United States
Environmental Protection
Agency

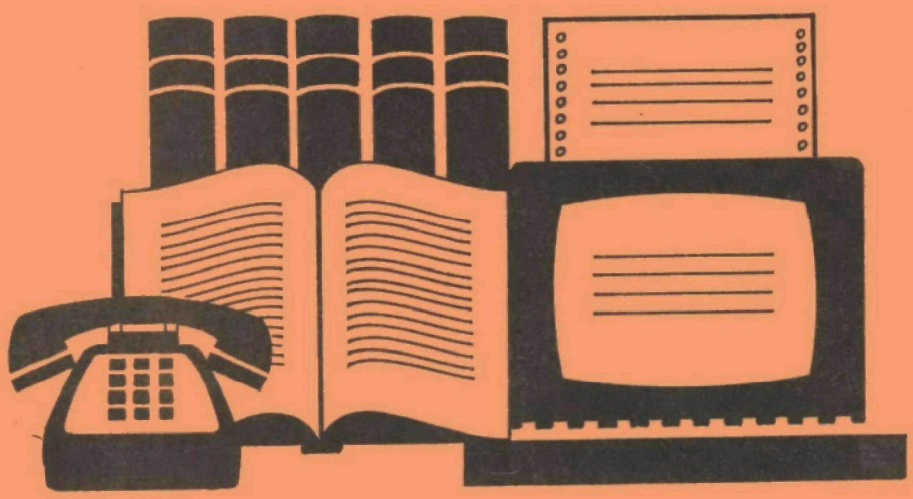
Information Services
and Library
Washington DC 20460

EPA/IMSD/86-003
June 1986

EPA

How to Search the Hazardous Waste Database

A User's Manual



HOW TO SEARCH THE

HAZARDOUS WASTE DATABASE

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U.S. Environmental Protection Agency

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Washington, DC

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FOREWARD

This draft user's manual was prepared to accompany the Hazardous Waste Collection database, which was developed by staff of the EPA Information Services Branch and the Headquarters Library. The database and manual are designed for use by the EPA network libraries.

We wish to emphasize that this manual is a draft and encourage you to provide any ideas or comments you may have for improving it to Mary Hoffman and Emma McNamara at the Headquarters Library (8-382-5922).

USER GUIDE FOR
HAZARDOUS WASTE COLLECTION DATABASE

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PART 1: INTRODUCTION

OVERVIEW

EPA's Information Services and Library is developing a special collection of documents related to hazardous waste. The collection includes EPA reports, books, reports resulting from Superfund studies, regulations, legislation, policy and guidance documents, and information on periodicals and commercial databases. Bibliographic and abstract information about each document is entered in a database allowing persons needing hazardous waste information to search using keywords or other identifiers and obtain a list of documents meeting the search criteria. The resulting list can include an abstract of each document to help the user decide whether to request the complete report.

HOW TO USE THIS GUIDE

This user guide explains the contents of the Hazardous Waste Collection Database and how to perform searches and obtain listings of the search results. Following is a brief discussion of the capabilities of the system within dBASE III. The next three sections in Part 1 list the information that each file within the system contains. Part 2 describes the process for getting into and out of the database. Part 3 is a detailed guide to performing searches of the various files--the commands to use and the results to expect. Part 4 explains how to get the results of the search printed out.

Users should review the description of file contents for the file they intend to use and decide which fields contain the most important or identifiable aspects of the information (e.g., everything by a certain AUTHOR, or having a certain word in the TITLE).

Then read Part 3 to determine the best way to search for the information. Experienced dBASE searchers will not need to spend much time on this but should review the instructions for system-specific requirements or constraints that may differ from their experience.

When you are ready to conduct a search, look at Part 4 and decide how you want to print out the results. It includes instructions on setting up your own standard formats and saving them for future use as well as a way to obtain a quick listing on the spot. If you expect to print the same categories of information several times, setting up a standard format will prove to be worth the effort. For one-time use when the format of the results is not critical, there are quick ways to format and print a report.

FOR ADDITIONAL INFORMATION

Headquarters Information Services and Library staff will continue to add documents to the Hazardous Waste Collection. At the same time, the staff will update the database. Periodically, an updated version of the database will be made available. You will be able to return floppy disks to Headquarters,

where new information will be added to your disk. The disks will be returned to you with any additional information needed to process them into a database.

If you have suggestions for further development of the Hazardous Waste Collection, or would like more information on the database, call Mary Hoffman or Emma McNamara at the Headquarters Library, Washington, D.C., at 382-5922.

SYSTEM CAPABILITIES: THE dBASE III CONTEXT

The Hazardous Waste Collection Database was developed using dBase III, a database management system. Each file in the system can be searched using the information in one or more fields, which are described in the following section. Several commands can be used in searching. These are described in Part 3, along with the situations where each would be most appropriately used.

You do not need to be an expert in dBASE III to use this system. Each section includes all the information you need to operate the system. Hints for most effective searching are also described in Part 3.

DATABASE FILES

The database is organized in three files: the Monographs File, the Periodicals File, and the Commercial Databases File. Each of these files has its own standard set of information on each item in the file. The contents or structure of each file is described in the following sections. As you read about the files, remember that each item can be used to search the database, depending on what you know about the information you are seeking.

Monographs File

This is the largest file. It contains all the research reports, guidance documents, site reports, books, and other similar materials. It is the file you will want to use under most circumstances. The following are the fields used in this file.

- CALLNU -- a unique identifier assigned to each item in the collection by the library staff. Used to determine where the item is shelved. (20 characters)
- OTHERINFO -- includes codes to show which libraries have a copy of the document and call numbers if appropriate. (254 characters)
- TITLE -- the title of the report, guidance, or other material. Initial articles (the, an, and a) have been eliminated from titles. (150 characters)
- AUTHOR -- the writer of a report or signer of a guidance or policy document. Last name is listed first, followed by the first name. (30 characters)
- CORPSOURCE -- the agency or company that issued the report.

