

**AIR TOXICS
INFORMATION CLEARINGHOUSE**



Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

STAPPA / ALAPCO

State and Territorial Air Pollution Program Administrators
Association of Local Air Pollution Control Officials

**NATICH Data Base
Users Guide for
Data Viewing**

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NATIONAL AIR TOXICS
INFORMATION CLEARINGHOUSE

NATICH DATA BASE

USERS GUIDE FOR DATA VIEWING

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SECTION 1
THE NATIONAL AIR TOXICS INFORMATION CLEARINGHOUSE

THE CLEARINGHOUSE

The U.S. Environmental Protection Agency (EPA) and the State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials (STAPPA/ALAPCO) jointly established the National Air Toxics Information Clearinghouse to support State and local agency efforts to control toxic air pollutants. The Clearinghouse is designed to make it easier for Federal, State, and local agencies to exchange information about air toxics and to develop and operate air toxics control programs.

The primary purpose of the Clearinghouse is to collect, classify, and disseminate air toxics information provided by State and local air agencies, EPA, and other Federal and International agencies. Clearinghouse information is distributed in these ways:

- Bimonthly newsletters containing information on State, local and Federal air toxics programs and activities, research, agency case histories, etc.;
- Special reports on specific air toxics issues;
- A computerized data base;
- Hardcopy reports of data contained in the data base issued on a regular schedule;
- Response to requests for specific information; and
- National workshops and seminars.

Table 1 provides a list of Clearinghouse publications issued as of February 1988. All reports are available free of charge to State and local agencies through the Clearinghouse [(919) 541-0850, FTS 629-0850]. The newsletter is available free of charge to State and local agencies and the general public through the Clearinghouse as well. The private sector may purchase reports from the National Technical Information Service at (703) 487-4650, or from Radian Corporation at (512) 454-4797, ext. 5224.

TABLE 1. NATIONAL AIR TOXICS INFORMATION CLEARINGHOUSE PUBLICATIONS

<u>Title</u> ¹	<u>Publication Date</u>
National Air Toxics Information Clearinghouse Newsletters	Bimonthly
Bibliography of Selected Reports and <u>Federal Register Notices Related to Air Toxics</u> EPA-450/5-87-005 NTIS: 88 136601 (Vol I) and NTIS: 88 136593 (Vol II)	July 1987 ²
Ongoing Research and Regulatory Development Projects EPA-450/5-87-004 NTIS: PB88 113196/AS	June 1987 ²
NATICH Data Base Report on State, Local, and EPA Air Toxics Activities EPA-450/5-87-006 NTIS: PB88 113428/AS	July 1987 ²
Rationale for Air Toxics Control in Seven State and Local Agencies EPA-450/5-86-005 NTIS: PB86 181179/AS	August 1985
NATICH: How the Clearinghouse Can Help to Answer Your Air Toxics Questions EPA-450/5-86-009	July 1986
Methods for Pollutant Selection and Prioritization EPA-450/5-86-010 NTIS: PB87 124079/AS	July 1986
NATICH: Qualitative and Quantitative Carcinogenic Risk Assessment EPA-450/5-87-003 NTIS: PB88 113188/AS	June 1987
NATICH Data Base Users Guide for Data Viewing EPA-450/5-88-002 NTIS: To be Determined	February 1988
NATICH Data Base Users Guide for Data Entry and Editing EPA-450/5-88-001 NTIS: To be Determined	February 1988

¹All titles begin with "Air Toxics Information Clearinghouse" or "National Air Toxics Information Clearinghouse."

²These reports are published annually.

THE NATICH DATA BASE

A computer data base (NATICH) forms the core of the Clearinghouse. The data base resides on the EPA National Computer Center's IBM mainframe computer and is designed for easy access and data retrieval. It contains all of the information collected from State and local agencies on their air toxics activities as well as bibliographic and research information from EPA and other organizations. Information collected from State and local agencies includes the following:

- State and local air toxics contacts;
- Regulatory program descriptions;
- Acceptable ambient concentration guidelines and standards;
- Pollutant research and methods development activities;
- Non-health related impacts;
- Permitting data;
- Ambient air monitoring information;
- Source test data;
- Emissions inventory information;
- Agency publications and documents; and
- Ongoing research and regulatory development projects.

State and local agencies do not submit confidential business information about sources in their jurisdictions.

The NATICH data base also contains information collected from EPA and other Federal and International organizations on their ongoing research and regulatory development projects and bibliographic citations/abstracts for published documents. Information provided by EPA includes selected EPA risk analysis information as well.

The information in the data base is generally indexed according to agency, pollutant, and type of emission source. Using your agency's microcomputer or minicomputer, a modem and emulator package, you can have interactive viewing access to all data base information via a series of easy to use menus which appear on your screen. The menus direct you to answers to questions such as: "Which agencies have regulated acrylonitrile?" and "What pollutants have been found through source

tests to be emitted from municipal incinerators?". Answers to these and hundreds of other questions can be obtained quickly, easily, and inexpensively.

DATA COLLECTION

The Clearinghouse collects information in several ways, including an annual information request from State and local agencies, and an annual Federal and International survey of ongoing research and published air toxics information. State and local agencies can submit information to the data base in three ways: (1) by completing and returning the NATICH data collection forms; (2) by transferring information from agency computer files to the NATICH data base via magnetic tape or diskette¹; and (3) by directly accessing NATICH data entry and editing programs². To protect system security, agencies are allowed data entry access only to data for their agency. The Clearinghouse welcomes and encourages the submission of data collection forms, the transfer of computer files, and direct data entry and editing by State and local agencies to maintain the currency of the information in the data base on State and local air toxics activities.

OBTAINING INFORMATION FROM NATICH

You can obtain information from the NATICH data base in three ways: (1) through direct computer access; (2) from hardcopy reports; and (3) by requesting information from EPA regional contacts or the Clearinghouse staff. With a microcomputer or minicomputer, a modem, and an emulator package, you can have interactive viewing access to all data base information. Interactive access means that you can ask questions of the data base and receive answers via your computer terminal.

If you do not have access to a computer, you can consult the regularly-issued hardcopy reports of data contained in the data base (see Table 1). In addition,

¹If you have information contained in computer files that could be transferred by computer, please call Ed Brown, Radian Corporation, (512) 454-4797.

²For a copy of NATICH Data Base Users Guide for Data Entry and Editing, please call the Clearinghouse staff [(919) 541-0850, FTS 629-0850] or Radian Corporation, (512) 454-4797, ext. 5224.

you can call the EPA Regional Office air toxics contacts listed in Table 2 and they can obtain data base information for you.

USING THIS GUIDE

This Users Guide was prepared to help you access and use the NATICH data viewing programs to obtain information directly from the data base. Section 2 of this guide specifies the hardware and software you will need to access the data base, describes how to gain authority for interactive viewing access to the data, and provides step-by-step logon and logoff instructions. Section 3 provides an overview of how the interactive data viewing system works and includes a concise summary of each available report program. Section 4 guides you through selected report programs with step-by-step instructions and figures showing actual screens of data from the data base.

Additional guidance on solving miscellaneous problems, the use of the keyboard, and information to help you select and interpret information in the data base can be found in the appendices.

Appendix A describes several common problems which you may encounter in accessing and using the data base, such as your keyboard becoming locked or the cursor moving outside a defined field, and offers solutions to these problems. It also lists who to contact if a problem should persist or for guidance on problems not described in the appendix.

Appendix B provides guidance on certain keyboard functions important to the NATICH data base. In general, the characters, numbers, or function keys you need to use to retrieve information from the data base are fairly limited. A long pollutant name may be the largest number of characters you need to enter at any one time. However, should you encounter some difficulty with keyboard usage, consult this appendix.

Appendix C lists the State and local agencies that have submitted information to the data base and their acronyms. The agency acronym is included in many of the viewing displays instead of the full name of the agency; therefore, you should

TABLE 2. EPA REGIONAL OFFICE AIR TOXICS CONTACTS

Region	Contact
I	Margaret McDonough (617) 565-3231 FTS 835-3231
	Sarah Levinson (617) 565-3232 FTS 835-3232
II	Bob Kelly (212) 264-2517 FTS 264-2517
III	Iz Milner (215) 597-9090 FTS 597-9090
IV	Sharon Porter (404) 881-2864 FTS 257-2864
V	Harriet Croke (312) 353-6009 FTS 353-6009
VI	Jill Lyons (214) 655-7208 FTS 255-7208
VII	Wayne Kaiser (913) 236-2893 FTS 757-2893
VIII	Dewitt Baulch (303) 293-1761 FTS 564-1761
IX	Kathy Diehl (415) 974-8381 FTS 454-8381
X	Dave Kircher (206) 442-4198 FTS 399-4198

familiarize yourself with the acronyms or keep a reference copy of the list handy. Generally, the acronym consists simply of the two-letter State abbreviation for the State agencies. For the local agencies, an abbreviation for the city, county, or local district name is added to the two-letter State abbreviation. For example, the acronym for the Bureau of Air Quality Control for the State of Pennsylvania is PA. The acronym for Air Management Services for the city of Philadelphia is PA-PHIL.

Pollutants are identified in the data base by their Chemical Abstracts Service (CAS) number. The CAS number is a unique number assigned to chemicals by the American Chemical Society CAS Registry System. The CAS numbers are independent of nomenclature and have no chemical significance. They are assigned as each new chemical enters the CAS Registry System. Groups of chemicals or pollutants such as "organic compounds" that cannot be identified more precisely by a CAS number have been assigned unique Clearinghouse identifiers in the place of CAS numbers. Appendix D lists the Clearinghouse identifiers for chemical groups included in the data base. The identifier consists of some combination of letters which abbreviates the chemical group name, prefixed by CL (for Clearinghouse). The Clearinghouse identifiers are therefore easily distinguished from CAS numbers which are entirely numeric. For example, the Clearinghouse identifier for chlorinated hydrocarbons, for which there is no CAS number, is CL-CHC.

Sources are categorized in the data base by their Standard Industrial Classification Codes (SIC Codes). Appendix E presents a complete list of SIC Codes and corresponding short titles for a comprehensive range of economic activities. The SIC Code was developed by the Federal government (U.S. Department of Commerce) for use in the classification of establishments by type of activity in which they are engaged. The classification is structured on a hierarchical two-digit, three-digit, and four-digit industry code basis, according to the level of industry detail. The two-digit number stands for the major industrial group (e.g., primary metal industries), the three-digit number for the group (e.g., primary nonferrous metals) and the four-digit number for the industry (e.g., primary aluminum).

SECTION 2
ACCESS TO THE NATICH DATA BASE

HARDWARE AND SOFTWARE REQUIREMENTS

To directly access the NATICH data base you will need a computer, modem, and a VT100 ANSI full-screen emulator package such as Crosstalk® or Smarterm®¹. The emulator package allows your computer to communicate with the EPA computer.

To communicate with the NATICH data base, set up the following communications parameters (if you have a full screen VT100 emulation package):

- 1200 baud rate²;
- Even parity;
- Full duplex; .
- Seven data bits;
- One stop bit; and
- VT100 emulation.

Keep in mind that some specific procedures such as configuring your equipment to communicate with the data base will depend on your particular computer, modem, and emulator package.

AUTHORIZATION TO LOGON

State and Local Agencies

To gain authority for interactive data viewing, you must set up an account with EPA. You will want set up one account for each user. To do so:

1. Call or write your EPA Regional Office air toxics contact (see Table 2) and request authorization to log onto NATICH. You will receive by mail a User ID, an account name, and an initial password from the EPA National Computer Center (NCC).

¹Use of trade names does not constitute an endorsement by EPA or STAPPA/ALAPCO. Numerous terminals also can be used. Call EPA Telecommunications at (800) 334-0744 for details.

²Higher baud rates can be used, but the logon procedures will differ. If you have the equipment to use a higher baud rate, contact the Clearinghouse Staff at (919) 541-0850 or FTS 629-0850 to determine appropriate logon procedures.

2. Call EPA Telecommunications at (800) 334-0744 for your local TYMNET telephone number (TYMNET is the telephone network that connects you with the EPA Computer).
3. Contact the EPA Clearinghouse staff to obtain additional information and assistance necessary to log onto NATICH at the address and telephone number listed below:

EPA Clearinghouse Staff

John Vandenberg, Beth Hassett, Nancy Riley, Karen Blanchard,
or Bob Schell

Pollutant Assessment Branch, MD-13
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711

(919) 541-0850 FTS 629-0850

When you contact the Clearinghouse staff, you will be given interactive viewing access to all the information in the NATICH data base. To gain access to data entry programs to enter or update data for your agency, your assigned access level must be upgraded by the Clearinghouse staff. If you already have an account with EPA for interactive viewing access to information in the data base, you do not need to change your account or open a new account to obtain authorization to enter data. You need only contact the Clearinghouse Staff at (919) 541-0850 or FTS 629-0850 and request that your access level be upgraded for data entry authorization. Please note that each agency is responsible for maintaining strict oversight of the data entry function. Security can be enhanced by limiting the number of agency personnel with authorization to enter and edit data.

General Public

The NATICH data base is also available to the public through the National Technical Information Service (NTIS). Call Cathy Metzler or Lois Grooms, NTIS, at (703) 487-4807 and request an on-line license and billing agreement. Complete and return the agreement to NTIS. NTIS will then contact the EPA National Computer Center and obtain a User ID, account name, and password for you. Next, contact the Clearinghouse staff at (919) 541-0850 or FTS 629-0850 to obtain additional infor-

mation necessary to log onto NATICH. Each month the National Computer Center sends NTIS a billing tape, and NTIS will bill you for computer time (approximately \$12-\$15 per hour of access time). Data entry and editing access is not available to the general public.

EPA and other Federal Agencies

Staff members of EPA and other Federal agencies can also arrange for data viewing access to the NATICH data base by setting up an account with EPA as per the directions for State and local agencies or through use of an existing account on the NCC computer. Federal users must contact the Clearinghouse staff to receive data base authorization for their User IDs. Data entry and editing access is not available to EPA or other Federal Agency personnel.

LOGON PROCEDURES

Initial Logon

To logon to the NATICH data base, use the following procedure for your initial logon. Subsequent logons will involve a more streamlined procedure which will automatically enter certain logon parameters for you.

- First, dial your TYMNET number.

After you see the message "Connect", you will see the prompt "Please type your terminal identifier". When this prompt appears:

- Type the letter "A" to identify the terminal type ("A" stands for VT100 emulation). You do not need to strike the RETURN key after entering "A".

Next you will see the prompt "Please log in".

- Type "EPA1" and strike the RETURN key.

You will now see the message "Welcome to the U.S. Environmental Protection Agency National Computer Center". When the port selector menu appears:

- Enter "TCP" and strike the RETURN key.

Next you will see the prompt "Connected".

- Rapidly strike the "{}" key (shift "]"") at least four or five times; you do not need to strike the RETURN key. (You must begin typing "{}'s within about 10 seconds after seeing the prompt or the computer will halt the logon procedure. The "{}" key will work for IBM and many other terminals. For some terminals you may need to substitute the letter "M" for the "{}"; for VT52 terminals, you may use "5".)

At this point a "Telecommunications Network" banner will appear with the prompt "Enter Command or M for Menu."

- Enter "PCICS" and strike the RETURN key.

The next screen will ask you for your User ID, account name, FIMAS ID, group, password, and initial transaction.

- Move from one prompt line to the next by striking the TAB key. Enter your User ID, account name, FIMAS ID, group, and password. (The FIMAS ID is "SAROP"; the group is the same as your account name.)
- Type "NSSP STACK=(LOGON ATCLO)" at the "INITIAL TRANSACTION" prompt.
- Then, TAB down and type an "X" in front of the "NO NEWS" prompt and strike the RETURN key.
- Strike the RETURN key when the next screen appears to "INVOKE THE INITIAL TRANSACTION."

The first menu for the NATICH data base will then appear. From that menu you may proceed to the interactive report programs.

Subsequent Logons

After you initially logon, subsequent logons will be more streamlined. Follow the initial logon instructions until you come to the screen which asks for your User ID.

