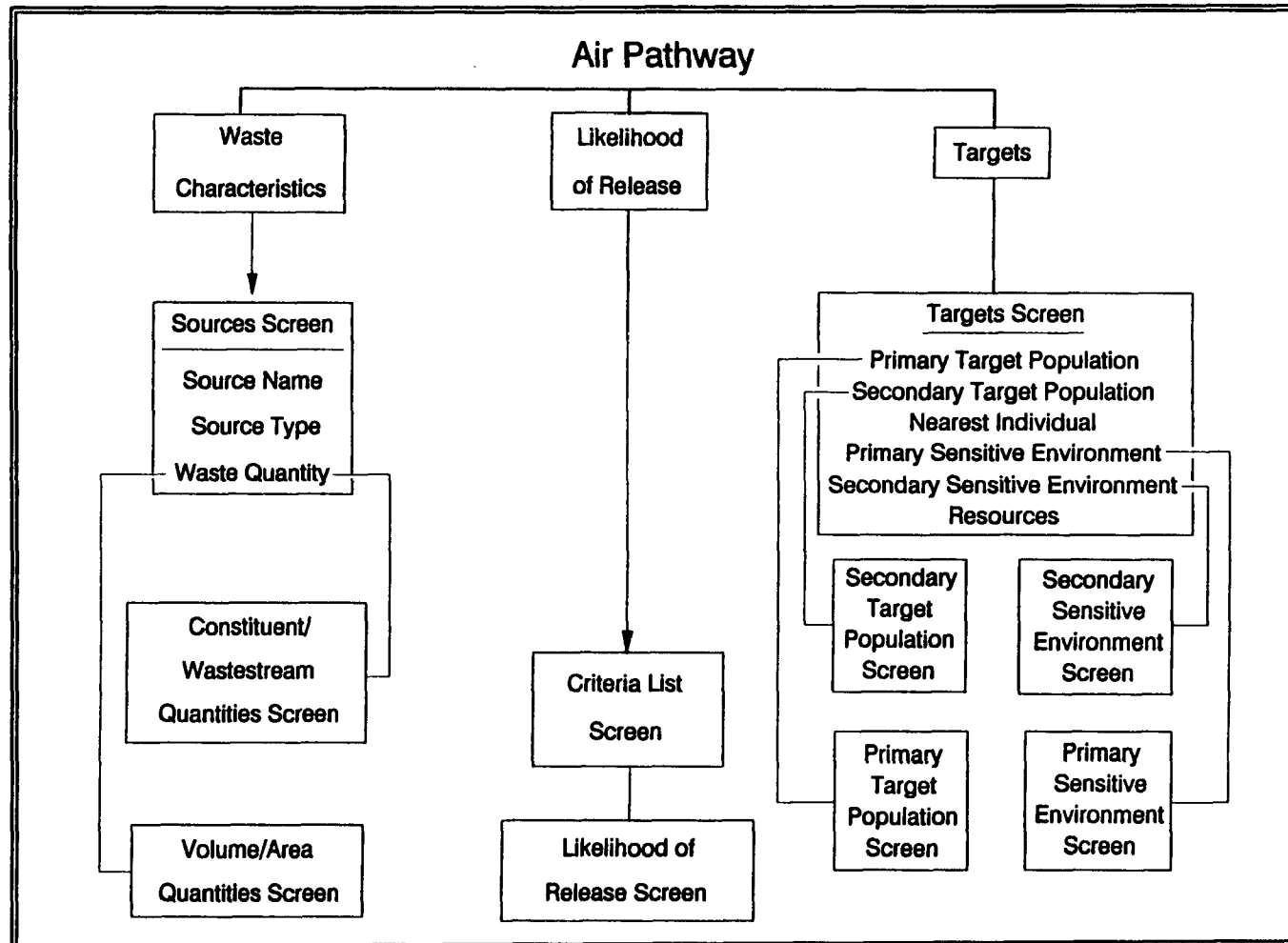


Figure A-5

APPENDIX B

NETWORK (LAN) USER INSTRUCTIONS

The PA-Score and PA-Print programs (PA-Score software) were designed to operate as interactive, single-user programs; however, they can be installed and used on a multi-user system, such as a local area network (LAN), with some restrictions. As PA-Score software does not possess multi-user capability, PA-Score and PA-Print can only be used by one user at a time, even in a network environment. In addition, installation of the software and printing to a printer require LAN-specific operations. Instructions for these operations are provided below.

INSTALLATION

To install PA-Score software on a LAN workstation you must first exit the system/applications shell menu. The menu should have an "Exit to DOS" option. Remember to consult the LAN systems administrator before you attempt PA-Score software installation.

CURSOR to the "Exit to DOS" option.
Press <ENTER>.

A letter prompt, corresponding to the hard drive, should appear. To create a PA-Score subdirectory on the hard drive...

Type **md PASCORE** (make a directory called PASCORE).
Press <ENTER>.

To access that subdirectory...

Type **cd PASCORE** (change directory to the PASCORE directory).

To load the PA-Score software files into the PASCORE subdirectory...

Type **copy a:*. *** (if the PA-Score or PA-Print diskette is in drive a:).

To begin the programs...

Type **PASCORE** or **PAPRINT**

PRINTING

To print to a printer, while operating PA-Print on a LAN, the PA-Print "Print to a disk file" option must be utilized. PA-Print cannot print directly to a printer on a network. After printing to a disk file the standard LAN print procedures may be employed to print the desired PA-Score information to a printer.

To print to a disk file...

From the PA-Print print menu,
CURSOR to the "Select Printer" option.
Press <ENTER>.
CURSOR to the "Print to Disk File" option.
Press <ENTER>.

Type in the name of the file and the disk drive to which the information is to be printed (for example, 'a:SITE.PRT').

Press <ENTER>.

CURSOR to the "Select Printer Options" option.

Press <ENTER>.

CURSOR to the "ASCII Characters 0 - 225" option.

Press <ENTER>.

CURSOR to the "YES" option.

Press <ENTER>.

You should be at the Printer Control Codes Pop-Up Menu.

CURSOR to "Yes".

Press <ENTER>.

Erase any existing codes by typing spaces over them.

Press <ENTER>.

You have now configured PA-Print to print to a disk file.

Select the desired print task...

Press <ENTER>.

The information now exists on the disk file defined earlier (example a:site.prt). After exiting PA-Print, this disk file can be printed using standard LAN print procedures.

APPENDIX C

PA-SCORE SOFTWARE FILES/DISKETTE

The PA-Score and PA-Print programs require several files to operate. Check the enclosed diskette to be sure that the following files are present:

PA-Score Software Diskette Files

INSTALL.BAT	TUTORIAL.PAS
PAScore.EXE	PAPRINT.EXE
PA_SCORE.PAD	PA_PRINT.CFG
PA_SCORE.SIZ	PA_PRINT.TXT
PA_HELP.PAD	PASCREEN.PAD
PA_HELP.SIZ	PASCREEN.SIZ

If the PA-Score software has been installed on the hard disk, in a PAScore subdirectory, ensure that the following files are present in that subdirectory:

PAScore Subdirectory Files

PAScore.EXE	TUTORIAL.PAS
PA_SCORE.PAD	PAPRINT.EXE
PA_SCORE.SIZ	PA_PRINT.CFG
PA_HELP.PAD	PA_PRINT.TXT
PA_HELP.SIZ	PASCREEN.PAD
	PASCREEN.SIZ