Common abbreviations are used when possible. (10 characters)

- CONTACTP --EPA staff member who can be contacted for further information. Last name is listed first, followed by first name. (20 characters)

- BIB -- bibliographic information such as city of publication, publisher, and publication date. (60 characters)

- ACQUIS -- how to acquire your own copy of the material, e.g., NTIS (U.S. National Technical Information Service), EPA source etc. (30 characters)

- LOCATION -- the collection your library has chosen for the documents. (10 characters)

- TYPEDOC -- indicates the nature of the material, e.g., report, book, guidance. See Appendix A for a list of document types. (5 characters)

- KEYWORDS -- the words and phrases that indicate the subject and contents of each item. See Appendix A for a list of keywords. (150 characters)

- GEOCODE -- the location studied, if applicable. See Appendix A for a list of geographic codes. (5 characters)

- ABSTRACT -- a brief description of the contents of the item. (254 characters)

- ABSSOURCE -- Source of the abstract, e.g., NTIS, summary statement from document. (10 characters)

- NTISNU -- the accession number assigned to reports available from the NTIS. (12 characters)

- EPARPTNU -- an accession number assigned to an EPA report by the orginating EPA office. (20 characters)

- EPACONTRCT -- the number of the EPA contract under which the work was performed. (15 characters)

Periodicals File

This file includes the journals that are of particular interest to persons active in hazardous waste management. The information in the database is as follows:

- TITLE -- the name of the journal. (200 characters)

- FORMERLY -- the old title if the name of the journal has changed. (200 characters)

- ISSN -- the International Standard Serial Number, a unique identifier assigned to the journal by the publisher. (12 characters)

- BIB -- bibliographic information such as city of publication and publisher. (60 characters)

- INDEXEDIN -- the publications in which the journal is indexed, e.g., Chemical Abstracts, Energy Information. (254 characters)

- DESCRIPTIO -- an abstract of the type of information typically included in the journal. (254 characters)

- ACQUISITIO -- how to acquire your own copy of the journal, e.g., price, publisher's address. (60 characters)

- FREQUENCY -- how often the journal is published. (20 characters)

- LOCATION -- which EPA libraries or other locations subscribe to the journal. (254 characters)

Commercial Databases File

This file contains information on the commercial databases available to EPA searchers. Through these databases, EPA staff have access to an almost unlimited pool of information related to hazardous waste. This file is intended primarily for use by librarians, but staff may find it useful in identifying sources of information on topics of interest. Searching the databases can be done best by or under the direction of a librarian. The contents of this file are organized as follows:

- DATABASE -- the name of the database. (40 characters)

- TYPE -- whether it contains bibliographic or non-bibliographic and whether it contains abstracts. (30 characters)

- PRODUCER -- the organization that developed and maintains the database. (50 characters)

- VENDOR -- database vendors (e.g.,Dialog) that supply the database. (30 characters)

- CONNECTION -- through what telecommunication services connection is possible (e.g., Tymnet, Dialnet). (50 characters)

- FILECOMPS -- all printed indices that contain the same information as available in the database. (100 characters)

- KEYWORDS -- primary subject areas covered by the database. (254 characters)

- SOURCES -- if the database contains bibliographic information, the types of publications and other sources are listed here. (254 characters)

- UPDATES -- how often the database is updated. (15 characters)

- BEGINDATE -- the date of the earliest information included in the database. (5 characters)

- RECORDNU -- the number of records in the file. (30 characters)

- HOURLYCOST -- the charge for time spent connected to the database. (10 characters)

- ONLINEPRT -- cost per record printed while on line. (15 characters)

- OFFLINEPRT -- cost per record printed off line and mailed to the user. (15 characters)

- LOCATION -- EPA libraries that have access to the database. (254 characters)

PART 2: ENTERING AND EXITING THE DATABASE

ENTERING THE DATABASE

Before you can use the Hazardous Waste Collection Database you have to gain access to the system. The access method depends on whether the database resides on floppy disks or a hard disk. If the database is on floppy disks and you want to install it on the hard disk, see Appendix B: Setting Up and Updating the System. It can be used either way, but searches are much faster when the files are stored on hard disk (the difference can be as much as seconds versus minutes). The diskettes you have received were formatted to be used in Drive A of an IBM-PC AT. The following commands are written for the IBM PC AT. On other personal computers, the commands may vary.

FLOPPY DISK SYSTEM

These commands are to be used for accessing the database from the floppy diskette when the database has not been copied to a hard disk.

- Turn on the computer, monitor, and printer
- Load dBase III
- The dot prompt "." will appear
- Type: SET DEFAULT TO A [Enter]
- Insert the floppy disk containing the database in Drive A
- Type: USE HAZARD (for the monograph file) or USE HAZJ (for the journals file) or USE HAZCD (for the commercial database file) [Enter].
- Type: SET PRINT ON [Enter] (if you want the search results printed instantly rather than using a formatted report)

Hard Disk System

The following commands assume that the database has been loaded on the hard disk, and that your PC has the standard EPA menu.

- Turn on the computer, monitor, and printer
- Press F1 (function keys) to access dBase III
- The dot prompt "." will appear
- Type: USE HAZARD (for the monograph file) or USE HAZJ (for the journals file) or USE HAZCD (for the commercial database file) [Enter].

List Structure

At this point you may want to look at the structure of each of the three files in the database. If you want to print these structures, youneed to use the SET PRINT ON command. You must keep in mind that to see information contained in any one of the files you must first USE that file.

- SET PRINT ON [Enter]
- USE HAZARD [Enter]
- LIST STRUCTURE [Enter]

At this point the printer will give you a listing of all the fields in the HAZARD.DBF, the field type (numerical or character), and each field's length.

If you then want the structure of the Commercial databases file, proceed as follows:

- USE HAZCD [Enter]
- LIST STRUCTURE [Enter]

If your printer is on but you do not want your commands or results printed you need to:

- SET PRINT OFF

EXITING THE SYSTEM - QUIT

You can exit the system at any time by typing QUIT at the dot prompt. WARNING: If you do not type QUIT your files may be left open, and you risk losing some information.

If you are in the middle of a search and do not want any more information, i.e., want to interrupt it, press the Escape [ESC] key. The system will come back with an INTERRUPTED message and the dot prompt will appear on the screen. You can use the same technique to stop printing a report. Once the dot prompt appears on the screen you can proceed with any other dBase command. If you are ready to get out of dBase you must type QUIT.

PART 3: SEARCHING THE DATABASE

Several commands are available for searching the database, including LIST and DISPLAY, which are most useful for the Hazardous Waste database. The use of each is explained below. Your choice of a search command depends on several factors, including how much you know about the records you seek and how much effort you want to use in developing search criteria.

LIST COMMAND

The LIST command is used with one or more field names plus field contents or strings. All items meeting the search criteria will appear on the screen as they are found in the database. When all relevant records have been retrieved, a period (dot prompt) will appear below the last record. To stop the retrieval process temporarily so you can read an item, press and hold the key labeled "CTRL" (on the left side of the keyboard), then press "S". When you are ready to restart the search, press any key. The escape key (Esc) will let you stop the search.

DISPLAY COMMAND

The DISPLAY command produces the same result, but only 20 items are shown on the screen at once. If you press any key, the next 20 items will be shown.

STRING AND FIELD CONTENT SEARCHES

Two general types of searches are possible: string searches and field searches. Each of these has certain advantages and constraints, which will be described. As mentioned in Part 1, you can search based on the information contained in various components of the file.

String Searches

A string is any combination of letters and numbers that may or may not be a whole word. String searches seek that combination of characters anywhere in the specified field and can be identified by the presence of $ before the field name.