- Enter your User ID and strike the RETURN key.
- Enter your password and strike the RETURN key.
- Strike the RETURN key again when the next screen appears to "INVOKE THE INITIAL TRANSACTION."

The first menu for the NATICH data base will then appear.

LOGOFF PROCEDURES

To exit from the NATICH data base:

- From the submenus, enter an "E" to exit and strike the RETURN key;
- Choose selection "QU" on the main reports menu and strike the RETURN key.

Now you will see the cursor in the upper left corner of your screen.

- Type "CSSF LOGOFF" and strike the RETURN key.

You are now logged off the computer, but are still on the telephone line. To disconnect the telephone line, follow the instructions that apply to your modem. Be sure to use this logoff procedure rather than just walking away from the computer; if you fail to logoff, your account will continue to be charged for access time.

IF YOU HAVE A PROBLEM

At times you may encounter difficulties logging onto the computer or problems while using the data base itself. Refer to Appendix A for guidance. If the problem continues, please call the Clearinghouse staff at (919) 541-0850 or FTS 629-0850.

SECTION 3
OVERVIEW OF THE INTERACTIVE DATA VIEWING SYSTEM

CONTENTS OF THE DATA BASE

NATICH Data

At this time, the NATICH data base contains data in three main categories: (1) data collected from State and local air pollution control agencies on their air toxics activities and names to contact for additional information; (2) citations and abstracts to published documents and descriptions of ongoing research related to toxic air pollutants from State and local agencies, EPA, and other Federal and International organizations; and (3) selected EPA risk analysis information. Table 3 describes the types of data residing in NATICH in more detail. These data are updated on a regular basis. It is likely that new and different types of data will be added to the data base in the future in response to advancement in fields such as pollution control, emergency response, and health risk assessment.

Organization

The NATICH interactive viewing system is screen-oriented and menu-driven. Its design allows you to select and view data without specific knowledge of the NATICH data base physical design or the programming language. It works by displaying menus on the screen which list the data selection choices available to you. User prompts guide you each time you are presented with a menu selection or blank to fill in. You will have access to all of the information in the NATICH data base through a series of 22 report programs.

The data are indexed in the data base in several ways and can be retrieved by searching on the indexes presented to you as menu choices. State and local agency data are indexed by agency, by CAS number and pollutant name (if it is pollutant-specific information), and by SIC code (if it is source-specific information). Permitting data submitted by State and local agencies are also indexed by the year the permit was issued or last amended. References to published documents and

TABLE 3. SUMMARY OF DATA CONTAINED IN THE NATICH DATABASE

Type of Data	Description
1. State and Local Agency Data	
General Information	Agency information (agency name, address, telephone); air toxics contact names for several specific areas of expertise, telephone numbers, number of work years assigned to each area.
Regulatory Program Description	Air toxics program description; acceptable ambient concentration guidelines or standards; pollutant research; methods development activities; non-health related impacts.
Permitting Information	General information such as the number of air toxics permits issued, whether or not permits are renewed, and if so, how often. For each permit case reported to the Clearinghouse: facility category; SIC Code; year permit issued; last year amended; permit identification number; control equipment; SCC codes; pollutants; emissions limits; source of emissions; and whether or not permit is notable (of particular interest).
Ambient Monitoring Information	Pollutants measured; year measured; location of measurement; sampling technique; analytical method.
Source Testing Information	General information such as the number of source tests involving air toxics. For each source test reported to the Clearinghouse: facility category; SIC Code; test date; test identification number; sampling techniques; analytical methods; pollutants measured; measured emissions rates; location of measurement; whether or not source test is notable (of particular interest).

(Continued)

TABLE 3. (Continued)

Type of Data	Description
Emissions Inventory Information	Emissions inventory description, including inventory status, data collection methodology, inventory scope, information collected, and inventory size. Inventory data, including pollutants, annual emissions, and area (State, county, city, or mobile, point source, etc.).
2. <u>Published Documents and Ongoing Research Sponsored by State and Local Agencies, EPA, and Other Federal and International Organizations</u>	
Reference Types	Air toxics support document Ambient monitoring Case study Chemical Hazard Information Profile (CHIP) Control technology document Dispersion modeling Emergency response Emission factor development Epidemiological study Exposure assessment <u>Federal Register</u> notice Health assessment Indoor air National Emission Standard for Hazardous Air Pollutants (NESHAP) New Source Performance Standard (NSPS) Pre-regulatory assessment Risk assessment Regulatory development guide Regulation or rule Source assessment Source sampling Toxicity testing Other

(Continued)

TABLE 3. (Continued)

Type of Data	Description
Sponsors	Environmental Protection Agency (EPA) International Agency for Research on Cancer (IARC) National Academy of Sciences (NAS) National Cancer Institute (NCI) National Institute for Occupational Safety and Health (NIOSH) National Institute of Environmental Health Sciences (NIEHS) National Toxicology Program (NTP) State and local air pollution control agencies (STATE/LOC) World Health Organization (WHO)
3. <u>Selected EPA Risk Analysis Information</u>	For many facilities for which EPA has generated risk analysis information: plant name; location; SIC code; pollutants emitted; annual emissions; estimated maximum concentrations; maximum individual risk per pollutant (lifetime cancer risk for individuals continuously exposed for 70 years to the highest predicted annual concentration, expressed as the probability of getting cancer in one's lifetime); annual incidence (predicted lifetime cancer incidence, expressed as cancer cases per year); date of the estimates; indication of whether or not location and/or other input parameters are verified.

ongoing research and regulatory development projects are indexed, as applicable, by the document or project number, reference type (e.g., control technology, health assessment), sponsor (e.g., State or local agency, EPA, NIOSH), pollutant name or CAS number, and SIC code. Selected EPA risk information is indexed by pollutant name or CAS number, SIC Code, and State. By selecting from the available menu choices, you can retrieve data from the data base to answer very specific, narrowly-defined questions or broad-based inquiries relevant to the evaluation and control of toxic air pollutants.

Quality Control

The usefulness of the NATICH data base to you and others is dependent, of course, on the quality of data entered into the data base. The NATICH data base controls the quality of the data in four important ways.

First, the data base imposes a data confirmation function in all data entry programs. A person entering data must confirm that each screen of data is what he/she intends to enter before the transaction is final. The data confirmation function is designed to minimize the unintentional entry of spurious or erroneous data.

Second, the data base automatically validates certain important data parameters, including CAS numbers, SIC Codes, and SCCs (Source Classification Codes), before information related to that parameter can be entered. The NATICH data base will not allow the entry of a CAS number, SIC code, or SCC unless it is known to the data base. All valid SIC Codes and SCCs and more than 2,000 CAS numbers are known to the data base. This validation function is intended to prevent the entry of erroneous CAS numbers, SIC Codes and SCCs. This is extremely important because the data, in large part, are keyed to and retrieved by these parameters.

Third, data entry and editing access is available only to the Clearinghouse staff and to authorized State and local agency personnel (who can access data only for their agency). The Clearinghouse encourages State and local agencies to maintain strict oversight of the data entry function and to limit the number of agency personnel with authorization to enter and edit data.

Fourth, each person who enters data into the data base is responsible for the quality of the data he/she enters. Although transparent to the user, all data entered into the data base are stamped with the date and the User ID used to gain access to the data entry function. This allows the Clearinghouse staff to monitor all data entry and update activities. State and local agencies are asked to review information contained in the data base once each year.

MENU STRUCTURE

You have interactive viewing access to all the data in the NATICH data base via menus of report programs. The report menus are organized hierarchically into a Home Menu, the Report Selection Menu, and six Report Menus, each containing a category of reports. The hierarchical arrangement means that you can step forward to a subordinate menu or step backward to the preceding (parent) menu. Figure 1 illustrates this relationship. You can leave the report programs from the Home Menu, the Report Selection Menu, or the individual Report menus.

If you have authorization to enter/edit data in addition to interactive viewing access, when you log onto the NATICH data base (see Section 2 for logon procedures) you will immediately see the HOME MENU which gives you a choice of selecting:

1. Clearinghouse Reports, or;
- 2 User Data Entry.

If you select #1, the REPORT SELECTION MENU appears. If you select #2, the FORMS MENU appears for the user data entry programs. For guidance on using the data entry programs, consult the NATICH Data Base Users Guide for Data Entry and Editing. If you have interactive viewing access only, when you logon you will bypass the HOME MENU entirely and go directly to the REPORT SELECTION MENU.

The REPORT SELECTION MENU gives you a choice of selecting a REPORT MENU for six categories of reports or of accessing a report directly via the report number. The options include:

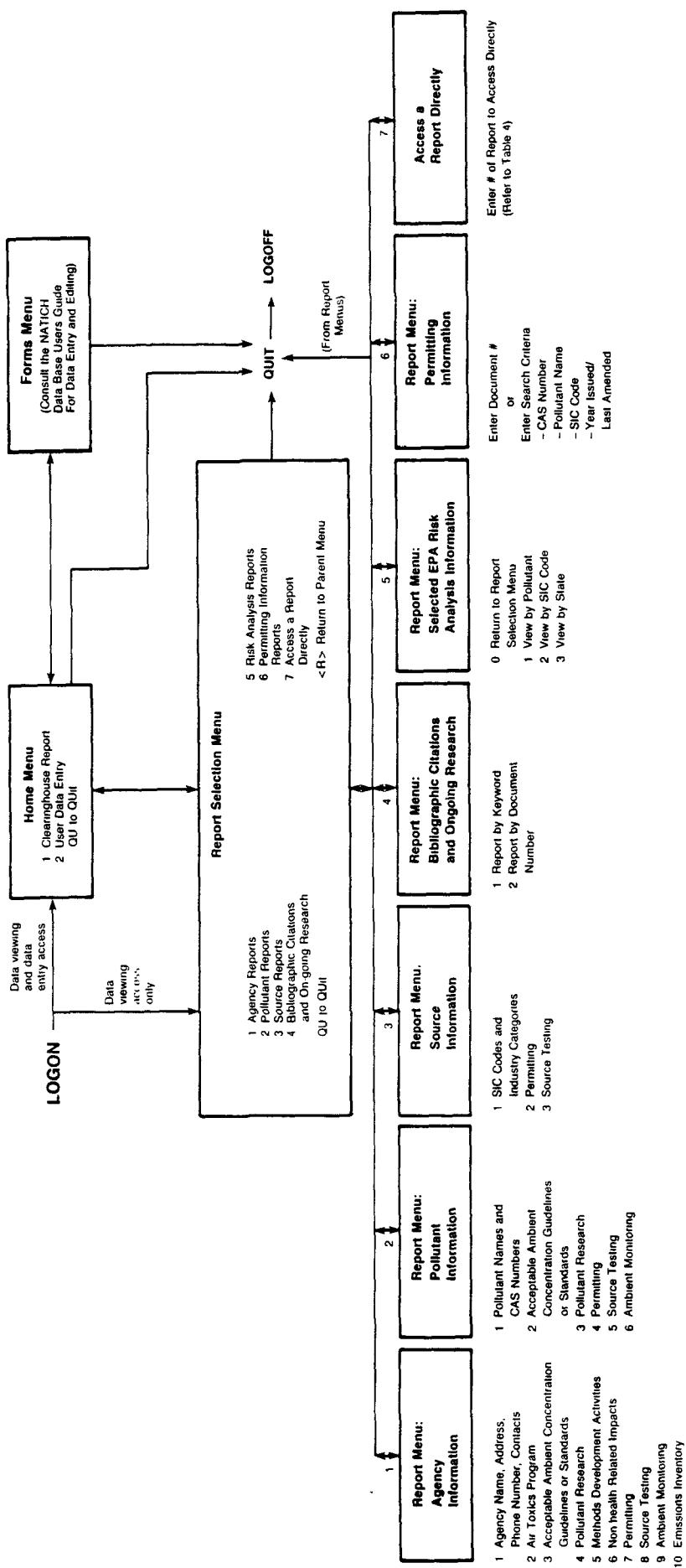


Figure 1. NATCH Interactive Data Viewing System - Menu Structure.

1. Agency Reports;
2. Pollutant Reports;
3. Source Reports;
4. Bibliographic Citations and Ongoing Research;
5. Risk Analysis Reports;
6. Permitting Information Reports; and
7. Access a Report Directly.

You can enter a number from this list to go to a specific REPORT MENU or to access a report directly, or you can enter:

QU to QUIT Session; or
<R> Return to Parent Menu
(which is the HOME MENU in this case).

The reports have been grouped into the above six categories based on the focus of the reports and the search criteria. Agency Reports, Pollutant Reports, and Source Reports all retrieve State and local agency data by agency, by pollutant name or CAS number, and by SIC Code, respectively. The Bibliographic Citations and Ongoing Research Report retrieves the citations and abstracts for published documents and research projects which you can select either by a document or project number or by a combination of key words including pollutant name, CAS number, SIC Code, reference type and/or sponsor. The Risk Analysis Report retrieves selected EPA risk analysis information which you can select by pollutant name or CAS number, by SIC Code, or by State. The Permitting Information Report retrieves the same permitting data available through Agency, Pollutant, and Source Reports; however, this is a more powerful program in that you can use a combination of search criteria, including CAS number or pollutant name, SIC Code, and/or the year the permit was issued or last amended, to select the data.

When you arrive at a Report Menu, you will be able to scan the available reports in that category and select a report to view data based on the focus of your search. Each of the 22 specific reports will also present you with menu options to select the data you wish to see.

REPORT PROGRAMS

Table 4 lists the 22 report programs currently available in the data base and provides a concise summary of each report. It lists the report number and title and describes the data retrieval options and the data the report retrieves. Please note that the report numbers associated with each report are no longer consecutive due to modifications of and additions to the data base.

Effective searching in the data base may involve moving from one category of report programs to another. When using the report programs in the POLLUTANT INFORMATION category, for example, you may see a piece of data (e.g., reference to a source test conducted by a specific agency for a pharmaceutical plant) which causes you to seek out additional information about the source tests conducted by that agency or about other source tests conducted for similar source types. You can obtain this information by accessing appropriate programs in the AGENCY INFORMATION category and the SOURCE INFORMATION category. If you would like to obtain more detailed information than is contained in the data base, you should write or telephone the contact listed on your screen or an appropriate contact from the contacts directory available via Report 1 (Agency Name, Address, Phone Number, Contacts).

Section 4 guides you through selected report programs with step-by-step instructions and figures showing actual screens of data from the data base. After you have some practice moving about the data base and become familiar with the menu choices and report programs, you should be able to retrieve the data you need quickly and effortlessly.

TABLE 4. SUMMARY OF NATICH INTERACTIVE REPORT PROGRAMS

Report No.	Report Title	Data Retrieval Options	Data Retrieved
AGENCY INFORMATION (Reports 1-9, 20)			
1. Agency Name, Address, Phone #, and Contacts	(1) View agency name, address, phone number, contacts for specific agency. (2) View agency name, address, phone number, contacts for all agencies		For specific agencies registered in NATICH: agency name, address, phone number, air toxics contact names for several areas of expertise (e.g., permitting, ambient monitoring), telephone numbers, number of work years assigned to specific areas. Same information as above, but for all agencies registered in NATICH presented on succeeding screens.
2. Air Toxics Program Information	(1) View air toxics program descriptions for specific agency (2) Select agencies by air toxics program characteristics		Agency name and regulatory contact and phone number. Description of agency's air toxics control program in terms of whether current program (C), planned future program (F), or no program (N) corresponds to a series of statements on program status, program structure, program scope, and application. Comments or clarifications.
3. Acceptable Ambient Concentration Guidelines or Standards by Agency	After selecting specific agency: (1) Concentrations, units, and averaging times (2) Basis, sources, and uncertainty factors		List of agencies with programs corresponding to program characteristics selected by user. Regulatory contacts and telephone numbers.
4. Pollutant Research by Agency	Select specific agency		Agency name and regulatory contact and phone number. List of pollutant names, CAS numbers, acceptable ambient concentration guidelines or standards, units, and averaging times. Comments or clarifications.
5. Methods Development Activities	(1) View methods development activities for specific agency (2) List agencies that have submitted methods development activity information		Agency name and regulatory contact and phone number. List of pollutant names, CAS numbers, whether or not guideline or standard is based on an occupational exposure level (OEL) and if yes, the source (ACGIH, OSHA, or NIOSH) and uncertainty factor used, other bases for guideline or standard (original research, adopted from another agency, or other). Comments or clarifications.
6. Non-Health Related Impact Information by Agency	(1) View non-health related information for specific agency (2) List agencies that have submitted non-health related impact information		Agency name and regulatory contact and phone number. List of pollutant names, CAS numbers, type of research or assessment activity (e.g., health assessment, source assessment), availability of supporting documentation. Comments or clarifications.
			Agency name and regulatory contact and phone number. Brief description of methods development activities in several areas (e.g., emissions testing, ambient monitoring).
			List of agencies that have submitted methods development activity information in areas selected by user.
			Agency name. Narrative case study information on non-health related impacts of toxic air pollutants (e.g., materials, vegetation damage).
			List of agencies that have submitted non-health related impact information to the data base.