The following scenario illustrates the use of the LIST command with a string in the title field.

- I want to see all items in the database that have INCINERATION anywhere in the title.

```
LIST CALLNU, TITLE, AUTHOR, FOR 'INCINERATION'
$TITLE [Enter]
```

In this example the record is retrieved and the fields CALLNU, TITLE, and AUTHOR are displayed if the title field contains the character string INCINER-

ATION. Any string found in any field can be used in this way. The keywords used in the database are listed in Appendix A, which may help you decide on appropriate keywords.

The command shown above will provide the call number, title, and author. Review the description of the file contents in Part 1 and decide if there are other items you want to see (the abstract of the document, for example).

Field Content Searches

Field content searching involves knowing something about the items you are seeking--the author's name or the first portion of the title. It also requires familiarity with the database contents. The word used must be the first set of characters in the field or the record will not be found by the search. Unless you are sure that your information is correct, string searches will probably be a quicker and more complete way of finding the desired listings.

The following command illustrates the use of the LIST command in a field content search:

```
LIST CALLNU, TITLE FOR TITLE = 'INCINERATION' [enter]
```

This command will retrieve all the records whose titles begin with the word incineration.

Figure 1 shows the format and differing result of string and field content searches. It is clear that more items were found using the string search.

FIGURE 1--RESULTS OF FIELD CONTENT SEARCH AND STRING SEARCH

RESULTS OF FIELD CONTENT SEARCH

TD 796.S57 SITTIG, MARSHALL INCINERATION OF INDUSTRIAL HAZARDOUS WASTES AND SLUDGES

INCINERATION AND TREATMENT OF HAZARDOUS WASTE: PROCEEDINGS OF THE NINTH ANNUAL RESEARCH SYMPOSIUM

PB85-116291 INCINERATION AND TREATMENT OF HAZARDOUS WASTE: PROCEEDINGS OF THE ANNUAL RESEARCHSYMPOSIUM (10TH),HELDATFORTMITCHELL,KENTUCKY

RESULTS OF STRING SEARCH

TD 796.033 HOOPER, G.V. OFFSHORE SHIP AND PLATFORM INCINERATIONOF HAZARDOUSWASTES

TD 796.S57 SITTIG, MARSHALL INCINERATION OF INDUSTRIAL WASTES AND SLUDGES

INCINERATION AND TREATMENT OF HAZARDOUS WASTE: PROCEEDINGS OF THE NINTH ANNUAL RESEARCH SYMPOSIUM

PB85-153559 MCCORMICK, R. CAPITAL AND O AND M COST RELATIONSHIPS FOR HAZARDOUS WASTE INCINERATION: NO. ADDENDUM 1-IONIZING WEST SCRUBBER COST

PB85-116291 INCINERATION AND TREATMENT OF HAZARDOUS WASTE: PROCEEDINGS OF THE ANNUALRESEARCHSYMPOSIUM (10TH), HELD AT FORT MITCHELL, KENTUCKY

PB84-230044 DAY, D.R. EVALUATION OF HAZARDOUS WASTE INCINERATIONINA LIME KILN: ROCKWELL LIME COMPANY: FINAL REPORT

PB84-226935 PETERS, J.A. EVALUATION OF HAZARDOUS WASTE INCINERATION IN CEMENT KILNS AT SAN JUAN CEMENT COMPANY; FINAL REPORT

PB84-189828 RYAN, P.W. STABLE ISOTOPE DILUTION FOR HAZARDOUSWASTE -INCINERATION:FINALREPORT-

PB84-180173 OBERACKER, D.A. PROCEEDINGS OF THE ASME/EPA HAZARDOUS WASTE INCINERATION CONFERENCE HELD AT WILLIAMSBURG, VIRGINIA

PB84-157072 KEITZ, E. PROFILE OF EXISTING HAZARDOUS WASTE INCINERATION FACILITIES AND MANUFACTURES IN THE UNITED-STATES:-FINAL REPORT

PB84-139435 LIM, K. RETROFIT COST RELATIONSHIPS FOR HAZARDOUS WASTE INCINERATION

PB85-191187 PALAZZOLO, M.A., ET AL. PARAMETRIC EVALUATION OF VOC/HAP VOLATILE ORGANIC COMPOUNDS-HAZARDOUS/TOXIC AIR POLLUTANTS) DESTRUCTION VIA CATALYTIC INCINERATION (FINAL REPORT)

BOOLEAN COMMANDS

"Boolean" commands are also known as logical operators. Three operators are available: NOT, AND, OR. In a search command, these words are preceded and followed by a period (e.g., .NOT.).

- .NOT. must be used first if more than one command is used. Use .NOT. to eliminate some portion of the items, for example:

  ```
  LIST CALLNU, AUTHOR, TITLE FOR .NOT. 'OCEAN'
  $KEYWORDS .AND. 'INCINERATION' $KEYWORDS
  [Enter]
  ```

  This search lists items about incineration except those having to do with ocean incineration.

- .AND. limits the results of the search to items that satisfy all conditions listed:

```
LIST CALLNU, AUTHOR, TITLE FOR 'INCINERATION'
$KEYWORDS .AND.'198' $BIB [Enter]
```

This command would list all documents with incineration as a keyword that were published in 1980 or later. The lack of a fourth character in the date (198) and the use of the string operator ($) is what causes the search to find any date in the 1980s.

Publication date is included in the "BIB" or bibliographic information field. If you want a specific year, use that year in the quotation marks. Two or more years can be linked by .OR. ('1984' $BIB .OR. '1985' $BIB).

- .OR. allows you to list several keywords if you are unsure of what will best describe the documents you seek or if your search needs to be fairly broad:

```
LIST CALLNU, AUTHOR, TITLE FOR 'INCINERATION'
$KEYWORDS .OR. 'BURNING' $KEYWORDS [Enter]
```

These commands are read according to an established hierarchy in an expression, so you must determine the correct order if both .AND. and .OR. are used in the same expression. Items linked by .OR. should be placed in parentheses to ensure that they are handled correctly (that is, first). The operator .NOT. must always come first if it is used.

INDEXING A FILE

Indexing is used to establish a key to the database or a subset of the database (such as a search result). The index can sort records alphabetically, numerically, or chronologically depending on the contents of the field you selected for sorting. Indexing can only be done using fields of fewer than 100 characters. (The length of each field is included in the field descriptions in Part 1.) To get around this limitation, use the following command:

```
INDEX ON SUBSTR (TITLE, 1, 100) TO [NEWTITLE]
[Enter]
```

In this example, the first 100 characters of the title were used to organize the records in the database. Any field name can be used in the first set of parentheses. The name used in the second set of parentheses must be different from any existing file name, or the existing file will be replaced.