(Continued)

TABLE 4. (Continued)

Report No.	Report Title	Data Retrieval Options	Data Retrieved
7. Permitting Information by Agency		(1) View list of permits for a specific agency (2) View permit description via access # from (1).	Agency name and permitting contact and telephone number. Total number of facilities agency has permitted to control air toxics emissions. Whether or not permits are renewed, and if so, how often. Whether or not permitting data are maintained in computerized files. For each permit registered by agency in data base: SIC Code, facility category, date of permit, whether or not permit is notable (not routine), access number (unique number assigned by data base to each permit). Use the access number to obtain more detailed information about a specific permit in Option 2 of this report. Access number. Agency name and permitting contact and phone number. Facility category, SIC Code, year issued, last year amended, permit ID number, control equipment, whether or not permit is notable (not routine), comments. List of pollutant names, CAS numbers, emission limits and units, SCCs, and sources of emissions subject to limit.
8. Source Testing Information by Agency		(1) View list of source tests for a specific agency (2) View source test description via access # from (1).	Agency name and source test contact and telephone number. Total number of source tests conducted for air toxics evaluation. Whether or not source test data are maintained in computerized files. For each source test registered by agency in data base: SIC Code, facility category, test date, whether or not test is notable (not routine), access number (unique number assigned by data base to each source test). Use the access number to obtain more detailed information about a specific source test in Option 2 of this report. Access number. Agency name and source test contact and phone number. Facility category, SIC Code, test date, test ID number, sampling technique, analytical method, whether or not source test is notable (not routine), comments. List of pollutant names, CAS numbers, measured emission rates and units, SCCs, and location of measurement.
9. Pollutants Monitored by Agency	Select specific agency		Agency name and ambient monitoring contact and telephone number. List of pollutants monitored by agency. Option to enter pollutant name to view monitoring information. Monitoring information: pollutant name, CAS number, location of measurement (city and county), year measured, sampling technique, and analytical method.
20. Emissions Inventory Information		(1) View air toxics emissions inventory information for a specific agency (2) Select agencies by emissions inventory characteristics	Agency name and inventory contact and telephone number. Description of agency's air toxics emissions inventory in terms of answers to a series of yes/no and fill-in-the-blank questions on inventory status, data collection methodology, inventory scope, inventory information, and inventory size. Comments or clarification. List of agencies with inventories corresponding to characteristics selected by user. Emissions contacts and telephone numbers.

(Continued)

TABLE 4. (Continued)

Report No.	Report Title	Data Retrieval Options	Data Retrieved
		(3) View inventory data for specific agency	Agency name, List of pollutant names, CAS numbers, annual emissions in metric tons/year, and type of emissions (e.g., point, area)
POLLUTANT INFORMATION (Reports 10-15)			
10. Pollutant Names, Synonyms, and CAS Numbers		(1) Select pollutant by name (2) Select pollutant by CAS number	CAS number, pollutant name, list of synonyms. Same as above.
11. Acceptable Ambient Guidelines or Standards by Pollutant		After entering pollutant name or CAS number: (1) Concentrations, units, and averaging times (2) Basis, sources, and uncertainty factors	Pollutant name and CAS number. List of agencies with acceptable ambient concentrations or guidelines for selected pollutant, concentrations, and units, averaging times, and whether or not comments have been submitted by agency. (View comments by going to Report 3.) Pollutant name and CAS number. List of agencies with acceptable ambient concentrations or guidelines for selected pollutant, whether or not guidelines or standards are based on an occupational exposure level (OL) and if yes, the source (ACGIH, OSHA, or NIOSH) and uncertainty factor used, other bases for guideline or standard (original research, adopted from another agency, or other), and whether or not comments have been submitted by agency. (View comments by going to Report 3.)
12. Pollutant Research by Pollutant		(1) Select pollutant by name (2) Select pollutant by CAS number.	Pollutant name and CAS number. List of agencies that have submitted pollutant research information for selected pollutant, types of research or assessment activities (e.g., health assessment, source assessment), availability of supporting documentation, and whether or not comments have been submitted by agency. (View comments by going to Report 4.) Same as above.
13. Permitting Information by Pollutant		(1) View list of permits for specific pollutant (by pollutant name or CAS number) (2) View permit description via access # from (1).	Pollutant name and CAS number. List of agencies that have permitted a facility to control selected pollutant, SIC Code and facility category of permitted facility, whether or not permit is notable (not routine), access number (unique number assigned by data base to each permit). Use the access number to obtain more detailed information about a specific permit in Option (2) of this report. Same as Report 7, Option (2).
14. Source Testing Information by Pollutant		(1) View list of source tests for specific pollutant (by pollutant name or CAS number)	Pollutant name and CAS number. List of agencies that have tested a facility for emissions of selected pollutant, SIC Code, and facility category of tested facility, whether or not test is notable (not routine), access number (unique number assigned by data base to each sample test). Use the access number to obtain more detailed information about a specific source test in Option (2) of this report.

(Continued)

TABLE 4. (Continued)

Report No.	Report Title	Data Retrieval Options	Data Retrieved
15. Ambient Monitoring Data by Pollutant		(2) View source test description via access # from (1) (1) Select pollutant by name (2) Select pollutant by CAS number	Same as Report 8, Option (2). Pollutant name and CAS number. List of agencies that have monitored for selected pollutant in ambient air, year(s) measured, location(s) of measurement (city and county). Same as above.
SOURCE INFORMATION (Reports 16-18)			
16. Standard Industrial Classification (SIC) Code Descriptions		Select 2-, 3-, or 4-digit SIC Code	2-digit code and corresponding Major Group name, 3-digit code and corresponding Industry group name, and 4-digit code and corresponding Industry name.
17. Permitting Information by SIC Code		(1) View list of permits for specific SIC Code (2) View permit description via access # from (1)	2-, 3-, or 4-digit SIC Code. List of agencies that have permitted a facility categorized in SIC group selected, SIC code and facility category of permitted facility, whether or not permit is notable (not routine), access number (unique number assigned by data base to each permit). Use the access number to obtain more detailed information about a specific permit in Option (2) of this report. Same as Report 7, Option (2).
18. Source Testing Information by SIC Code		(1) View list of source tests for a specific SIC Code (2) View source test description via access # from (1)	2-, 3-, or 4-digit SIC Code. List of agencies that have tested a facility categorized in SIC Code selected, SIC Code, and facility category of tested facility, whether or not test is notable (not routine), access number (unique number assigned by data base to each source test). Use the access number to obtain more detailed information about a specific source test in Option (2) of this report. Same as Report 8, Option (2).
BIBLIOGRAPHICAL CITATIONS AND ONGOING RESEARCH (Report 19)			
19. Bibliographic Citations and Ongoing Research		(1) Report by keyword (available search criteria: pollutant name, CAS number, SIC Code, reference type, sponsor acronym) a. View bibliographic citations only b. View ongoing research and regulatory development research projects only c. View both bibliographic citations and ongoing research projects	List of search criteria selected. Number of bibliographic citations found. Number of ongoing research and regulatory development projects found. Citation, abstract, ordering information, and keywords that reference citation for all bibliographic citations found, on succeeding screens. Title, status, contact, and phone number, project description, and keywords that reference project for all projects found, on succeeding screens. Information as described in a. and b. above for both bibliographic citations and ongoing research projects, on succeeding screens.

(Continued)

TABLE 4. (Continued)

Report No.	Report Title	Data Retrieval Options	Data Retrieved
RISK ANALYSIS INFORMATION (Report 21)			
21. Selected EPA Risk Analysis Information	(1) View by pollutant.	Pollutant name and CAS number. Unit cancer risk factor. List of plants emitting selected pollutant for which EPA has collected risk analysis information. Plant-specific data: plant name, SIC Code, location (city or county and State), total emissions of selected pollutant (kg/yr), maximum concentration ($\mu\text{g}/\text{m}^3$), maximum individual cancer risk (lifetime cancer risk for individuals continuously exposed to selected pollutant at highest predicted annual concentration expressed as the probability of getting cancer in one's lifetime), annual incidence (predicted lifetime cancer incidence expressed as cancer cases per year), date of estimates, whether or not location and/or other input parameters are verified.	
	(2) View by SIC Code	SIC Code and description. List of pollutants emitted by plants categorized in SIC group selected for which EPA has collected risk analysis information. Plant-specific data as described in (1) above.	
	(3) View by State	State. List of pollutants emitted by plants in State selected for which EPA has collected risk analysis information. Plant-specific data as described in (1) above.	
PERMITTING INFORMATION (Report 22)			
22. Permitting Information by Search Criteria	(1) Enter access # (obtained using Option (2) of this report)	Same as Report 7, Option (2).	
	(2) Enter search criteria (available search criteria: Cas number, pollutant name, SIC Code, year permit issued/last amended)	List of search criteria selected. Information on permits that satisfy search criteria: pollutants emitted and CAS numbers, facility category, SIC Code, SCC, agency that issued permit, year permit was issued/last amended, emission limit and unit, access number (unique number assigned by data base to each permit). Use access number to obtain more detailed information about a specific permit in Option (1) of this report.	

SECTION 4
SELECTED REPORT PROGRAMS

AGENCY REPORTS

Complete information submitted to the data base by State and local agencies (except bibliographic citations and ongoing research) is available using reports in the AGENCY INFORMATION category. Each report in this group retrieves certain information about a specific agency's air toxics activities or lists agencies which satisfy search criteria selected by the user. Use this group of reports when the focus of your search is to retrieve information about a specific agency rather than a specific pollutant or source.

Available reports include:

1. Report 1 - Agency Name, Address, Phone Number, and Contacts;
2. Report 2 - Air Toxics Program Information by Agency;
3. Report 3 - Acceptable Ambient Concentration Guidelines or Standards by Agency;
4. Report 4 - Pollutant Research Data by Agency;
5. Report 5 - Methods Development Activities by Agency;
6. Report 6 - Non-health Related Impact Information by Agency;
7. Report 7 - Permitting Information by Agency;
8. Report 8 - Source Testing Information by Agency;
9. Report 9 - Ambient Monitoring Information by Agency; and
10. Report 20- Emissions Inventory Information by Agency.

Selecting an Agency

When using this group of report programs you will be called on to select a specific agency in order to view that agency's data. You do not have to know the names of all the agencies included in the data base in order to access the data. When you select a report program in this group, at the appropriate time you will see a prompt:

ENTER 2-LETTER STATE ABBREVIATION (OR <R> TO EXIT):

- Type in the 2-letter State postal abbreviation (e.g., CA, PA) of the State where the agency you wish to select is located and strike the RETURN key.

A numbered list of agencies in the State will appear along with a prompt, as in this example for the State of Illinois:

1. Department of Inspections and Permits, City of Evanston
2. Bedford Park Environmental Quality Control Board
3. IL Environmental Protection Agency, Division of Air Pollution Control

ENTER SELECTION OR <R> TO CONTINUE:

- Type in the number from the list which corresponds to the agency you wish to select and strike the RETURN key, or, if the list of agencies continues to the next screen and you wish to see the complete list, strike the RETURN key without entering a number.

After you have selected a specific agency by entering a number and striking the RETURN key, the first screen of data for that agency will appear. Prompts will guide you on every screen as you move through the report programs.

Example Reports

Step-by-step instructions are provided for the following reports:

- Report 1 - Agency General Information;
- Report 5 - Methods Development Activities By Agency; and
- Report 20- Emissions Inventory Information By Agency.

When you are familiar with these report programs you should have no problem executing the other report programs in this group.

Report 1 - Agency General Information

When you select Report 1 either from the AGENCY REPORTS menu or directly from the REPORT SELECTION MENU, a menu screen for Report 1 will appear. The menu gives you three numbered options:

- (0) Return to Main Reports Menu;
- (1) View Agency Name, Address, Phone Number, Contacts for Specific Agency; and
- (2) View Agency Name, Address, Phone Number, Contacts for All Agencies.

Enter the number which corresponds to the option you wish to select.

If you select option (1), you must next designate a specific agency as described above (see instructions under the heading "Selecting An Agency"). After you designate an agency, a data screen will appear which lists the agency name, address, and telephone number, and contact names, telephone numbers, and number of work years in 10 areas of expertise. The value for number of work years represents the total number of work years assigned to air toxics subject area, including management levels. Figure 2 shows an example data screen from this report for the Cleveland Division of Air Pollution Control in Cleveland, Ohio.

When you have finished viewing the data on the screen, you can simply strike the RETURN key to return to the Report 1 menu.

If you select Option (2), you can scroll through these data for every agency included in the data base, in alphabetical order by State, on succeeding screens. On each screen you have the option to continue scrolling through the data (by striking the RETURN key) or to exit to the Report 1 menu (by entering "E").

REPORT 1. AGENCY NAME, ADDRESS, PHONE #, AND CONTACTS

NAME: CLEVELAND DIV. OF AIR POL. CONTROL, DEPT. OF PUBLIC HEALTH
ADDRESS: 2735 BROADWAY AVE.

CITY: CLEVELAND STATE: OH
ZIP: 44115 PHONE: (216)-664-3591

SUBJECT AREA	CONTACT NAME	TELEPHONE	WORK YRS
REGULATORY PROGRAM:	DOUGLAS D.SEAMAN	(216)-664-3512	1.0
PERMITTING:	DOUGLAS D.SEAMAN	(216)-664-3512	1.0
SOURCE TESTS:	RICHARD A. DELL	(216)-664-3591	14.0
AMBIENT MONITORING:	EDWARD J. FASKO	(216)-664-3560	3.0
EMISSIONS INVENTORY:	PAUL KARBOWSKI	(216)-664-3510	5.0
HEALTH EFFECTS:	RICHARD A. DELL	(216)-664-3591	14.0
INDOOR AIR:	GARY J. NIED	(216)-664-3500	8.0
COMPLIANCE/		(---)-----	
ENFORCEMENT:		(---)-----	
DISPERSION/		(---)-----	
EXPOSURE MODELING:		(---)-----	
RISK COMMUNICATION:		(---)-----	

PRESS <R> TO RETURN TO REPORT 1 MENU

Figure 2. Example Data Screen Showing Agency Name, Address, Phone #, and Contacts for a Selected Agency.

Report 5 - Methods Development Activities by Agency

When you select Report 5 either from the AGENCY REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 5 will appear. The menu screen first lists the eight types of methods development activities included in the data base:

1. Emissions Testing;
2. Ambient Monitoring;
3. Dispersion Modeling Application, Evaluation and/or Development;
4. Accident Prevention and/or Emergency Response Procedures;
5. Ambient Exposure Assessment;
6. Emissions Modeling from Non-Traditional Sources;
7. Indoor Air Characterization, Mitigation; and
8. Other.

The menu gives you three numbered options:

- (0) Return to Main Reports Menu;
- (1) View Methods Development Activities for Specific Agency; and
- (2) List Agencies that have Submitted Methods Development Activity Information.

Enter the number which corresponds to the option you wish to select.

If you select Option (1) you must next designate a specific agency as described above (see instructions under the heading "Selecting An Agency"). After you designate an agency, a data screen will appear which lists the agency name, regulatory contact, and telephone number, and gives a narrative description of the selected agency's methods development activities in the areas of emissions testing and ambient monitoring, if provided by the agency. Figure 3 shows an example of this data screen from the data base for the Texas Air Control Board. Three succeeding screens give narrative descriptions (again, if submitted by the agency) of the selected agency's methods development activities in the remaining six areas, two areas per screen. On each screen you have the option to continue to the next

REPORT 5. METHODS DEVELOPMENT ACTIVITIES

STATE: TX AGENCY: TX AIR CONTROL BOARD
REGULATORY CONTACT: LES MONTGOMERY

PHONE: (512)-451-5711

1. EMISSIONS TESTING

Y/N: Y EXPLANATION: DEVELOPED METHOD FOR MEASURING CHLORINATED ORGANICS; DEVELOPING METHOD FOR MEASURING VOC'S FROM GAS STORAGE TERMINALS; TESTING EMISSIONS FROM MUNICIPAL SOLID WASTE INCINERATORS.

2. AMBIENT MONITORING

Y/N: Y EXPLANATION: DEVELOPED METHODS FOR GETTING ARSENIC, BENZENE, FORMALDEHYDE, PCB'S, LEAD, VINYL CHLORIDE, PNA, ETHYLENE OXIDE, EPICHLOROHYDRIN,& ACRYLONITRILE ON PESTICIDE HEAD HI-VOLS. DEVELOPING METH. TO COL.

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 5 MENU

Figure 3. Example Data Screen Showing Methods Development Activities for a Selected Agency.

screen (by striking the RETURN key), or to exit to the Report 5 menu (by entering "E").

If you select Option (2) to list agencies that have submitted methods development activity information, a screen will appear which allows you to designate the one or more methods development activities about which you wish to retrieve information. The screen lists the eight methods development activities and directs you to enter a "Y" (for yes) next to each activity you wish to select. Leave the space blank if you do not want to select a methods development activity; do not enter an "N" (for No) or any other character. Use the TAB key to move the cursor up and down the list of methods development activities. If you need to "erase" a "Y", move the cursor to the "Y" you wish to remove and press the SPACE bar. Strike the RETURN key only when you have completed the selection and wish to view a list of the agencies that have reported methods development activity information to the data base in the areas you selected.

Remember that if you enter a "Y" next to more than one activity (for example, emissions testing and ambient monitoring), the computer will search for agencies that have submitted information on both emissions testing and ambient monitoring. If you would like a complete list for emissions testing and a complete list for ambient monitoring, select one activity at a time.

When you have completed your selection of methods development activities, strike the RETURN key. A data screen will appear which indicates the methods development activities you selected and lists State and local agencies, in alphabetical order by State, that have reported methods development activity information to the data base in the areas you selected. Figure 4 shows an example of this data screen from the data base for which accident prevention and/or emergency response procedures (number 4) was selected. If the list continues on to more than one screen, you can continue to the next screen by striking the RETURN key or you can exit to the Report 5 menu by entering "E".

To view a narrative description of the methods development activities for any agency on the list, return to the Report 5 menu and execute Option (1).

REPORT 5. METHODS DEVELOPMENT ACTIVITIES BY AGENCY

METHODS DEVELOPMENT ACTIVITIES ARE:

1: 2: 3: 4: Y 5: 6: 7: 8:

STATE	AGENCY
CA	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
KS	KS. DEPT. OF HEALTH AND ENV., BUR. OF AIR QUAL. & RAD. CNTRL
MO	MO DEPT. OF NATURAL RESOURCES, AIR POLLUTION CONTROL PROGRAM
NJ	NJ DEPT. OF ENV. PROT., BUR. OF AIR POLLUTION CONTROL
OH	OHIO EPA, DIV. OF AIR POLLUTION CONTROL
TX	TX AIR CONTROL BOARD
WA	WA DEPT. OF ECOLOGY, OFFICE OF HAZ. SUB. & AIR QUALITY CNTL.

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 5 MENU

Figure 4. Example Data Screen Listing Agencies That Have Submitted Selected Methods Development Activity Information.

Report 20 - Emissions Inventory Information

When you select Report 20 either from the AGENCY REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 20 will appear. The menu gives you four numbered options:

- (0) Return to Main Reports Menu;
- (1) View Air Toxics Emissions Inventory Information for a Specific Agency;
- (2) Select Agencies by Emissions Inventory Characteristics; and
- (3) View Inventory Data for a Specific Agency.

Enter the number which corresponds to the option you wish to select.

If you select Option (1) you must next designate a specific agency as described above (see instructions under the heading "Selecting An Agency"). After you designate an agency, a data screen will appear which lists the agency name, emissions inventory contact and telephone number, and describes the agency's air toxics emissions inventory in terms of answers to a series of yes/no and fill-in-the blank questions on inventory status, data collection methodology, inventory scope, inventory information, and inventory size. The description continues on to four additional screens, the last of which gives narrative comments about the inventory, if such comments were submitted by the agency. Figure 5 shows an example of the first data screen in the sequence for the Santa Barbara County (California) Air Pollution Control District. You can move from one screen to the next by striking the RETURN key or you can exit to the Report 20 menu from any screen in the sequence by entering "E".

If you choose Option (2) to select agencies by emissions inventory characteristics, a series of screens will appear which allow you to designate characteristics of an emissions inventory from a list. The computer will search in the data base for agencies whose emissions inventories correspond to the characteristics you select.

REPORT 20.

EMISSIONS INVENTORY INFORMATION

STATE: CA AGENCY: SANTA BARBARA CO. AIR POLLUTION CONTROL DISTRICT
INVENTORY CONTACT: BOBBIE BRATZ PHONE: (805)-964-8111

INVENTORY STATUS

- Y 1. HAVE YOU COMPILED AN AIR TOXICS EMISSIONS INVENTORY.
2. IF NO INVENTORY EXISTS, ARE THERE PLANS TO COMPILE ONE?
WHEN / /

DATA COLLECTION METHODOLOGY

- N 3. IS YOUR INVENTORY BASED ON DATA SUPPLIED THROUGH
THE PERMIT PROCESS?
- Y 4. IS YOUR INVENTORY BASED ON QUESTIONNAIRES SENT TO SOURCES?
5. HOW OFTEN IS YOUR INVENTORY INFORMATION UPDATED?

- Y ALL DATA UPDATED REGULARLY (FREQUENCY? 2YEAR)
PORTIONS UPDATED REGULARLY (FREQUENCY?)
UPDATED IRREGULARLY
EXISTING INVENTORY IS THE RESULT OF A ONE-TIME EFFORT WITH NO
KNOWN PLANS TO UPDATE. WHEN WAS INVENTORY COMPLETED? / /

PRESS <R> TO CONTINUE OR 'E' TO RETURN TO REPORT 20 MENU

Figure 5. Example Data Screen Showing Air Toxics Emissions Inventory Information for a Selected Agency.

The first screen in the series directs you to enter a "Y" (for Yes) next to each characteristic you wish to select (if you enter any other character, a prompt will direct you to re-enter). Figure 6 shows an example of this screen on which two "Y"s have been entered. Use the TAB key to move the cursor up and down the list of characteristics. If you need to "erase" a "Y", move the cursor to the "Y" you wish to remove and press the SPACE bar. When you finish designating characteristics on this screen, you can continue to succeeding screens to designate additional characteristics by striking the RETURN key, or you can view a list of agencies whose emissions inventories correspond to the characteristics you selected by entering "E" in the selection field. (Remember to TAB down to the selection field before you enter an "E").

Each time you enter a "Y" next to a characteristic, the search becomes more restrictive. The computer will search for agencies whose programs correspond to all of the characteristics you designate.

When you have completed your selection of characteristics, strike the RETURN key if you are on the last screen or enter "E" if you are on any of the previous screens (the prompts will guide you). A data screen will appear which indicates the characteristics you selected and lists agencies, in alphabetical order by State, whose emissions inventories correspond to the characteristics you selected. The list also includes the emissions contact and telephone number for each agency. Figure 7 shows an example of this data screen from the data base for the characteristics selected on the screen in Figure 6. If the list continues on to more than one screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 20 menu by entering "E".

If you select Option (3) from the Report 20 menu to view inventory data for a specific agency, you must next designate a specific agency as described above (see instructions under the heading "Selecting An Agency"). After you designate an agency, a data screen will appear which lists pollutants included in the inventory by the agency you selected, in alphabetical order by pollutant. The list also includes the CAS number, annual emissions in metric tons/yr, and location (area) for each pollutant. Figure 8 shows an example of this data screen for the Puget

REPORT 20. EMISSIONS INVENTORY INFORMATION

(ENTER 'Y' OR ' ' TO SELECT PROGRAM CHARACTERISTICS)

INVENTORY STATUS

- Y 1. WE HAVE COMPILED AN AIR TOXICS EMISSIONS INVENTORY.
- 2. IF NO INVENTORY EXISTS, ARE THERE PLANS TO COMPILE ONE?

DATA COLLECTION METHODOLOGY

- 3. IS YOUR INVENTORY BASED ON DATA SUPPLIED THROUGH THE PERMIT PROCESS?
- 4. IS YOUR INVENTORY BASED ON QUESTIONNAIRES SENT TO SOURCES?
- 5. HOW OFTEN IS YOUR INVENTORY INFORMATION UPDATED? (CHOOSE ONE)
 - ALL DATA UPDATED REGULARLY
 - PORTIONS UPDATED REGULARLY
 - UPDATED IRREGULARLY
 - EXISTING INVENTORY IS THE RESULT OF A ONE-TIME EFFORT WITH NO KNOWN PLANS TO UPDATE

PRESS <R> TO CONTINUE, OR 'E' TO VIEW SELECTED STATES _

Figure 6. Example Selection Screen to Select Agencies By Emissions Inventory Characteristics.

REPORT 20.

EMISSIONS INVENTORY INFORMATION
INVENTORY CHARACTERISTICS SELECTED:

1: Y 2: 3: 4: Y 5: 6: 7: 8: 9:
10: 11: 12:

STATE	AGENCY	EMISSIONS CONTACT	PHONE NUMBER
AK	AK	NONE	(---)-----
AZ	AZ-PHOENIX	NONE	(---)-----
AZ	AZ-PIMACO	NONE	(---)-----
CA	CA-BAAQMD	NONE	(---)-----
CA	CA-SCAQMD	MARK SAPERSTEIN	(818)-572-2118
CA	CA-SAC.	NONE	(---)-----
CA	CA-S.BARB.	NONE	(---)-----
CT	CT	HARI RAO	(203)-566-8167
ID	ID	ROBERT WILKOSZ	(208)-334-5898
IN	IN	EUGENE DUVAL	(317)-232-8229
IN	IN-HAMMOND	RONALD NOVAK	(219)-853-6305
IN	IN-INNAP	DAVID R. JORDON	(317)-633-5497

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 20 MENU

Figure 7. Example Data Screen Listing Agencies That Exhibit Selected Emissions Inventory Characteristics.

REPORT 20.

EMISSIONS INVENTORY POLLUTANT LIST

STATE: WA AGENCY: PUGET SOUND AIR POLLUTION CONTROL AGENCY

POLLUTANT	CAS#	EM RATE	UNIT	LOCATION
ACENAPHTHENE	83-32-9	54.0000	MT/YR	PSAPCA
ACETALDEHYDE	75-07-0	72.0000	MT/YR	PSAPCA
ACETONE	67-64-1	358.0000	MT/YR	PSAPCA
AMMONIA	7664-41-7	34.0000	MT/YR	PSAPCA
ANTIMONY	7440-36-0	0.0000	MT/YR	NONE CALCULATED
ARSENIC AND COMPOUND	7440-38-2	0.0000	MT/YR	NONE CALCULATED
BENZENE	71-43-2	1178.0000	MT/YR	PSAPCA
BENZO(A)PYRENE	50-32-8	3.0000	MT/YR	PSAPCA
BUTANONE,2-	78-93-3	1008.0000	MT/YR	PSAPCA
BUTYL ALCOHOL	71-36-3	120.0000	MT/YR	PSAPCA
BUTYLACETATE,N-	123-86-4	192.0000	MT/YR	PSAPCA
BUTYROLACTONE,4-	96-48-0	5.0000	MT/YR	PSAPCA

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO EMISSIONS INVENTORY REPORT MENU

Figure 8. Example Data Screen Showing Emissions Inventory Data for a Selected Agency.

Sound (Washington) Air Pollution Control Agency. If the list continues on to succeeding screens you can proceed to the next screen by striking the RETURN key or you can exit to the Report 20 menu by entering "E".

POLLUTANT REPORTS

Pollutant-specific information submitted to the data base by State and local agencies (except bibliographic citations and ongoing research) is available using reports in the POLLUTANT INFORMATION category. Each report in this group retrieves certain pollutant-specific State and local agency data for pollutants specified by the user. If you wish to retrieve all available information from State and local agencies about a specific pollutant, use this group of reports. Available reports include:

1. Report 10 - Pollutant Names, Synonyms, and CAS Numbers;
2. Report 11 - Acceptable Ambient Concentration Guidelines or Standards by Pollutant;
3. Report 12 - Pollutant Research Data by Pollutant;
4. Report 13 - Permitting Information by Pollutant;
5. Report 14 - Source Testing Information by Pollutant; and
6. Report 15 - Ambient Monitoring Information by Pollutant.

Selecting A Pollutant

When using this group of report programs you will need to select a specific pollutant. You may access pollutant-specific information in the data base by entering either a pollutant name or a CAS number. This choice may prove useful to you if you only know a name or a CAS number. However, to avoid potential problems caused by entry errors (misspelling or alternate spelling of the pollutant name or the use of a synonym not recognized by the data base) the use of a CAS number is preferable. The computer searches for an exact match between the name you enter and the pollutant names and synonyms registered in the data base.

Groups of chemicals or pollutants such as "organic compounds" that cannot be identified more precisely by a CAS number have been assigned unique Clearinghouse identifiers in place of CAS numbers. Appendix D lists the identifiers for chemical

groups included in the data base. Clearinghouse identifiers can be used to select a group of pollutants in the same way a CAS number is used to select a single pollutant.

When you execute a report program from this group and choose to select a pollutant by the pollutant name, you will see a prompt:

ENTER POLLUTANT NAME (OR <R> TO EXIT):

- Type in the name of the pollutant in the space provided. If you make an error in spelling, you can edit your entry by using the direction keys, the BACKSPACE key, and/or the SPACE bar and typing over the incorrect characters (see Appendix B for guidance on keyboard functions). Strike the RETURN key when you are satisfied with your entry.

If the computer finds information in the data base about the pollutant you selected, a data screen will appear showing the information. If the computer finds no information in the data base about the pollutant you selected, a message will appear on the top of your screen which informs you that no record was found. You may want to execute the search again using an alternate spelling or synonym or the CAS number.

When you choose to select a pollutant by the CAS number, you will see the prompt:

ENTER CAS # (OR <R> TO EXIT):

- Type in the CAS number in the space provided, including the dashes (-) between the three number sets. Strike the RETURN key.

If the computer finds information in the data base about the pollutant you selected, a data screen will appear showing the information. If the computer finds no information in the data base about the pollutant you selected, a message will appear on the top of the screen which informs you that no record was found. You may want to check the CAS number you entered for accuracy.

Example Reports

Step-by-step instructions are provided for the following reports:

- Report 11 - Acceptable Ambient Concentration Guidelines or Standards by Pollutant; and
- Report 12 - Pollutant Research Data by Pollutant.

When you are familiar with these report programs you should have no problem executing the other report programs in this group.

Report 11 - Acceptable Ambient Concentration Guidelines or Standards by Pollutant

When you select Report 11 either from the POLLUTANT REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 11 will appear. The menu gives you three numbered options:

- (0) Return to a Main Reports Menu;
- (1) Select Pollutant by Name; and
- (2) Select Pollutant by CAS Number.

Enter the number which corresponds to the option you wish to select.

If you select Option (1) or Option (2) you will be prompted to enter either a pollutant name or a CAS number, respectively, as described above (see instructions under the heading "Selecting A Pollutant"). After you designate a pollutant either by pollutant name or by CAS number, a screen will appear which repeats the pollutant name and the CAS number and gives you the option to select either (1) concentrations, units, and averaging times, or (2) basis, sources, and uncertainty factors, by entering either a "1" or a "2". This screen also allows you to quit the session (by entering "QU"), select next pollutant (by entering "NE") or return to the parent menu (by striking the RETURN key).