SEARCHING TIPS

The following tips will improve the efficiency of your searches. Included are a variety of examples from actual use of the database. Any user who finds other examples that should be added to the list is asked to contact the Headquarters Information Services and Library.

- All initial articles have been eliminated from titles.

- Some documents do not have entries for keywords, call numbers, or some other fields. For completeness, search for the desired string in the title, as well. For example:

```
DISPLAY [desired fields] FOR 'REMOVAL' $TITLE
.OR. 'REMOVAL' $KEYWORDS [Enter]
```

- If there is more than one desired field, the field names should be separated by a comma.

- If a word to be used in a search could be either singular or plural and you want only the singular, insert a space between the last letter and the closing quote ('SITE ').

- If the word could be part of another word, e.g., UST (an accepted abbreviation for Underground Storage Tanks) is also part of RUST or INDUSTRIAL, insert a space within the quotation marks both before and after the word (' UST ').

- Use single or double quotes to tell dBase for what word or string you are searching. Use the right quote at both ends (').

PART 4: GETTING RESULTS

VIEWING RESULTS

To view a complete record on the screen, the EDIT command provides a more readable format than LIST (EDIT 90, for example, to see Record #90). However, be careful not to type anything while in the EDIT mode. Press the Esc key (escape) right away to prevent accidental changes. The record will remain on the screen.

```
EDIT 90 [Enter]

[Esc]
```

Another way to have a readable screen is to specify the information you want to see, such as author, title, abstract, and call number, with the DISPLAY or LIST commands.

```
DISPLAY CALLNO, AUTHOR, TITLE FOR 'REMOVAL
ACTION' $KEYWORDS
```

This command shows the first 20 items that have 'removal action' as a keyword. A prompt at the bottom of the screen will tell you to "Press any key to continue." Use any keyword and ask for any combination of fields.

PRINTING RESULTS

Options

You have some choices in the area of printing out the results of your search. The simplest of these is to have whatever appears on the screen printed by typing SET PRINT ON (be sure your printer is hooked up and on, too). The result is often difficult to interpret, however, so for lengthy listings a more sophisticated printout will serve the needs of most users better. You may also use the Print Screen key on your PC.

Printing a Simple List

To list search results on 8 1/2" wide paper using a wide carriage printer, the following example shows the commands that insert a carriage return and line feed after each item. Otherwise, the information will print across the full carriage width, running off the paper. You may find that use of these commands improves the readability of the report, too. It is not essential to use them if you have a narrow printer carriage, but you may prefer the resulting printout.

SET PRINT ON [Enter]

? CHR(15) [Enter] (For condensed print, necessary for this situation)

* (will appear on the screen, meaning the printer has accepted the command)

LIST CALLNU, CHR(13), CHR(10), TITLE, CHR(13), CHR(10), AUTHOR, CHR(13), CHR(10) FOR 'INCINERATION' $KEYWORDS [Enter]

The CHR(13) and CHR(10) after each field name cause the printer to know the end of the line has been reached and to go to the next line before starting to print again. You can insert any field you want to print as long as its contents can be printed on one line (130 for 8 1/2" paper and 240 for 14" paper using condensed print); the number of characters in each field is given in Part 1.

Formatting a Report

You can establish a format for printouts each time you want to print something, or you can create and save one or more formats to use in printing reports. Saving the report format is recommended if you will be searching and printing the same fields more than once, perhaps using different keywords, date limits, or other parameters.

Reports can be printed directly from the hard disk or you can download (save) the search results to a floppy disk to have the report printed specially, for example, using a laser printer to provide a publication quality table.

Instructions for Developing and Saving a Report Format

The following commands to develop a report format can be entered and saved for repeated printouts of author, title, call number, and abstract. They include commands for indexing the records alphabetically by title so that the report is organized.

The commands are followed by examples of what the database screen looks like after each command.

- SET DEFAULT TO A [enter] (if database is on a floppy)
- USE HAZARD (name of file containing records) [enter]
- INDEX ON SUBSTR (TITLE, 1, 100) TO (ALPHA) (New name) [enter]
- USE HAZARD INDEX (ALPHA) (New name) [enter]
- CREATE REPORT MONORPT (New name) [enter]

Each name should be different as you set up report formats.

SCREEN 1

Structure of file A:HAZARD.dbf

CALLNU	C	20	CORPSOURCE	C	10	LOCATION	C	10	ABSTRACT	C	254
OTHERINFO	C	254	CONTACTP	C	20	TYPEDOC	C	5	ABSSOURCE	C	10
TITLE	C	150	BIB	C	60	KEYWORDS	C	150	NTISNU	C	12
AUTHOR	C	30	ACQUIS	C	30	GEOCODE	C	5	EPARPTNU	C	20

Page heading:

MONOGRAPHS IN THE HAZARDOUS WASTE COLLECTION

Page width (# chars): 120
Left margin (# chars): 4
Right margin (# chars): 0
lines/page: 50
Double space report? (Y/N): Y

SCREEN 2

Structure of file A:HAZARD.dbf

CALLNU	C	20	CORPSOURCE	C	10	LOCATION	C	10	ABSTRACT	C	254
OTHERINFO	C	254	CONTACTP	C	20	TYPEDOC	C	5	ABSSOURCE	C	10
TITLE	C	150	BIB	C	60	KEYWORDS	C	150	NTISNU	C	12
AUTHOR	C	30	ACQUIS	C	30	GEOCODE	C	5	EPARPTNU	C	20

Group/subtotal on:

Summary report only? (Y/N): N Eject after each group/subtotal? (Y/N): N

Group/subtotal heading:

Subgroup/sub-subtotal on:

Subgroup/subsubtotal heading:

SCREEN 3

```
Structure of file A:HAZARD.dbf

CALLNU      C  20   | CORPSOURCE C  10   | LOCATION   C  10   | ABSTRACT   C 254
OTHERINFO   C 254   | CONTACTP   C  20   | TYPEDOC    C   5   | ABSSOURCE  C  10
TITLE       C 150   | BIB        C  60   | KEYWORDS   C 150   | NTISNU     C  12
AUTHOR      C  30   | ACQUIS     C  30   | GEOCODE    C   5   | EPARPTNU   C  20

                                          Field  3            Columns left =   61
))))TITLE                                AUTHOR               ---------------------


     XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX X  XXXXXXXXXXXXXXXXXX

Field-          AUTHOR
  contents

                                                  # decimal places:  0  Total? (Y/N): N

              1AUTHOR
Field         2
  header      3
              4
Width          20
```