If you enter "1" to select concentrations, units, and averaging times, a data screen will appear which again repeats the pollutant name and CAS number and lists agencies which have established acceptable ambient concentration guidelines or standards for this pollutant. Information on the screen includes the concentration, units, and averaging time for each agency on the list and whether or not the agency has submitted comments on their acceptable ambient concentration guidelines or standards. If so, the comments may be viewed by going to Report 3 - Acceptable Ambient Concentration Guidelines or Standards by Agency. Figure 9 shows an example of this data screen for chromium. The field for concentration is a numeric field which the data base automatically prefills with 0.0000. Therefore a concentration of 0.0000 may not necessarily mean 0. It may mean that the concentration was not submitted or that the concentration is less than 0.0001 (1/10,000). For example, a concentration of 0.00005 would register in the data base as 0.0000.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 11 menu by entering an "E".

If you enter "2" from the selection screen to select basis, sources, and uncertainty factors, a data screen will appear which once more repeats the pollutant name and CAS number and provides information on how the agencies established acceptable ambient concentration guidelines or standards for this pollutant. Information on the screen includes agencies which have established guidelines or standards, whether or not the guideline or standard is based on occupational exposure levels (OELs), and if so, the source of the OEL (ACGIH, OSHA, and/or NIOSH) and the uncertainty factor used to adjust the OEL. (Uncertainty factors are numbers used to adjust an occupational exposure level and duration to an ambient exposure level and duration to reflect protection of sensitive populations, uncertainty in health effects, etc.) The screen also indicates other possible bases for establishing a guideline or standard (agency sponsored original research, adoption of a guideline or standard set by another agency or group, or other) and whether or not the agency has submitted comments to the data base on their acceptable ambient concentration guidelines or standards. Comments for a specific agency can be viewed by going to Report 3 - Acceptable Ambient Concentration Guidelines or Standards by Agency. Figure 10 shows an example of this data screen for chromium.

REPORT 11. ACCEPTABLE AMBIENT CONCENTRATION GUIDELINES OR STANDARDS
BY POLLUTANT

POLLUTANT: CHROMIUM

CAS #: 7440-47-3

AGENCY	CONCEN	UNITS	AVG TIME	COMMENTS *
CA-MONT.	0.0000			N
CT	2.5000	UG/M3	8HR.	Y
MA	0.0680	UG/M3	24HR.	Y
MT	0.3900	UG/M3	24-HR	Y
MT	0.0700	UG/M3	ANNUAL	Y
NC	0.0000	UG/M3	ANNUAL	N
NV	0.0120	MG/M3	8HR.	N
NY	0.1670	UG/M3	1YR.	N
PA-PHIL.	0.1200	UG/M3	1YR.	N
RI	0.0900	NG/M3	ANNUAL	Y

* COMMENTS MAY BE VIEWED BY SELECTING REPORT 3.
PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 11 MENU

Figure 9. Example Data Screen Showing Acceptable Ambient Concentrations, Units, and Averaging Times for a Selected Pollutant.

REPORT 11. ACCEPTABLE AMBIENT CONCENTRATION GUIDELINES OR STANDARDS
BY POLLUTANT

POLLUTANT: CHROMIUM

CAS #: 7440-47-3

AGENCY	OEL	SOURCES			UNCERTAINTY FACTOR	OTHER BASES			OTHER COMMENTS *
	BASED	ACGIH	OSHA	NIOSH		RES	ADOPT	OTHER	
<hr/>									
CA-MONT.					0.0000				N
CT	Y	Y	Y	Y	200.0000	N	N	N	Y
MA	N	N	N	N	0.0000	N	N	N	Y
MT	N	N	N	N	128.0000	N	N	Y	Y
MT	N	N	N	N	714.0000	N	N	Y	Y
NC	Y	Y	N	N	0.0000	N	N	N	N
NV	Y	Y	N	N	42.0000	N	N	N	N
NY	N	N	N	N	0.0000	N	N	Y	N
PA-PHIL.	Y	N	N	N	420.0000	N	N	N	N
RI	N	N	N	N	0.0000	N	N	Y	Y

* COMMENTS MAY BE VIEWED BY SELECTING REPORT 3.
PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 11 MENU

Figure 10. Example Data Screen Showing Acceptable Ambient Concentration Bases, Sources, and Uncertainty Factors for a Selected Pollutant.

Any blanks in this information may indicate that an agency has established a guideline or standard for the selected pollutant but did not provide information on the bases for the guideline or standard.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 11 menu by entering an "E".

Report 12 - Pollutant Research Data by Pollutant

When you select Report 12 either from the POLLUTANT REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 12 will appear. The menu gives you the same three numbered options as does the menu for Report 11:

- (0) Return to Main Reports Menu;
- (1) Select Pollutant by Name; and
- (2) Select Pollutant by CAS Number.

Enter the number which corresponds to the option you wish to select.

If you select Option (1) or Option (2) you will be prompted to designate either a pollutant name or a CAS number, respectively, as described above (see instructions under the heading "Selecting A Pollutant"). After you designate a pollutant either by pollutant name or by CAS number, a data screen will appear which repeats the pollutant name and CAS number and lists agencies which have conducted research on this pollutant, the type of research, whether or not the research is documented in a report, and whether or not the agency has submitted comments on their pollutant research activities. Comments can be viewed by accessing Report 4: Pollutant Research Data by Agency. Figure 11 shows an example of this data screen for 2,3,7,8-Tetrachlorodibenzodioxin.

The type of research is indicated by two-letter acronyms and/or by a five-character field for other. Due to space limitations, the acronyms are not defined on the screen. They are:

REPORT 12. POLLUTANT RESEARCH DATA BY POLLUTANT

POLLUTANT: TETRACHLORODIBENZODIOXIN,2,3,7,8-,P- CAS #: 1746-01-6

AGENCY	RESEARCH TYPE						DOC?	COMMENTS *
	HA	SA	EA	TT	ES	MS		
CA		EA		RA		Y	N	
CT		HA		RA	RM	Y	Y	
IN-INNAP		SA		EF	RA	Y	N	

* COMMENTS MAY BE VIEWED BY SELECTING REPORT 4.
PRESS <R> TO CONTINUE OR 'E' TO SELECT ANOTHER POLLUTANT

Figure 11. Example Data Screen Showing Pollutant Research Data for a Selected Pollutant.

HA	Health Assessment	ES	Epidemiological Study
SA	Source Assessment	MS	Monitoring Study
EA	Exposure Assessment	EF	Emission Factor Development
TT	Toxicity Testing	RA	Risk Assessment

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN KEY or you can exit to the Report 12 menu by entering an "E".

SOURCE REPORTS

Source-specific information submitted to the data base by State and local agencies (except bibliographic citations and ongoing research) is available using reports in the SOURCE INFORMATION category. Each report in this group retrieves certain source-specific State and local agency data for SIC Codes specified by the user. If you wish to retrieve all available information from State and local agencies about a certain category of sources, use this group of reports. Available reports include:

1. Report 16 - Standard Industrial Classification (SIC) Code Descriptions;
2. Report 17 - Permitting Information by SIC Code; and
3. Report 18 - Source Testing Information by SIC Code.

Selecting a Source Category

When using this group of report programs you will need to designate a category of sources about which you wish to retrieve information. Source-specific information is indexed in the data base by SIC Code. The SIC Code was developed by the Federal government (U.S. Department of Commerce) for use in the classification of establishments by type of activity in which they are engaged. The classification is structured on a hierarchical two-digit, three-digit, and four-digit industry code basis, according to the level of industry detail. The two-digit number stands for the major industrial group (e.g., primary metal industries), the three-digit number for the group (e.g., primary non-ferrous metals), and the four-digit number for the industry (e.g., primary aluminum). Therefore, a four-digit number defines a category of sources more narrowly than does a three-digit or a two-digit number. Appendix E provides a complete list of SIC codes and industry descriptions.

You may access the source-specific information in the data base by entering a two-digit, three-digit, or a four-digit SIC Code. If you designate a two-digit SIC Code (e.g., 28), the computer will search for information indexed by that two-digit number, as well as three-digit and four-digit numbers (e.g., 281 and 2824) in the same group. If you designate a four-digit SIC Code, the computer will search only for information indexed by that four-digit number.

When you execute a report program from this group to select source-specific information by SIC Code, you will see the prompt:

ENTER 2-, 3-, OR 4-DIGIT SIC CODE (OR <R> TO EXIT):

- In the space provided, type in the SIC Code which best represents the industry group about which you wish to retrieve information. Consult Appendix E to determine the appropriate SIC Code. Strike the RETURN key.

If the computer finds information in the data base about the source category you selected, a data screen will appear showing the information. If the computer finds no information in the data base about the source category you selected, a message will appear on the top of your screen which informs you that no record was found. You may want to execute the search again using the SIC Code of a larger or similar group of sources.

Example Reports

Step-by-step instructions are provided for the following report:

- Report 18 - Source Testing Information by SIC Code.

When you are familiar with this report program you should have no problem executing the other report programs in this group.

Report 18 - Source Testing Information by SIC Code

When you select Report 18 either from the SOURCE REPORTS menu or directly from the REPORT SELECTION menu, a menu screen for Report 18 will appear. The menu gives you three numbered options:

- (0) Return to Main Reports Menu;
- (1) View List of Source Tests for a Specific SIC Code; and
- (2) View Source Test Information via Access # From (1).

Enter the number which corresponds to the option you wish to select.

Note that the access number mentioned in Option (2) is a unique number assigned by the data base to each source test. To obtain an access number you must execute Option (1) to view a list of tested facilities and selected information about the source tests, including the internally-generated access number. If you wish to obtain a more complete description of any particular source test, use the access number and execute Option (2).

If you select Option (1) you will be prompted to enter a two-, three-, or four-digit SIC Code as described above (see instructions under the heading "Selecting a Source Category"). After you designate an SIC Code, a screen will appear which repeats the SIC Code and lists agencies which have conducted source tests on facilities in the SIC category selected. The screen also provides the four-digit SIC Code of the tested facility, the facility category, whether or not the source test is notable (not routine), and the access number. Figure 12 shows an example of this screen from the data base for SIC 4953 (refuse systems).

If the list continues to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 18 menu by entering an "E". Remember to make note of access numbers of interest. You need to use the access number to retrieve a more complete description of a specific source test under Option (2).

If you select Option (2) from the Report 18 menu to view source test information via the access number, you will be prompted to enter a five-digit access number. After you type in an access number in the space provided and strike the RETURN key, a screen will appear which reports the access number and provides detailed information about the source test. Information provided on this screen includes the agency name, source test contact and telephone number, facility category, four-digit SIC Code, test date, test ID number, sampling technique, analytical method, whether or not the test is notable (not routine) and narrative comments. Figure 13 shows an example of this screen from the data base for access number 73665, a source test conducted by the California Air Resources Board.

REPORT 18.

TESTED SOURCES

SIC: 4953

NOTABLE	AGENCY	SIC	FACILITY CATEGORY	ACCESS
	AL	4953	MUNICIPAL INCINERATOR	99789
Y	CA	4953	EMISSIONS FROM FLARE USED FOR COMBUSTION	73665
Y	CA	4953	EMISSION FROM GAS TURBINE FUELED WITH GA	73664
Y	CA	4953	EMISSIONS FROM FLARE USED FOR COMBUSTION	73663
	CA-SCAQMD	4953	HAZARDOUS WASTE MANAGEMENT FACILITY	99848
	CA-SCAQMD	4953	HAZARDOUS WASTE MANAGEMENT FACILITY	99847
	CA-SCAQMD	4953	FLUID TREATMENT PLANT	99844
	CA-SCAQMD	4953	TREATMENT OF NON-HAZARDOUS LIQUID WASTES	99822
Y	MN	4953	3 M CHEMOLITE INCINERATOR	99792
Y	OK-TULSA	4953	MUNICIPAL TRASH INCINERATOR	73718
	OR	4953	MUNICIPAL SOLID WASTE INCINERATION	99862
	OR	4953		98995

NOTE ACCESS #'S OF INTEREST.

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 18 MENU

Figure 12. Example Data Screen Listing Source Tests for a Selected SIC Code.

REPORT 18.

SOURCE TEST DESCRIPTION

ACCESS #: 73665

STATE: CA AGENCY: CA AIR RESOURCES BOARD
SOURCE TEST CONTACT: DEAN SIMEROOTH

PHONE: (916)-445-0657

FACILITY CATEGORY: EMISSIONS FROM FLARE USED FOR COMBUSTION OF GASES
FROM SANITARY.

4-DIGIT SIC CODE: 4953

TEST DATE: 07/01/86 NOTABLE: Y

TEST ID #: ARB/SS/87-09

SAMPLING TECHNIQUE: MODIFIED METHOD 5 (SEMI-VOLATILE ORGANICS)

ANALYTICAL METHOD: GC/MS (SEMI-VOLATILE ORGANICS)_(SEE COMMENT)

OTHER COMMENTS: SAMPLING TECHNIQUE FOR VOLATILE ORGANICS: GRAB
WITH BAG.

ANALYTICAL METHODS FOR VOLATILE ORGANICS: GC/FID
AND GC/ECD.

FOR CHLOROETHENE(VINYL CHLORIDE) NO EMISSION
RATES DETECTED.

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 18 MENU _

Figure 13. Example Data Screen Describing a Selected Source Test.

You can proceed to a second screen of information if you strike the RETURN key or you can exit to the Report 18 menu if you enter "E". The second screen of information lists pollutants measured, CAS numbers, measured emission rates and units, SCCs, and location of the measurement. Figure 14 shows an example of this screen from the data base for the same access number (73665). The field for emission rate is a numeric field which the data base automatically prefills with 0.0000. Therefore an emission rate of 0.0000 may not necessarily mean 0. It may mean that the rate was not submitted or that the rate is less than 0.0001 (1/10,000). For example, a rate of 0.00005 would register in the data base as 0.0000.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 18 menu by entering an "E".

REPORT 18.

SOURCE TEST DESCRIPTION

STATE: CA AGENCY: CA AIR RESOURCES BOARD

TEST ID #: ARB/SS/87-09

POLLUTANT	CAS#	EM RATE	UNIT	SCC	LOCATION
BENZENE	71-43-2	0.0028	LB/HR	4-90-900	FLARE EXHAUST STA
CARBON TETRACHLORIDE	56-23-5	0.0000	LB/HR	UNKNOWN	FLARE EXHAUST STA
DIOXINS	CL-DIOXIN	0.0000	LB/HR	UNKNOWN	FLARE EXHAUST STA
TOLUENE	108-88-3	0.0009	LB/HR	UNKNOWN	FLARE EXHAUST STA
TRICHLOROETHANE, 1,1,	71-55-6	0.0001	LB/HR	UNKNOWN	FLARE EXHAUST STA
VINYL CHLORIDE	75-01-4	0.0040	LB/HR	UNKNOWN	FLARE EXHAUST STA

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 18 MENU

Figure 14. Example Data Screen Showing Pollutant-Specific Information for a Selected Source Test.

BIBLIOGRAPHIC CITATIONS AND ONGOING RESEARCH

References to published documents and ongoing research and regulatory development projects in the area of air toxics provided by State and local agencies, EPA, and other Federal and International organizations can be retrieved using one report:

Report 19 - Bibliographic Citations and Ongoing Research.

The report allows you to search for relevant references using a combination of search criteria, including pollutant name, CAS number, SIC Code, reference type, and/or sponsor. You can also retrieve citations and abstracts to a specific document or project if you know its document number. Step-by-step instructions for Report 19 follow.

When you select Report 19 either from the BIBLIOGRAPHIC CITATIONS AND ONGOING RESEARCH menu or directly from the REPORT SELECTION menu, a menu screen for Report 19 will appear. The menu screen gives you the option to select:

- (1) Report by Keyword, or
- (2) Report by Document Number.