SCREEN 4

```
Structure of file A:HAZARD.dbf

CALLNU      C  20   | CORPSOURCE C  10   | LOCATION   C  10   | ABSTRACT   C 254
OTHERINFO   C 254   | CONTACTP   C  20   | TYPEDOC    C   5   | ABSSOURCE  C  10
TITLE       C 150   | BIB        C  60   | KEYWORDS   C 150   | NTISNU     C  12
AUTHOR      C  30   | ACQUIS     C  30   | GEOCODE    C   5   | EPARPTNU   C  20

                                          Field  5            Columns left =   37
))TITLE                                  AUTHOR               CALL NUMBER


  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX X  XXXXXXXXXXXXXXXXXX X  XXXXXXXXXXXXXXXXXX

Field           CALLNU
  contents

                                                  # decimal places:  0  Total? (Y/N): N

              1CALL NUMBER
Field         2
  header      3
              4
Width          20
```

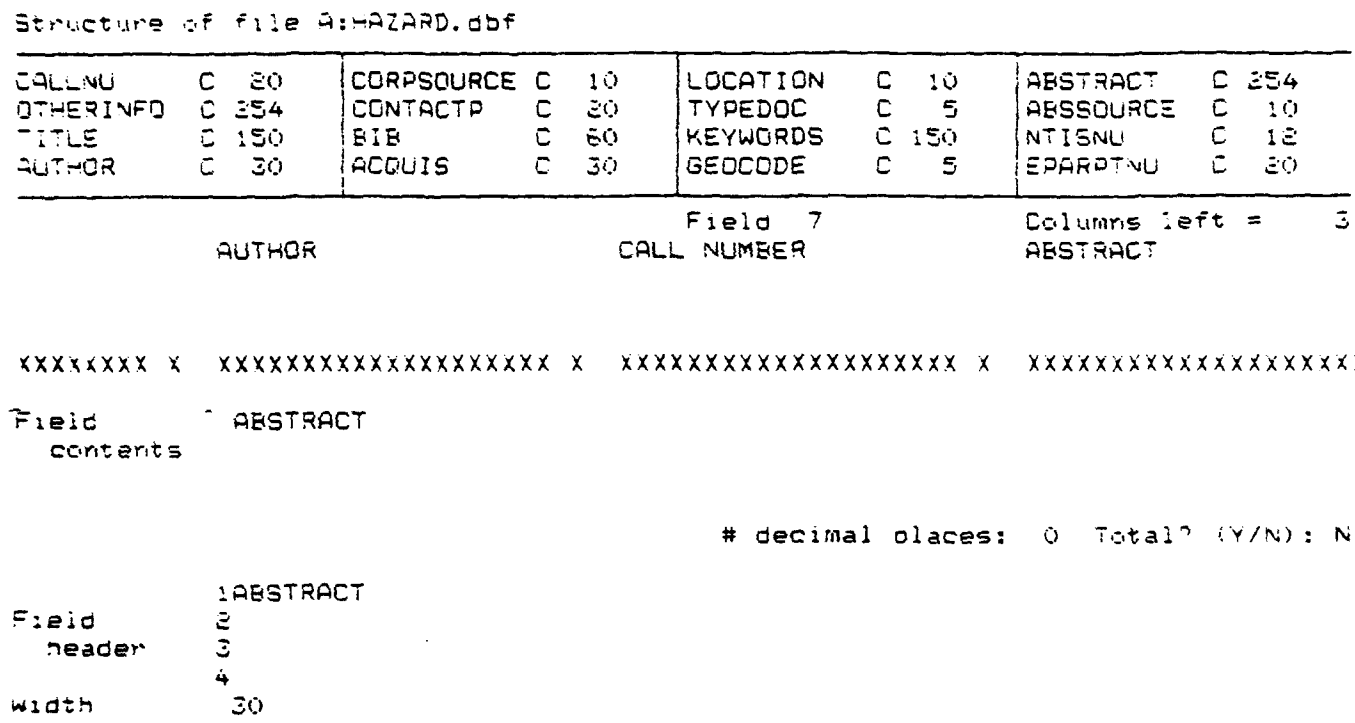
SCREEN 5

```
Structure of file A:HAZARD.dbf

CALLNU      C  20   CORPSOURCE C  10   LOCATION    C  10   ABSTRACT    C 254
OTHERINFO   C 254   CONTACTP   C  20   TYPEDOC     C   5   ABSSOURCE   C  10
TITLE       C 150   BIB        C  60   KEYWORDS    C 150   NTISNU      C  12
AUTHOR      C  30   ACQUIS     C  30   GEOCODE     C   5   EPARPTNU     C  20

                                        Field  1              Columns left =   85
))))TITLE                               ----------------------------------------

    XXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Field          TITLE
  contents

                                        # decimal places:  0  Total? (Y/N): N

             1TITLE
Field        2
  header     3
             4
Width         30
```

SCREEN 6

```
Structure of file A:HAZARD.dbf

CALLNU      C  20   CORPSOURCE C  10   LOCATION    C  10   ABSTRACT    C 254
OTHERINFO   C 254   CONTACTP   C  20   TYPEDOC     C   5   ABSSOURCE   C  10
TITLE       C 150   BIB        C  60   KEYWORDS    C 150   NTISNU      C  12
AUTHOR      C  30   ACQUIS     C  30   GEOCODE     C   5   EPARPTNU     C  20

                                        Field  2              Columns left =   82
))))TITLE                               ----------------------------------------

    XXXXXXXXXXXXXXXXXXXXXXXXXXXXX X

Field
  contents

                                        # decimal places:  0  Total? (Y/N): N

             1
Field        2
  header     3
             4
Width         2
```

SCREEN 7



- Decide number of fields included
- Set up column width for each field (132 spaces if print condensed on 8 1/2 x 11 paper)

Remember to add spaces between columns. Computer will keep a running total of the spaces used.

Type a pair of double quotes with spaces between for Field Contents (" ") to insert spaces between fields; mark number of spaces in width, see screen number 4 for an example.

Use the CONTROL and END keys to save the report for future use.

To set the paper for printing using an Okidata printer:

- Set form length dial at "7" (11 inch long paper)
- Turn printer off
- Set paper position - top of page at "ruler bar" - Press TOF button
- Turn printer on
- Type: SET PRINT ON
- Type: ?CHR(15)

* - computer message that command is accepted

- Type: USE (HAZARD) INDEX (ALPHS)
- Type: REPORT FORM (MONORPT), (i.e. name) TO PRINT
- will number pages and date report
- ESC to interrupt report

APPENDIX A: CODES USED IN THE HAZARDOUS WASTE DATABASE

Codes for Document Types

DOCUMENT TYPE	SCOPE OF THE DOCUMENT	CODE
Book	non-EPA monograph	B
Report	EPA monograph	
hard copy		R
fiche		RF
Article	Periodical article; reprint	J
Database	Computerized information system	D
Search	Database search results	S
Project Summary	EPA projects	PS