It also allows you to return to the parent menu (by striking the RETURN key), quit reports and end session (by entering "QU"), or to return to the HOME menu (by entering HO).

If you select Option (1), a screen will appear which allows you to designate search criteria. Figure 15 shows this screen on which SIC Code 49 (Electric, Gas, and Sanitary Services) and reference type SA (Source Assessment) have been entered.

Use the TAB key to move from field to field and enter search criteria according to the focus of your search. You can designate either a pollutant name or CAS number, an SIC Code, a reference type, and a sponsor acronym. If you do not wish to restrict your search for a particular search criteria, leave the field blank or enter "ALL". Appendix D lists Clearinghouse identifiers for chemical groups which can be used in place of CAS numbers. Appendix E provides a complete list of SIC Codes and industry descriptions.

REPORT 19. BIBLIOGRAPHIC CITATIONS and ONGOING RESEARCH PROJECTS MENU

Restrict citations reported by filling in blanks. Include citations with all keywords of the indicated type by leaving blank or entering 'ALL'

POLLUTANT NAME:

CAS#:

SIC CODE: 49 (2, 3, or 4 digits)

REFERENCE TYPE: SA (abbreviation OR '?' <R> for prompt)

SPONSOR ACRONYM: (abbreviation OR '?' <R> for prompt)

ENTER: QU (QUIT session) PA (display PARENT menu)
HO (display HOME menu) CO (CONTINUE)

SELECTION: CO

Figure 15. Example Search Criteria Screen for the Bibliographic Citations and Ongoing Research Report.

For information on available reference types and/or sponsor acronyms, enter a "?" in the appropriate field. If you enter a "?" in the field for reference type, a prompt screen will appear which displays all available reference types and their acronyms. It allows you to select a reference type directly from the list by entering the acronym or to include all reference types in the report (by entering "ALL"). You will then return to the search criteria screen to continue designating search criteria. If you enter a "?" in the field for sponsor acronym, a similar prompt screen will appear which displays available sponsors and their acronyms and gives you the same choices discussed above for the reference type prompt screen. Table 5 lists reference types and sponsors currently available.

When you are finished designating search criteria, the menu gives you the following options:

QU to quit session;
HO to display the HOME menu;
PA to display the parent menu; or
CO to continue.

The cursor must be in the selection field to make any of these choices. The selection field is prefilled with "CO" (to continue) as the default action. If you wish to continue you only need to strike the RETURN key.

If you continue, a summary screen will appear which lists the search criteria you designated and reports the number of bibliographic citations found and the number of ongoing research projects found. Figure 16 shows an example of this screen from the data base with the same search criteria designated: SIC 49 (Electric Gas, and Sanitary Services) and reference type SA (Source Assessment). It shows that 16 bibliographic citations and 13 ongoing research projects were found. Your options at this point are to enter:

CI to view bibliographic citations only;
OR to view ongoing research projects only;
BO to view both bibliographic citations and ongoing research projects;
PA to display the parent menu;
HO to display the HOME menu; and
QU to quit the session.

TABLE 5. REFERENCE TYPES AND SPONSORS

<u>REFERENCE TYPES</u>	
AM	Ambient Monitoring
CHIP	Chemical Hazard Information Profile
CS	Case Study
CT	Control Technology Document
DM	Dispersion Modeling
EA	Exposure Assessment
EF	Emission Factor Development
ER	Emergency Response
ES	Epidemiological Study
FR	<u>Federal Register</u> Notice
HA	Health Assessment
IA	Indoor Air
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standard
OT	Other
PD	Support Document for Air Toxics Program Development
PRA	Pre-Regulatory Assessment
RA	Risk Assessment
RDG	Regulatory Development Guide
RR	Regulations or Rules
SA	Source Assessment
SS	Source Sampling
TT	Toxicity Testing

<u>SPONSORS</u>	
EPA	Environmental Protection Agency
IARC	International Agency for Research on Cancer
NAS	National Academy of Sciences
NCI	National Cancer Institute
NIEHS	National Institute of Environmental Health Sciences
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
STATE/LOC	State or Local Agency
WHO	World Health Organization

REPORT 19. BIBLIOGRAPHIC CITATIONS and ONGOING RESEARCH PROJECTS SUMMARY

SEARCH CRITERIA:

POLLUTANT NAME:

CAS #:

SIC CODE: 49

REFERENCE TYPE: SA

SPONSOR ACRONYM:

RESULTS:

BIBLIOGRAPHIC CITATIONS: 16

ONGOING RESEARCH PROJECTS: 13

ENTER: CI (view bibliographic Citations only)

OR (view Ongoing Research projects only)

BO (view BOth bibliographic citations and ongoing research projects)

PA (display PArent menu) HQ (display HQme menu)

QU (QUIT the session)

SELECTION: BO

Figure 16. Example Summary Screen for the Bibliographic Citations and Ongoing Research Report.

The system prefills the selection field with "BO", "CI", "OR", or "PA", depending on whether it finds both bibliographic citations and ongoing research projects, only bibliographic citations, only research projects, or neither.

If you choose to scroll through the bibliographic citations, the research projects, or both, on every screen you have the option to continue to the next screen (by entering "CO"), quit the session (by entering "QU"), return to the HOME menu (by entering HO), or return to the parent menu (by entering "PA"). Figures 17 and 18 show an example bibliographic citation and abstract from the data base found using the search criteria designated on the screen in Figure 16. Figure 19 shows an example ongoing research project description found in the same group. The bibliographic citation and the ongoing research project description can extend to more than one screen depending on the number of keywords that reference the document or project.

You can also retrieve a specific citation/abstract or ongoing research description if you know the document or project number which references the document or project in the data base. The document number is usually the number assigned by the National Technical Information Service (NTIS) if published by NTIS or the number assigned by the sponsoring agency.

To select by document number, go to Option (2) from the Report 19 menu (Report by Document Number). After you execute this option, a prompt will appear which directs you to enter a document number (or strike the RETURN key). To retrieve a citation/abstract or ongoing research description you must enter the document/research number exactly as it appears in the data base (including dashes, spaces, and other characters). For this reason, this option is useful only if you have an exact reference to a document or research number and wish to view a citation and abstract or research description for that document or research project.

REPORT 19. BIBLIOGRAPHIC CITATION FOR: PB80-219421

Environmental Assessment of a Waste-to-Energy Process: Braintree
Municipal Incinerator
EPA, Cincinnati, OH, IERL
Midwest Research Institute
M. Golembiewski, et al.
Aug 80, 230p, EPA-600/7-80-149, PC A11/MF A01

Keywords that reference this project are:

CL-PM	PARTICULATE MATTER
CL-POM	POLYCYCLIC ORGANIC MATTER
EPA	ENVIRONMENTAL PROTECTION AGENCY
SA	SOURCE ASSESSMENT
10024-97-2	NITROUS OXIDE
11097-69-1	AROCLOR 1254
1336-36-3	POLYCHLORINATED BIPHENYLS
49	ELECTRIC, GAS, AND SANITARY SERVICES

ENTER: 'QUIT', 'HOME', 'PARENT', 'ABSTRACT', 'CONTINUE' CO

Figure 17. Example Data Screen Showing a Bibliographic Citation for a Published Document.

REPORT 19. BIBLIOGRAPHIC CITATION FOR REF: PB80-219421

Abstract: Midwest Research Institute conducted an array of field tests at the Braintree Municipal Incinerator facility in Braintree, Massachusetts for the purpose of providing data on multimedia emissions to help determine adverse environmental impact and pollution control technology needs. There are two incinerators at the Braintree facility: both are of the waterwall type and are designed to burn unprocessed mixed municipal refuse at a rate of 120 tons/day each. Air pollution control is provided by electrostatic precipitators. Primary emphasis was placed on evaluating air emissions. Analyses were carried out for criteria pollutants as well as for potentially hazardous compounds such as polychlorinated biphenyls and polycyclic aromatic hydrocarbons. The Environmental Protection Agency-designed Source Assessment Sampling System train was also used as per the Environmental Protection Agency's Level 1 environmental assessment protocol. The data obtained were used to evaluate emissions in each effluent stream on the basis of existing standards or criteria and also through the use of the Environmental Protection Agency's recently devised Source Analysis Model (SAM-1A).

ENTER: 'QUIT', 'HOME', 'PARENT', 'CONTINUE' CO

Figure 18. Example Data Screen Showing an Abstract for a Published Document.

REPORT 19. ONGOING RESEARCH FOR: CL-BIB-0055

TITLE: Potential for Air Releases From CERCLA Sites
STATUS: Started 7/85; Complete 6/87
CONTACT: DERR/HSC, S. Caldwell (202) 382-4485
CAS NO: CL-HAZWAST
CHEMICAL: HAZARDOUS WASTES
SOURCE: Hazardous Waste Facilities, Spills, Etc.

Keywords that reference this project are:

CL-HAZWAST HAZARDOUS WASTES
EPA ENVIRONMENTAL PROTECTION AGENCY
SA SOURCE ASSESSMENT
49 ELECTRIC, GAS, AND SANITARY SERVICES
495 SANITARY SERVICES

ENTER: 'QUIT', 'HOne', 'PArent', 'COninue' CO

Figure 19. Example Data Screen Showing a Description of an Ongoing Research Project.

RISK ANALYSIS REPORTS

Selected EPA risk analysis results can be retrieved using one report:

Report 21 - Selected EPA Risk Analysis Information.

The report allows you to search for EPA risk data by pollutant, by SIC Code, or by State.

The EPA performs dispersion modeling of emission sources of air toxics in support of decisions on the need to regulate these sources under the Clean Air Act (CAA). A tiered modeling approach is used wherein EPA first makes a rough estimation of population risks resulting from ambient air exposure to the pollutants under evaluation. Following the publication of a regulatory decision (e.g., "intent to list" notice), a more thorough examination of specific sources is conducted in deciding whether to actually list the pollutant and subsequently propose Federal regulations (e.g., national emissions standard for hazardous air pollutants (NESHAP)). This includes verification of emissions, plant site, plant parameters and habitability of the area surrounding high risk facilities.

This report program presents selected EPA risk analysis results. Risk analysis procedures are performed by EPA for known or suspected carcinogens, as well as for chemicals not believed to be carcinogenic. This information is provided in response to requests by State and local agencies for ready access to EPA risk assessment information. Additional source-specific information may be found in the public dockets for the individual pollutants.

The quantitative cancer risk estimates are produced by combining the unit cancer risk factor with estimates of population exposure. The cancer risk results are presented as the predicted lifetime cancer incidence expressed as cancer cases per year (annual incidence), and as the lifetime cancer risk for individuals continuously exposed for 70 years to the highest predicted annual concentrations (maximum individual risk) expressed as the probability of getting cancer in one's lifetime.

There are many sources of uncertainty inherent in risk estimation that impact the confidence that can be placed upon the estimates. These include uncertainties resulting from the derivation of the unit cancer risk factor and the assumptions incorporated into the exposure analysis procedures. Note that the risk estimates are subject to change as new information is obtained. In general, risk estimates provide a relative, not absolute, index to the extent of potential risk between facilities and/or source types. The estimates should be regarded as, at best, a rough estimate of the actual risk to exposed populations and should not be used alone as a basis for regulatory decision making. For further information on the risk estimation procedure or an interpretation of the results contact the Clearing-house staff at (919) 541-0850, FTS 629-0850. Step-by-step instructions for Report 21 follow.

When you select Report 21 either from the SELECTED EPA RISK ANALYSIS INFORMATION menu or directly from the REPORT SELECTION menu, you will come to the first of two screens of information about the risk analysis process. Review the information for an understanding of the derivation and meaning of the risk analysis data and proceed to the menu screen for Report 21 by striking the RETURN KEY. The menu screen gives you four numbered options:

- (0) Return to Main Reports Menu;
- (1) View by Pollutant;
- (2) View by SIC Code; and
- (3) View by State.

Enter the number which corresponds to the option you wish to select.

If you select Option (1), a prompt will appear which gives you the option to select a pollutant by pollutant name or by CAS number. The procedure to select a pollutant is the same as the procedure described above for reports in the POLLUTANT INFORMATION category. (See instructions under the heading "Selecting a Pollutant" in the subsection on Pollutant Reports). After you designate a pollutant either by pollutant name or by CAS number, a data screen will appear which repeats the pollutant name and CAS number, shows the EPA unit cancer risk factor for the pollutant, and provides risk data for sources of the selected pollutant for which EPA has developed pollutant-specific risk estimates. Information on the screen

includes plant name; SIC Code; city or county and State; total emissions in kg/yr; predicted maximum concentration in ug/m³; maximum individual cancer risk for individuals continuously exposed for 70 years to the highest predicted annual concentrations, expressed as the probability of getting cancer in one's lifetime (maximum individual risk); the predicted lifetime cancer incidence, expressed as cancer cases per year (annual incidence); date of estimate; and whether or not the location and/or other input parameters are unverified. Figure 20 shows an example of this data screen for 1,3-Butadiene.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 21 menu by entering an "E".

If you select Option (2) from the menu screen to view by SIC Code, you will retrieve similar risk data sorted by source category. A prompt will appear which directs you to enter a two-, three-, or four-digit SIC Code. The procedure to select a source category is the same as the procedure described above for reports in the SOURCE INFORMATION category. (See instructions under the heading "Selecting a Source Category" in the subsection on Source Reports). After you designate a source category by SIC Code, a data screen will appear which reports the SIC Code and industry category description, and provides risk data for sources in the SIC classification selected for which EPA has developed pollutant-specific risk estimates. Information on the screen includes pollutant, plant name, city or county and State, total emissions in kg/yr, predicted maximum concentration in ug/m³, maximum individual risk, annual incidence, date of estimate, and whether or not the location and/or other input parameters are unverified. Figure 21 shows an example of this data screen for SIC 283 (Drugs).

Since the space available on the screen for pollutant name is limited to 10 characters, the pollutant name may be truncated. For this reason you have the option to view the CAS number and full name of any pollutant on the screen. To execute this option, enter the number to the left of the pollutant in the space provided and strike the RETURN key. The CAS # and full pollutant name will appear. On the screen shown in Figure 21, the number "8" was entered at the cursor location (next to the INDEX prompt) to reveal the CAS number (75-09-2) and full pollutant

REPORT 21. SELECTED PRELIMINARY EPA RISK INFORMATION

POLLUTANT: BUTADIENE,1,3-

CAS #: 106-99-0

UNIT RISK: 0.0002800

SIC	PLANT NAME	CITY OR COUNTY	ST	TOTAL EM KG/YR	MAX CONC UG/M3	MAX INDIV RISK	ANNUAL INCID	DATE MM/YY	R
28	GEN CORP.	OODESSA	TX	49020	6.1E+01	2E-02	0.1618	05/86	
28	B.F. GOODRI	PORT NECHES	TX	109400	1.3E+02	4E-02	0.1790	05/86	
28	GOODYEAR	HOUSTON	TX	152400	1.9E+02	5E-02	2.1850	05/86	
28	UNIROYAL	PORT NECHES	TX	101300	1.4E+02	4E-02	0.1700	05/86	
28	BORG-WARNER	WASHINGTON	WV	399500	2.4E+02	7E-02	0.5700	05/86	
28	DOW	DALTON	GA	297700	1.9E+02	5E-02	0.3080	05/86	
28	DOW	FREEPORT	TX	22909	1.1E+00	3E-04	0.0122	05/86	
28	DOW	GALES FERRY	CT	16900	1.6E+01	5E-03	0.0590	05/86	
28	DOW	MIDLAND	MI	48520	2.0E+01	6E-03	0.0860	05/86	
28	DOW	PITTSBURG	CA	12600	2.5E+00	7E-04	0.0360	05/86	
28	GEN CORP.	MOGADORE	OH	51770	3.9E+01	1E-02	0.1416	05/86	

* LOCATION AND/OR OTHER INPUT PARAMETERS FOR THIS SOURCE ARE UNVERIFIED
PRESS <R> TO CONTINUE OR 'E' TO EXIT TO REPORT 21 MENU

Figure 20. Example Data Screen Showing EPA Risk Analysis Information for a Selected Pollutant.