Index to EPA Library Codes

Library Code	Library
EHA R1	Region 1, Boston, MA
EHB NARRAG	Env. Res. Lab., Narragansett, RI
EIA R2	Region 2, New York, NY
EIC EDISON	Region 2 Field Office, Edison, NJ
EJA R3	Region 3, Philadelphia, PA
EJB HQ	Headquarters Library, Washington, D.C.
EJC LAW	Law Library, Washington, D.C.
EJD ANNAP	Central Regional Lab., Annapolis, MD
EJE OTS	OTS Tech Info Ctr, Washington, D.C.
EKA R4	Region 4, Atlanta, GA
EKB RTP	Library Services, MD-35, RTP, NC
EKC GBREEZE	Env Res Lab, Gulf Breeze, FL
EKD ATHENS	Env Res Lab, Athens, GA
EKE OAQPS-RTP	Library, MD-16, OAQPS, RTP, NC
EKF ESRL-RTP	ESRL-Meteorology Lab, RTP, NC
ELA R5	Region 5, Chicago, IL
ELB CINC	Env Res Ctr, Cincinnati, OH
ELC ANNARB	Motor Vehicle Emis Lab, Ann Arbor, MI
ELD DULUTH	Env Res Lab, Duluth, MN
EMA R6	Region 6, Dallas, TX
EMB ADA	RS Kerr Env Res Lab, Ada, OK
ENA R7	Region 7, Kansas City, MO

EOA R8. . . . . Region 8, Denver, CO
EOB NEIC-DENVER . . . . . NEIC, Denver, CO
ERA R9. . . . . Region 9, San Francisco, CA
ERB LAS VEGAS . . . . . EMSL, Las Vegas, NV
ESA R10 . . . . . Region 10, Seattle, WA
ESB CORV. . . . . Env Res Lab, Corvallis, OR

KEYWORDS

311(K) FUNDS
ABANDONED
ABOVEGROUND TANKS
ACID CLAY
ACID SLUDGE
ACIDS
ACTION MEMORANDUM
ACTIVATED CARBON
ACTIVATED SLUDGE
ADMINISTRATIVE ENFORCEMENT ACTIONS
ADSORPTION
AERATED LAGOONS
AERATION
AIR
AIR DELIVERABLE ANTIPOLLUTION TRANSFER SYSTEM (ADAPTS)
AIR EMISSIONS
AIR STRIPPING
ALTERNATE CONCENTRATION LIMITS
ANAEROBIC DIGESTION
APPENDIX VIII CONSTITUENTS
ARSENIC
ASBESTOS
ATOMIC ABSORPTION
ATTORNEY RESOURCES
AUDIOVISUAL
BACTERIA
BAGHOUSE SLUDGE
BATTERIES
BIBLIOGRAPHY
BIOASSAY
BIOLOGICAL TREATMENT
BOILERS
BUILDINGS
BURIAL
BURNING FOR ENERGY RECOVERY
BURNING HAZARDOUS WASTE
CALCINATION
CANADA
CANCER
CAPPING
CARCINOGENIC COMPOUNDS
CARCINOGENS
CASE HISTORIES
CASE STUDIES
CATALYTIC INCINERATION
CATHODIC PROTECTION
CEMENT KILN DUST WASTE
CENTRIFUGATION
CERCLA
CERCLIS
CHARACTERISTIC HAZARDOUS WASTE
CHEMICAL ACCIDENTS
CHEMICAL ADVISORY
CHEMICAL ANALYSIS
CHEMICAL MIGRATION
CHEMICAL MIGRATION
CHEMICAL OXIDATION
CHEMICAL RISKS
CHEMICAL SPILL
CHEMICAL TESTING
CHEMICAL TRANSPORTATION EMERGENCY CENTER (CHEMTREC)
CHEMICAL TREATMENT
CHEMICAL WASTE
CHEMICALS
CHLORINATION
CHLORINE
CHRIS CHEMICALS
CHROMIUM
CHROMIUM WASTE
CIVIL JUDICIAL ACTION
CLEAN WATER ACT
CLEANUP COST
CLEANUPS
CLOSE-OUT
CLOSURE
COAL COMBUSTION WASTE
COAST GUARD
COAST GUARD NATIONAL STRIKE FORCE (NSF)
COMBUSTION ASH
COMMERCIAL CHEMICAL PRODUCT
COMMUNITY AWARENESS
COMMUNITY RELATIONS
COMPATIBILITY
COMPLIANCE
COMPOSTING
CONFIDENTIALITY
CONGRESS
CONSENT DECREE
CONSTRUCTION
CONSTRUCTION
CONTAINERS
CONTAINMENT
CONTAMINANT PLUME
CONTAMINATED MEDIA
CONTINGENCY PLAN
CONTROL
CONVENTIONAL TREATMENT
COPPER
CORRECTIVE ACTION
CORROSION
COST
COST RECOVERY
COST RECOVERY ACTION
COSTS

CREDIBILITY
CRITERIA
CRYOGENS
DAMAGE CASE / ASSESSMENT
DATA EVALUATION
DATA QUALITY OBJECTIVES
DATABASES
DECONTAMINATION
DELISTING
DESIGN
DETERGENTS
DETOXIFICATION
DIALYSIS
DIKES
DIOXIN
DIRECTIVES
DISASTER HAZARD
DISCHARGE
DISPOSAL
DISTILLATION
DOMESTIC SEWAGE
DOQ
DREDGING
DRINKING WATER
DUMPS
DYNACTOR
ECONOMIC ANALYSIS
ELECTRODIALYSIS
ELECTROLYSIS
ELECTROPHORESIS
ELECTROPLATING
ELIGIBILITY
EMERGENCY ASSISTANCE
EMERGENCY PREPAREDNESS
EMERGENCY PROCEDURE
EMERGENCY RESPONSE
EMISSION CONTROL DUSTS
EMPTY CONTAINERS
ENERGY RECOVERY
ENERGY WASTE
ENFORCEMENT
ENFORCEMENT STATUS SHEET
ENGINEERING DESIGNS
ENVIRONMENTAL ASSESSMENT
ENVIRONMENTAL CANCER RISKS
ENVIRONMENTAL IMPACTS
ENVIRONMENTAL RISKS
ENZYME TREATMENT
EP TOXIC DUST
EP TOXICITY
EPA
EPA AUDIT
EVAPORATION
EXCAVATION
EXEMPTIONS
EXPOSURE ASSESSMENT
EXPOSURE PATHWAYS
EXTRACTION
FACILITY STANDARDS
FEASIBILITY STUDY
FEDERAL FACILITIES
FEDERAL LEGISLATION
FEDERAL REGULATION
FEDERAL-LEAD
FEE SYSTEMS
FILLING
FILTRATION
FINANCIAL ASSESSMENT
FINANCIAL REQUIREMENTS
FINANCIAL RESPONSIBILITY
FIRE CAT
FIRES
FLOCCULATION
FLOTATION
FLY ASH
FOAMED CONCRETE
FOAMS
FOLLOW-UP
FREEZE DRYING
FREEZE-CRYSTALLIZATION
FUNDING
GARBAGE
GAS
GAS CHROMATOGRAPHY
GASOLINE
GELS
GENERATION
GENERATORS
GEOTHERMAL
GRANT AWARDS
GROUNDWATER
GROUNDWATER CONTAMINATION
GROUNDWATER MANAGEMENT
GROUNDWATER MONITORING
GROUNDWATER PROTECTION
GUIDANCE
GUIDANCE DOCUMENT
HAZARD DEGREES
HAZARD RANKING SYSTEM
HAZARDOUS CHEMICALS
HAZARDOUS EVENTS
HAZARDOUS MATERIALS
HAZARDOUS RELEASES
HAZARDOUS SUBSTANCE LIST