REPORT 21. SELECTED PRELIMINARY EPA RISK INFORMATION

SIC CODE: 283

DESCRIPTION: DRUGS

POLLUTANT	PLANT NAME	CITY OR COUNTY	ST	TOTAL	MAX	ANNUAL	DATE	Q
				EM KG/YR	IND RISK			
1 CARBON TETRA	ABBOTT LABS NORTH CHIC	IL	218	4E-06	0.0001	07/86		
2 CHLOROFORM	HOFFMAN LaR	NUTLEY	NJ	30717	5E-04	0.0040	07/86	
3 CHLOROFORM	HOFFMAN LaR	BELVIDERE	NJ	236201	2E-03	0.0420	07/86	
4 CHLOROFORM	MERCK	RAHWAY	NJ	43844	6E-04	0.0920	07/86	
5 CHLOROFORM	SCHERING CO	UNION	NJ	6423	2E-04	0.0210	07/86	
6 ETHYLENE DIC	BEECHAM	PISCATAWAY	NJ	2006	2E-05	0.0026	07/86	
7 ETHYLENE DIC	MERCK	RAHWAY	NJ	136	1E-06	0.0003	07/86	
8 METHYLENE CH	ABBOTT LABS NORTH CHIC	IL	17502	1E-05	0.0019	07/86		
9 METHYLENE CH	ABBOTT LABS NORTH CHIC	IL	8862	4E-05	0.0011	07/86		

* LOCATION AND/OR OTHER INPUT PARAMETERS FOR THIS SOURCE ARE UNVERIFIED

To view CAS # and full name of a pollutant above

enter number from list above or <R> to continue

INDEX 8 CAS #: 75-09-2 NAME: METHYLENE CHLORIDE

Figure 21. Example Data Screen Showing EPA Risk Analysis Information for a Selected SIC Code.

name (methylene chloride). You can repeat this procedure as many times as necessary.

If the list continues on to another screen, as always you can proceed to the next screen by striking the RETURN key or you can exit to the Report 21 menu by entering an "E".

If you select Option (3) from the menu screen to view by State, you again will retrieve similar risk data sorted by State. A prompt will appear which directs you to enter a two-letter State abbreviation. After you enter a two-letter State abbreviation, a data screen will appear which repeats the State and provides risk data for sources located in the State selected for which EPA has developed pollutant-specific risk estimates. The data again include pollutant, plant name, city or county, SIC Code, total emissions in kg/yr, predicted maximum concentration in ug/m³, maximum individual risk, annual incidence, date of estimate, and whether or not the location and/or other input parameters are unverified. As before, you have the option to view the CAS number and full name of any pollutant on the screen.

Figure 22 shows an example of this data screen for the State of Georgia.

Again, if the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Report 21 menu by entering an "E".

REPORT 21. SELECTED PRELIMINARY EPA RISK INFORMATION

STATE: GA

	POLLUTANT	PLANT NAME	CITY OR COUNTY	SIC	EM KG/YR	IND RISK	TOTAL ANNUAL INCID	MAX MM/YY A
1	BUTADIENE, DOW	DALTON	28		297700	5E-02	0.3080	05/86
2	BUTADIENE, GOODYEAR	CALHOUN	28		43915	2E-02	0.0570	05/86
3	BUTADIENE, REICHHOLD	KENSINGTON	28		285300	8E-02	0.4880	05/86
4	CADMIUM CHLORIDE ME	COLUMBUS	33		0	8E-07	0.0001	06/87 *
5	CADMIUM NATIONAL SM	ATLANTA	33		0	1E-06	0.0002	06/87 *
6	CADMIUM NATIONAL SM	PEDRICKTOW	33		0	3E-06	0.0008	06/87 *
7	CADMIUM TARACORP	ATLANTA	33		0	2E-06	0.0006	06/87 *
8	CARBON TET DOW Chemicals	Dalton	28		2783	8E-05	0.0002	05/86 *
9	CHLOROFORM CONTINENTAL	AUGUSTA	26		65919	2E-03	0.0021	04/86 *

* LOCATION AND/OR OTHER INPUT PARAMETERS FOR THIS SOURCE ARE UNVERIFIED
To view CAS # and full name of a pollutant above
enter number from list above or <R> to continue

INDEX CAS #: NAME:

Figure 22. Example Data Screen Showing EPA Risk Analysis Information for a Selected State.

PERMITTING INFORMATION REPORTS

Selected subsets of State and local agency permitting information can be retrieved using one report:

Report 22 Permitting Information Report.

This report allows you to search for permitting information using a combination of search criteria, including CAS number, pollutant name, SIC Code, and year permit was issued/last amended. You can also retrieve descriptions of specific permits by entering an access number, as described for Report 18 Source Testing Information by SIC Code, in the subsection on SOURCE REPORTS.

This report retrieves the same information as does Report 7 Permitting Information by Agency, Report 13 Permitting Information By Pollutant, and Report 17 Permitting Information By SIC Code, with the exception that Report 7 also displays whether or not the agency renews permits, and if so, the frequency of renewal. However, Report 22 is more flexible because you can designate more than one search criterion. Use this report if the focus of your search involves more than one search criterion. Step-by-step instructions for Report 22 follow.

When you select Report 22 from the PERMITTING INFORMATION REPORTS menu, a Search Criteria menu will appear. It allows you to enter an access number or search criteria. Use the access number to view a detailed permit description for a specific permit only after you have reviewed permitting information using search criteria and noted access numbers for permits about which you would like more information.

To specify search criteria, use the TAB to move the cursor to the search criterion of choice. If you would like to search by pollutant, enter either a CAS number or a pollutant name, but not both. You can designate only one pollutant at a time. Instructions for selecting a pollutant are given in the subsection on POLLUTANT REPORTS under the heading "Selecting a Pollutant".

If you would like to search by source category, enter the appropriate SIC Code in the space provided. For a discussion about SIC Codes, go to the subsection on SOURCE REPORTS under the heading "Selecting a Source Category." Consult Appendix E for a complete listing of SIC Codes and industry descriptions.

If you would like to search by the year the permit was issued/last amended, enter a four-digit year (e.g., 1983). The computer will search the permitting information files for permits issued or amended during the year you designate or later.

When you are finished designating search criteria, the menu gives you the following options:

CO to Continue; and
PA to return to the parent menu.

The selection field is pre-filled with "CO" (to continue) as the default action. If you wish to continue with the search, you only need to strike the RETURN key. If you decide to suspend the search you can TAB down to the selection field, enter "PA" and strike the RETURN key to return to the parent menu.

If you continue, the next screen you see lists the search criteria you designated, specifies the number of permits which satisfy the search criteria, and gives you the option to modify the search criteria. Figure 23 shows an example of this screen with several search criteria designated: arsenic, SIC 2879 (Agricultural Chemicals, NEC), and 1974. It also shows that 3 permits were found which satisfy these search criteria. The listed options include:

CO to continue viewing permits;
MO to modify search criteria; and
PA to return to parent menu.

Again the selection field is pre-filled with "CO" (to continue). If you wish to view the permitting information selected based on the search criteria you designated, you only need to strike the RETURN key. If, however, the search identi-

PERMITTING INFORMATION
SEARCH CRITERIA MENU

Use TAB key to move cursor

ENTER ACCESS ID: _____

OR

SEARCH CRITERIA:

CAS: 7440-38-2

POLLUTANT NAME: ARSENIC

4-DIGIT SIC CODE: 2879

>=YEAR ISSUED/LAST AMENDED: 1984

ENTER: 'CO' to COninue viewing permits
'MO' to MOdify search criteria
'PA' to return to PARENT menu

SELECTION: CO

The number of permits satisfying the search criteria is 3

Figure 23. Example Search Criteria Screen for the Permitting Information Report.

fied a large number of permits, you may wish to modify the search criteria. You can do this by entering MO (to modify the search criteria) and striking the RETURN key. You can now use the TAB key to move up and down the search criteria fields. Add, delete (using the SPACE bar), or modify (by overtyping) the search criteria until you are satisfied. Then you can strike the RETURN key to execute the default selection of "CO" (to continue). Again, you can alternately TAB to the selection field and enter "PA" to suspend the search and return to the parent menu.

If you continue, a data screen will appear which displays the search criteria you designated and provides information on permits which satisfy the search criteria. Information includes the facility category, SIC Code, SCC, pollutant, agency, year the permit was issued/last amended, emission limits and units, whether or not permit is notable (not routine), and access number. The exact format of the information on the screen will depend on the search criteria you designate. For example, if you designate a pollutant as a search criteria, the pollutant name and CAS number will appear at the top of the screen and not in the body of the information table. However, if you do not designate a pollutant as a search criteria, the pollutant name and CAS number will necessarily occupy a column in the information table. Figure 24 shows an example of this data screen from the data base for the search criteria designated on the screen in Figure 23.

If the list continues on to another screen, you can proceed to the next screen by striking the RETURN key or you can exit to the Selection Criteria menu by entering an "E". Remember to make note of access numbers of interest. You can use the access number to retrieve a more complete description of a specific permit from the Selection Criteria menu.

If you enter an access number in the appropriate field on the Selection Criteria menu and strike the RETURN key, a screen will appear which repeats the access number and provides detailed information about the permit. Information on the screen includes the agency name, permitting contact and telephone number, facility category, SIC code, year permit was issued, last year amended, permit ID number, control equipment, whether or not the permit is notable (not routine), and narrative comments. Figure 25 shows an example of this screen from the data base, for access number 73807, a permit issued by the Georgia Department of Natural Resources, Air Protection Branch.

PERMITTING INFORMATION

CAS #: 7440-38-2 PRIMARY NAME: ARSENIC
SIC CODE: 2879 INDUSTRY: AGRICULTURAL CHEMICALS, NEC

NOTABLE FACILITY CATEGORY	SCC	AGENCY	YEAR	EMISSIONS	UNITS	ACCESS
Y CCA MIX PLANT	UNKNOWN	GA	1987	0.2300	GMS/HR	73807
ARSONATES UNIT CO	UNKNOWN	TX	1984	0.0218	TNS/YR	95618
Y CHEMICAL MANUFACT	3-01-033-99	WY	1987	0.0008	G/S	73722

NOTE ACCESS ID'S OF INTEREST.
ENTER <R> TO CONTINUE OR 'E' TO EXIT TO SELECTION CRITERIA MENU

Figure 24. Example Data Screen Showing Permitting Information for Selected Search Criteria.

PERMIT DESCRIPTION

STATE: GA AGENCY: GA DEPT. OF NATURAL RESOURCES, AIR PROTECTION BRANCH
PERMITTING CONTACT: JOHN W. MITCHELL PHONE: (404)-656-6900
ACCESS #: 73807
FACILITY CATEGORY: CCA MIX PLANT

4-DIGIT SIC CODE: 2879
YEAR PERMIT ISSUED: 1986
LATEST YEAR AMENDED: 1987
PERMIT ID #: 2879-092-9419 NOTABLE PERMIT? Y
CONTROL EQUIPMENT: VENTURI SCRUBBER

OTHER COMMENTS: 10 FOOT STACK, 24 HR/DAY
50 FOOT STACK, 50 HRS/WEEK

PRESS <R> TO VIEW POLLUTANTS OR 'E' TO EXIT TO SEARCH CRITERIA MENU _

Figure 25. Example Data Screen Describing a Selected Permit.

You can proceed to a second screen of information if you strike the RETURN key or you can exit to the Search Criteria menu if you enter "E". The second screen of information lists permitted pollutants, CAS numbers, emission limits and units, SCCs, and sources of emissions subject to the limit. Figure 26 shows an example of this screen from the data base for the same access number (73807). Remember that an emission limit of 0.0000 may not necessarily mean 0. It may mean that the limit was not submitted (the data base prefills numeric fields with 0.0000) or that the limit is less than 0.0001 (1/10,000). For example, a limit of 0.00005 would register in the data base as 0.0000.

If the list continues on to another screen, once again you can proceed to the next screen by striking the RETURN key or you can exit to the Search Criteria menu by entering an "E".

PERMIT DESCRIPTION - POLLUTANT LIST

STATE: GA AGENCY: GA DEPT. OF NATURAL RESOURCES, AIR PROTECTION BRANCH
PERMIT ID: 2879-092-9419

POLLUTANT	CAS#	EMISSIONS	UNIT	SOURCE	SCC CODE
ARSENIC AND COMPOUNDS	7440-38-2	0.2300	GMS/HR	CCA MIX TANK	UNKNOWN
CHROMATE, (CRO42-)	13907-45-4	0.0200	GMS/HR	CCA MIX TANK	UNKNOWN
CHROMIC ACID	7738-94-5	0.1700	GMS/HR	CCA MIX TANK	UNKNOWN
COPPER OXIDE, (CUO)	1317-38-0	10.0000	GMS/HR	CCA MIX TANK	UNKNOWN

PRESS <R> TO CONTINUE OR 'E' TO EXIT TO SEARCH CRITERIA MENU _

Figure 26. Example Data Screen Showing Pollutant-Specific Information for a Selected Permit.

APPENDIX A
IF YOU HAVE A PROBLEM

This appendix describes several common problems which you may encounter. If, after trying the solutions suggested here, a problem persists, contact:

1. EPA User's Support (919) 541-7862 or (800) 334-2405
(If the computer will not accept your password or User ID.)
2. EPA Telecommunications (919) 541-4506 or (800) 334-0741
(If you are unable to connect with the EPA computer or there is excess noise on the line.)
3. EPA Clearinghouse Staff (919) 541-0850 FTS 629-0850
John Vandenberg, Beth Hassett, or Nancy Riley
(If you see on-screen message such as "Security Violation Detected" or any problem not specified above.)

LOGGING ON

At times you may encounter difficulties logging onto the computer. Your computer and software package will have a procedure to move you back to a point at which you can redial. For example, with the Hays Smart Modem or a Hayes-compatible smart modem, you can follow these steps:

- Enter "+++".

When you see "OK" appear on the screen,

- Enter "ATH0" and "RETURN".

Now you can redial your TYMNET number.

SCREEN LOCKED

If you can't move your cursor, the screen has become locked. This might occur as a result of poor communications or because the computer cannot interpret what you have keyed in. To free the cursor:

- Enter "CTRL-R" (i.e., hold the "CTRL" key down and type "R").

When the screen is cleared, you can continue.

CURSOR OUTSIDE DEFINED FIELD

If the cursor moves outside of a defined selection field and becomes "locked":

- First press "CTRL-R" (i.e., hold the "CTRL" key down and type "R") to free the cursor; and
- Use the "TAB" or "REVERSE TAB" key to move the cursor back into an input field.

Now you can continue.

"GARBAGE" ON SCREEN

If random characters suddenly appear on your screen, it is probably caused by poor communications. To remove the "garbage" from the screen:

- Enter "CTRL-R" (i.e., hold the "CTRL" key down and type "R") to free the cursor.

You will now be able to proceed. However, if you are on a screen with a selection or other input field and there is "garbage" in an input field:

- Use the "TAB" key to move to the Selection prompt.
- Exit from the screen by following instructions of the prompt (you will need to enter "0" to return to the Report Selection menu, "E" to exit to a Report menu, "PA" to return to the Parent menu, or some other character(s) depending where you are in the data base. The prompts will guide you. After you exit from the screen you can proceed back to the same screen if you wish to continue.

If the problem persists, you may want to exit from the data base, logoff, and log back on. Your new connection may be improved.

BUMPED OUT OF THE DATABASE

If you are viewing data in the NATICH data base and suddenly see the HOME menu or the REPORT SELECTION menu, you have been bumped out of the data base. This might occur if you allow more than 10 minutes to elapse without transmitting a command. This phenomenon is referred to as "time-out" and occurs because there is a 10-minute limit to periods of inactivity imposed by the library in which the NATICH data base is housed.

If this occurs, you can simply proceed back to the screen from which you were bumped if you wish to continue. You can prevent a time-out if you do not allow a screen to "sit" for more than 10 minutes. If you need to study the data on the screen or would like a record of the data, you may be able to print the screen to a file which you can consult later with no time-out limitation, or to print a hard copy of the screen using a printer. If your computer and terminal emulator software package support this, they will have procedures to accomplish these functions. Consult your hardware and software manuals.