HAZARDOUS SUBSTANCE RESPONSE TRUST FUND
HAZARDOUS SUBSTANCES DISCHARGE
HAZARDOUS WASTE FACILITIES
HAZARDOUS WASTE GENERATOR
HAZARDOUS WASTE MANAGEMENT
HAZARDOUS WASTE SITES
HAZARDOUS WASTE TANKS
HAZARDOUS WASTES CONTROL
HEALTH
HEALTH ASSESSMENT
HEALTH PROGRAMS
HEALTH RISKS
HEAVY METALS
HERBICIDES
HIGH-GRADIENT MAGNETIC SEPARATION
HOUSEHOLD WASTE
HUMAN EXPOSURE POINTS
HUMAN HEALTH
HYDROLYSIS
IGNITABILITY
ILLEGAL DUMPING
INCINERATION
INCINERATORS
INCOMPATIBILITY
INDUCTIVELY COUPLED PLASMA SPECTROSCOPY
INDUSTRIAL WASTE
INDUSTRIAL WASTES
INDUSTRY
INFECTIOUS WASTE
INFORMATION
INORGANIC CHEMICALS
INORGANICS
INSPECTION
INSTALLATION
INSURANCE
INTEGRITY TEST
INTERIM PROHIBITION STATUS
INTERIM STATUS
INVENTORY
IOU CHROMATOGRAPHY
LABORATORY METHODS
LAGOONS
LAND BURIAL
LAND DISPOSAL
LAND TREATMENT
LAND-BASED
LANDFARM
LANDFILL
LAWSUITS
LEACHATE
LEACHATE COLLECTION SYSTEMS
LEACHING
LEAD
LEAK DETECTION
LEAKAGE
LEAKS
LEGISLATION
LEUKEMIA
LIABILITY
LINERS
LIQUID WASTES
LIQUID-SOLVENT
LISTED HAZARDOUS WASTE
LOCAL COMMUNITIES
LOCAL GOVERNMENT
LOCATION STANDARDS
LOSS OF INTERIM STATUS (LOIS)
LOVE CANAL
LUST
MANAGEMENT
MANIFEST
MARPOL
MATHEMATICAL MODELS
MEDIATION
METAL SLUDGES
METHANE
METHANE RELEASE SITES
METHANOL
METHODOLOGY
MICROORGANISMS
MICROWAVE DISCHARGE
MID-ATLANTIC
MIGRATION
MINED SPACE
MINIMUM TECHNICAL REQUIREMENTS
MINING WASTE
MITRE MODEL
MOBILE OZONE
MOBILE TREATMENT
MOBILE UNITS
MOBILE UNITS
MOLTEN SALT
MONITORING
MOTOR FUELS
MUNICIPAL REFUSE
MUTAGENS
NATIONAL CONTINGENCY PLAN (NCP)
NATIONAL FIRE PREVENTION ASSOCIATION (NFPA)
NATIONAL OIL AND HAZARDOUS SUBSTANCES CONTINGENCY PLAN
NATIONAL PRIORITIES LIST (NPL)
NEGOTIATIONS
NEUTRALIZATION
NOTIFICATION
NUCLEAR WASTE

NUMERICAL MODELS
OCCUPATIONAL BIOHAZARDS
OCEAN DUMPING
OCEAN INCINERATION
OFFSHORE
OFFSHORE INCINERATION
OFFSIGHT RESPONSE
OFFSITE DISPOSAL
OFFSITE POLICY
OIL
OIL SPILL
OILY WASTE
ONSITE DISPOSAL
ONSITE POLICY
OPEN DUMP
OPERATION
OPPOSITION
ORGANIC WASTES
ORGANIC WASTES
ORGANICS
ORGANOCHLORINE WASTES
ORGANOLEAD COMPOUNDS
OVERSIGHT TASKS
OWNERS AND OPERATORS
OXYGEN INCINERATION
OZONATION
PERMITS
PERSONNEL
PESTICIDES
PHENOLS
PHOTOSYNTHETIC RECLAMATION
PLANT CLOSURE
PLANT GREASES
PLANT SLUDGES
PLASMA ARC
PLUME
PLUTONIUM
POISON
POL (PETROLEUM OILS & LUBRICANTS)
POLICIES
POLLUTION FUND
POLLUTION MIGRATION
POLYCHLORINATED BIPHENYLS (PCB)
POLYNUCLEAR AROMATIC HYDROCARBONS (PAH)
POLYURETHANE FOAM
POST-CLOSURE
POTW
PRECIOUS METALS
PRECIPITATION
PREPAREDNESS
PRINCIPAL ORGANIC HAZARDOUS CONSTITUENT (POHC)
PRIORITIES
PRIVATE INSURERS
PROCEDURES
PROCUREMENT GUIDELINE
PROGRAM GOALS
PROGRAM PHILOSOPHY
PRP'S (POTENTIALLY RESPONSIBLE PARTIES)
PUBLIC HEALTH
PUBLIC PARTICIPATION
PURGING
PYROLYSIS
QUALITY ASSURANCE
RADIOACTIVE WASTE
RADWASTE
RANKING
RCRA
RCRA AMENDMENTS
RD&D UNIT
RE-REFINING
REACTIVITY
REAUTHORIZATION
RECLAMATION
RECORDKEEPING REQUIREMENTS
RECOVERY
RECYCLED METALS
RECYCLING
REDUCTION
REGULATIONS
REGULATORY COMPLIANCE
RELEASES
REMEDIAL ACTION
REMEDIAL ACTIVITIES
REMEDIAL DESIGNS
REMEDIAL INVESTIGATION
REMEDIAL PLANNING PROJECT
REMEDIAL PROJECT MANAGERS
REMEDIAL RESPONSE
REMEDY SELECTION
REMOTE CONTROL
REMOVAL ACTION
REPORTING REQUIREMENTS
REPOSITORY
REQUIREMENTS
RESEARCH
RESEARCH AND DEVELOPMENT
RESIDUALS
RESOURCE RECOVERY
RESPONSE AGREEMENTS
RESPONSIBLE PARTIES
RESTORATION
RETROFIT
REVENUES
REVERSE OSMOSIS

RI/FS
RIFS
RISK ANALYSIS
RISK ASSESSMENT
RISK/COST ANALYSIS
RPM
RULEMAKING
RUN-OFF
SAFETY
SAFETY PROGRAMS
SALVAGE
SAMPLING
SECONDARY CONTAINMENT
SECTION 3008(H)
SECURITY STANDARDS
SEDIMENTATION
SEDIMENTS
SENSING TECHNIQUES
SETTLEMENT POLICY
SEWAGE
SHIPS
SITE EVALUATION
SITE SELECTION
SITES
SITES
SITING
SLUDGE
SLUDGE DISPOSAL
SLUDGE DRYERS
SLUDGE MANAGEMENT
SLURRY TRENCH
SLURRY WALLS
SMALL QUANTITY GENERATOR
SNAIL
SOCIOECONOMIC IMPACT
SOIL
SOIL CONTAMINATION
SOLID WASTE
SOLVENTS
SORBENTS
SPENT FUEL
SPILL
STABILIZATION
STABILIZATION PONDS
STANDARDS
STATE AUTHORIZATION
STATE FEE SYSTEMS
STATE IMPLEMENTATION
STATE PARTICIPATION
STATE PROJECT OFFICERS (SOP'S)
STATE-LEAD
STATEMENT OF WORK (SOW)
STEAM
STORAGE AND TREATMENT FACILITIES
STORGE
SUBSURFACE CONDITIONS
SUBSURFACE POLLUTION
SUBTITLE C
SUBTITLE D
SUBTITLE I
SUPERFUND
SUPERFUND FINANCIAL ASSESSMENT SYSTEM
SURFACE IMPOUNDMENT
SURFACE WATER
SURFACTANTS
SUSPENSION FREEZING
SYNFUELS
TANK CLOSURE
TANK RETROFITTING / REPAIR
TANK STANDARDS
TANK SYSTEMS
TANKS
TAXES
TECHNOLOGY
TECHNOLOGY ASSESSMENT
TEST METHODS
TESTING
THERMAL TREATMENT
TOXIC
TOXIC CHEMICALS
TOXIC MUNITIONS WASTE
TOXIC SUBSTANCES
TOXIC SUBSTANCES CONTROL ACT
TOXIC WASTES
TOXICITY ASSESSMENT
TRACE METALS
TRAINING
TRANSFORMER FLUID
TRANSFORMERS
TRANSPORT
TRANSPORTATION
TREATABILITY
TREATED WASTE
TREATMENT TECHNIQUES
TRICKLING FILTERS
TRITIUM
TRUST FUND
TSCA
U.S. ARMY TECHNICAL ESCORT CENTER
ULTRAFILTRATION
UNCONTROLLED HAZARDOUS WASTE SITES
UNDERGROUND INJECTION
UNDERGROUND TANKS
UNIT OPERATIONS

USED OIL
UST
UTILITY WASTE
VAPOR MONITORING
VENTING
VESSELS
VOLATILE CHEMICALS
VOLATILE ORGANIC COMPOUNDS (VOC)
VOLATILE ORGANICS
VOLUME REDUCTION
VOLUNTARY AGREEMENTS
VOLUNTARY TESTING
WASTE ANALYSIS
WASTE DISPOSAL
WASTE DUMP
WASTE EXCHANGE
WASTE INCINERATION
WASTE-INCINERATION
WASTE MANAGEMENT
WASTE OIL
WASTE PILE
WASTE SOLIDIFICATION
WASTE STABILIZATION
WASTE TREATMENT
WASTEWATER
WATER
WATER QUALITY
WATER SUPPLY
WELL
WET AIR OXIDATION
WETLANDS
WOOD
WORKER PROTECTION

WORST SITES
ZINC
ZONE REFINING

APPENDIX B: SETTING UP AND UPDATING THE SYSTEM

INSTALLING THE SYSTEM ON A HARD DISK

To provide faster, more convenient use of the Hazardous Waste Collection Database, copy the floppy disks to your hard disk using the following procedure.

- Turn on the computer and monitor.
- Insert the Hazardous Waste Database floppy disk in drive "A".
- Press F10 (function keys) to access DOS.
- Type: CD dBASE [enter]
- Type COPY A:*.* C: [enter]
- The data on the floppy disk will be copied to the hard disk. Remove the floppy disk when the red disk drive light goes out and save it to send back to Headquarters for updates.

APPENDIX C: CREATING A LIST OF LIBRARY HOLDINGS

To create a list of any library's holdings, ask the system for a listing of desired fields specifying that the library's code in the "other info" field.

If you want to see what information the particular library has on some topic, the search can include the topic as a condition.

Exception: In the case of the regional libraries you need to search also the string "all reg" in addition to, for example, R5 for the Region 5 library.

Exception: In the case of NEIC-Denver, Edison, Cincinnati, RTP, Las Vegas, and Ada you need to search also the underlined segments.

The following example shows the command for listing the holdings in the Region 5 Library.

```
LIST CALLNU,CHR(13),CHR(10),TITLE,CHR(13),
CHR(10),AUTHOR,CHR(13),CHR(10) FOR 'R5'
$OTHERINFO.OR.'ALL REG'$OTHERINFO
```

The printout will give the information in a readable format. See Part 4 for an explanation of the commands CHR(13) and CHR(10).

The second example shows all Region 5 holdings on "removal."

```
LIST AUTHOR,TITLE FOR ('R5'$OTHERINFO.OR.'ALL
REG'$OTHERINFO).AND.'REMOVAL'$KEYWORDS
```

The results include the following:

HILL, RONALDD. PROMISINGSITECLEANUP TECHNOLOGY

HILL, RONALD, ET AL. UNCONTROLLED HAZARDOUS WASTE SITE CONTROL TECHNOLOGY PROGRAM

REMOVAL ACTIONS AT METHANE RELEASE SITES: FINAL

USE OF 311(K) POLLUTION FUND TO RESPOND TO HAZARDOUS SUBSTANCESDISCHARGE: FINAL

RELATIONSHIP OF THE REMOVAL AND REMEDIAL PROGRAMS UNDER THEREVISEDNCP: DRAFT

NOTIFICATION OF RESTRICTIONS ON REIMBURSEMENT OF PRIVATE PARTY COSTS FOR REMOVAL ACTIONS: FINAL

SUGGESTED ACTIONS TO KEEP PROJECTS MOVING DURING FUNDING SUSPENSION

RELATIONSHIP OF THE REMOVAL AND REMEDIAL PROGRAMS UNDER THE REVISED NCP: FINAL