DISCONNECTED FROM THE EPA COMPUTER

If you are disconnected from the EPA computer, you will see a message saying "DISCONNECTED". You can reestablish your connection and return directly to the screen on the terminal when the disconnection occurred. You do not have to redial TYMNET and repeat the log on. The steps to proceed to reestablish the connection will vary depending on your computer and emulator package. Consult your hardware and software users manuals.

MENU CHOICE DOES NOT WORK

Many of the screens offer menu choices at the bottom of the page. These choices must be entered into the Selection field. Otherwise, the data base will display an error message.

APPENDIX B

KEYBOARD USAGE

The cursor is a small blinking square or underline character (_) that appears at the spot where you begin typing your response to a menu selection or entry field. It appears at different locations on different screens, depending on the format of a particular screen. When you communicate interactively with the NATICH data base, the movement of the cursor is limited to specified entry fields. The prompts on the screen guide you with menu selections and labeled fields. You will only need to type a limited number of keys.

The chart below describes certain keyboard functions important to the NATICH data base. The exact key you need to press to perform these functions depends on the keyboard and terminal emulator software you are using. Commonly used keys are listed. A dash (-) between two keys indicates that you must press and hold the first key while you press the second key.

TABLE B-1. KEYBOARD USAGE

Function	Commonly Used Keys*
Moves cursor forward from one field to the next field.	TAB ←— —→
	CTRL-I
Moves cursor backward from one field to the previous field.	SHIFT-TAB SHIFT - ←— —→
	CTRL-G
Submits input on menus and responses to prompts.	RETURN ←— ENTER
	TRANSMIT
Unlocks screen and frees cursor to continue when there is a communications problem.	CTRL-R
Moves cursor to the right without deleting characters (nondestructive space forward).	—> (or terminal equivalent)

(Continued)

TABLE B-1. KEYBOARD USAGE (Continued)

Function	Commonly Used Keys*
Moves cursor to the left without deleting characters (nondestructive space backspace).	← (or terminal equivalent)
Moves cursor one line up (in a narrative text only).	↑ (or terminal equivalent)
Moves cursor one line down (in a narrative text only).	↓ (or terminal equivalent)
Moves cursor to the right, deleting character at the position of the cursor.	Space Bar
Moves cursor to the left, deleting character at the position of the cursor.	BACKSPACE ←—
	RUBOUT
	CTRL-H

*These keys are programmed to work as indicated for some computer keyboards and emulator packages. Consult your hardware and software users manuals to determine which keys will work for you.

APPENDIX C. AGENCY ACRONYMS

STATE	AGENCY	ACRONYM	STATE	AGENCY	ACRONYM
AK	AK DEPT. OF ENV. CONSERVATION POUCH 0 JUNEAU, AK 99811 (907)465-2606	AK	CA	SACRAMENTO CO. AIR POLLUTION CONTROL DISTRICT 9323 TECH CENTER, SUITE 800 SACRAMENTO, CA 95826 (916)366-2107	CA-SAC.
AL	AL DEPT. OF ENV. MANAGEMENT STATE CAPITOL MONTGOMERY, AL 36130 (205)271-7861	AL	CA	BAY AREA AIR QUALITY MANAGEMENT DISTRICT 939 ELLIS STREET SAN FRANCISCO, CA 94109 (415)771-6000	CA-BAAQMD
AR	AR DEPT. OF POLLUTION CONTROL AND ECOLOGY, AIR DIVISION 8001 NATIONAL DRIVE LITTLE ROCK, AR 72209 (501)562-7444	AR	CA	BUTTE CO AIR POLLUTION CONTROL DISTRICT 316 NELSON AVE., P.O. BOX 1229 OROVILLE, CA 95965 (916)538-7783	CA-BUTTE
AZ	MARICOPA CO. DEPT. OF HEALTH SER., BUR. OF AIR POLL. CONTROL 1845 E. ROOSEVELT ST. PHOENIX, AZ 85006 (602)254-6381	AZ-PHOENIX	CA	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT 9150 FLAIR DRIVE EL MONTE, CA 91731 (818)572-6200	CA-SCAQMD
AZ	AZ DEPT. OF HEALTH SERVICES, BUR. OF AIR QUALITY CONTROL 2005 N. CENTRAL PHOENIX, AZ 85004 (602)253-0022	AZ	CA	MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT 1164 MONROE ST., #10 SALINAS, CA 93906 (408)443-1135	CA-MONT.
AZ	AZ PINAL-GILA COUNTIES AIR QUALITY CONTROL DISTRICT P.O. BOX 1076 FLORENCE, AZ 85232 (602)868-5801	AZ-PIGICO	CA	SANTA BARBARA CO. AIR POLLUTION CONTROL DISTRICT 5540 EDMILL SUITE B SANTA BARBARA, CA 93111 (805)964-8111	CA-S.BARB.
AZ	AZ PIMA COUNTY AIR QUALITY CONTROL DISTRICT 150 W. CONGRESS ST. TUCSON, AZ 85701 (602)792-8686	AZ-PIMACO	CA	KERN COUNTY APCD 1601 "H" STREET, SUITE 250 BAKERSFIELD, CA 933015199 (805)861-3682	CA-KERN CO
CA	SAN DIEGO CO. AIR POLLUTION CONTROL DISTRICT 9150 CHESAPEAKE DRIVE SAN DIEGO, CA 92123 (619)565-3947	CA-S.DIEGO	CA	FRESNO COUNTY AIR POLLUTION CONTROL DISTRICT 1221 FULTON MALL FRESNO, CA 93721 (209)445-3219	CA-FRESNO
CA	STANISLAUS COUNTY AIR POLLUTION CONTROL DISTRICT 1716 MORGAN RD. MODESTO, CA 95351 (209)571-6908	CA-STANISL	CA	SISKIYOU COUNTY A.P.C.D. 525 SOUTH FOOTHILL DR. YREKA, CA 96097 (916)842-3906	CA-SISK
CA	CA AIR RESOURCES BOARD BOX 2815 SACRAMENTO, CA 95812 (916)322-2990	CA	CA	AMADOR COUNTY AIR POLLUTION CONTROL DISTRICT 108 COURT STREET JACKSON, CA 956422379 (209)223-6406	CA-AMADOR

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM	STATE	AGENCY	ACRONYM
CA	MODOC CO. AIR POLLUTION CONTROL DIST. 202 WEST 4TH STREET ALTURAS, CA 96134 (916)233-3939	CA-MODOC	FL	BIG ENVIRONMENTAL SERVICES DIV., CITY OF JACKSONVILLE 515 W. 6TH STREET JACKSONVILLE, FL 32206 (904)630-3210	FL-JACKSON
CA	PLACER COUNTY AIR POLLUTION CONTROL DISTRICT 11484 B AVE AUBURN, CA 95603 (916)823-4443	CA-PLACER	FL	FL DEPT. OF ENV. REG., BUR. OF AIR QUALITY MGMT. 2600 BLAIR STONE ROAD TALLAHASSEE, FL 323992400 (904)488-1344	FL
CO	CO DEPT. OF HEALTH 4210 E. 11TH AVENUE DENVER, CO 80220 (303)331-8500	CO	FL	BROWARD COUNTY ENVIRONMENTAL QUALITY CONTROL BOARD 621 S. ANDREWS AVE. FT. LAUDERDALE, FL 33315 (305)765-4436	FL-FIELD
CO	ENVIRONMENTAL HEALTH DEPARTMENT, CITY OF ASPEN 130 SOUTH GALENA ASPEN, CO 81611 (303)925-2020	CO-ASPEN	FL	PALM BEACH COUNTY HEALTH DEPARTMENT 901 EVERNIA STREET WEST PALM BEACH, FL 33402 (305)820-3070	FL-PALMBE
CO	EL PASO COUNTY HEALTH DEPARTMENT 501 N. FOOTE COLORADO SPRINGS, CO 80909 (303)578-3137	CO-ELPASO	FL	ORANGE COUNTY AIR POLLUTION CONTROL BOARD 2002 EAST MICHIGAN ST. ORLANDO, FL 32806 (305)244-7400	FL-ORANGE
CT	CT DEPT. OF ENV. PROTECTION, AIR COMPLIANCE UNIT 165 CAPITOL AVE., RM. 146 HARTFORD, CT 06106 (203)566-2690	CT	FL	PINELLAS COUNTY AIR POLLUTION CONTROL BOARD 16100 FAIRCHILD DR. CLEARWATER, FL 34622 (813)530-6522	FL-PINELLA
CT	MILFORD HEALTH DEPARTMENT 2051 BRIDGEPORT AVENUE MILFORD, CT 06460 (203)783-3287	CT-MILFORD	GA	GA DEPT. OF NATURAL RESOURCES, AIR PROTECTION BRANCH 270 WASHINGTON ST. SW ATLANTA, GA 30334 (404)656-4867	GA
DC	DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS 5010 OVERLOOK AVENUE, SW WASHINGTON, DC 20032-5396 (202)767-7370	DC-DCRA	HI	HI DEPT. OF HEALTH, ENV. PERMITS BRANCH 645 HALEKAMUA STREET, 3RD FL. HONOLULU, HI 96813 (808)548-6410	HI
DE	DE DIV. OF ENV. CONTROL, AIR RESOURCES SECTION 89 KINGS HWY., BOX 1401 DOVER, DE 19903 (302)736-4791	DE	IA	IA DEPT. OF NATURAL RESOURCES 900 E. GRAND AV., WALLACE BLDG DES MOINES, IA 50309 (515)281-8690	IA
FL	HILLSBOROUGH CO. ENVIRONMENTAL PROTECTION COMMISSION 1900 9TH AVE. TAMPA, FL 32206 (813)272-5900	FL-TAMPA	IA	LINN COUNTY HEALTH DEPARTMENT AIR POLLUTION DIVISION 751 CENTER PT. RD. NE. CEDAR RAPIDS, IA 52402 (319)398-3551	IA-LINCO

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM	STATE	AGENCY	ACRONYM
ID	ID DIV. OF ENV., AIR QUALITY BUR. 450 W. STATE STREET BOISE, ID 83720 (208)334-5898	ID	KS	TOPEKA SHAMNEE COUNTY HEALTH DEPARTMENT P. O. BOX 118, 1615 WEST 8TH TOPEKA, KS 66601 (913)233-5961	KS-T/S
IL	DEPT. OF INSPECTIONS & PERMITS, CITY OF EVANSTON 2100 RIDGE AVENUE EVANSTON, IL 60204 (312)866-2952	IL-EVAN.	KS	WICHITA-SEDGWICK COUNTY DEPT. OF COMMUNITY HEALTH 1900 E. 9TH STREET WICHITA, KS 67214 (316)268-8351	KS-WICHITA
IL	BEDFORD PARK ENVIRONMENTAL QUALITY CONTROL BOARD P.O. BOX 128 ARGO, IL 605010128 (312)458-2975	IL-BEDPK	KY	KY NAT. RES. & ENV. PROT. CABINET, DIV. FOR AIR QUALITY 18 REILLY RD. FRANKFORT, KY 40601 (502)564-3382	KY
IL	IL ENV. PROT. AGENCY, DIV. OF AIR POLLUTION CONTROL 2200 CHURCHILL RD., BOX 19276 SPRINGFIELD, IL 62734 (217)782-2113	IL	KY	JEFFERSON COUNTY AIR POLLUTION CONTROL AGENCY 914 EAST BROADWAY LOUISVILLE, KY 40204 (502)564-8151	KY-JEFF
IN	INDIANA DEPT. OF ENV. MANAGEMENT 105 SOUTH MERIDIAN ST. INDIANAPOLIS, IN 46225 (317)232-8325	IN	LA	LA DEPT. OF ENVIRONMENTAL QUALITY, AIR QUALITY DIV. BOX 44096 BATON ROUGE, LA 70804 (504)342-1201	LA
IN	HAMMOND AIR POLLUTION CONTROL 5925 CALUMET AVENUE HAMMOND, IN 46320 (219)833-6306	IN-HAMMOND	MA	MA DEPT OF ENV. QUALITY ENG., DIV. OF AIR QUALITY CONTROL. ONE WINTER ST., 8TH FL. BOSTON, MA 02108 (617)292-5630	MA
IN	INDIANAPOLIS AIR POLLUTION CONTROL DIVISION 2700 SOUTH BELMONT AVE. INDIANAPOLIS, IN 46221 (317)633-5896	IN-INNAP	MD	MD DEPT. OF HEALTH & MENTAL HYGIENE, AIR MANAGEMENT ADMIN. 201 W. PRESTON STREET BALTIMORE, MD 21201 (301)383-2779	MD
IN	VIGO COUNTY AIR POLLUTION CONTROL 201 CHERRY STREET TERRE HAUTE, IN 47807 (812)238-8433	IN-VIGO	MD	BALTIMORE COUNTY DEPARTMENT OF HEALTH 300 EAST TOWNSONTOWN BLVD. TOWSON, MD 21204 (301)494-3775	MD-BALT
KS	KANSAS CITY-WYANDOTTE CO. DEPT. OF HLTH,AIR POLLUTION CNTRL 619 ANN AVE. KANSAS CITY, KS 66101 (913)321-4803	KS-KC	ME	ME DEPT. OF ENV. PROT., BUR. OF AIR QUALITY CONTROL STATEHOUSE STATION 17 AUGUSTA, ME 04333 (207)289-2437	ME
KS	KS. DEPT. OF HEALTH AND ENV., BUR. OF AIR QUAL. & RAD. CNTRL BLDG. 740, FORBES FIELD TOPEKA, KS 66620 (913)296-1570	KS	MI	MI DEPT. OF NATURAL RESOURCES, AIR QUALITY DIV. BOX 30028 LANSING, MI 48909 (517)373-7023	MI

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM	STATE	AGENCY	ACRONYM	STATE	AGENCY	ACRONYM	ACRONYM
MI	AIR POLLUTION CONTROL DIV., WAYNE CO. HEALTH DEPT. 2211 E. JEFFERSON ST. DETROIT, MI 48207 (313)567-4100	MI-Detroit	NC	NC DIV. OF ENV. MGMT., AIR QUALITY SECTION BOX 27687 RALEIGH, NC 27611 (919)733-3340	NC	ND	ND DEPT. OF HEALTH, DIVISION OF ENVIRONMENTAL ENGINEERING 1200 MISSOURI AVE, BX 5520, R304 BISMARCK, ND 58502-5520 (701)224-2348	ND	NE
MI	MACOMB COUNTY HEALTH DEPARTMENT 43525 ELIZABETH MOUNT CLEMENS, MI 48043 (313)469-5236	MI-MACOMB	NC	W.N.C. REGIONAL AIR POLLUTION CONTROL AGENCY P.O. BOX 7215 ASHEVILLE, NC 28807 (704)255-5655	NC-WNC	ND	NE	NE DEPT. OF ENV. CONTROL, AIR POLLUTION DIV. BOX 94877 LINCOLN, NE 68509 (402)471-2186	NE
MN	MN POLLUTION CONTROL AGENCY, DIV. OF AIR QUALITY 520 LAFAYETTE RD. N. ST. PAUL, MN 55135 (612)296-7373	MN	MO	MO-STLUCO	MO	NH	NH	NH DEPT. OF ENV. SERVICES, AIR RESOURCES DIV. 64 W. MAIN STREET, BOX 2033 CONCORD, NH 03302 (603)271-1370	NH
MO	ST. LOUIS COUNTY AIR POLLUTION CONTROL 801 SOUTH BRENTWOOD BLVD. CLAYTON, MO 63105 (314)854-6921	MO	MO	MO-SPGRCO	MO	NJ	NJ DEPT. OF ENV. PROT., BUR. OF AIR POLLUTION CONTROL CN 027, 401 E. STATE ST. TRENTON, NJ 08625 (609)292-6704	NJ	
MO	MO DEPT. OF NATURAL RESOURCES, AIR POLLUTION CONTROL PROGRAM BOX 176 JEFFERSON CITY, MO 65102 (314)751-4817	MO	MO	MO-SPGRCO	MO	NJ	NJ HUDSON REGIONAL HEALTH COMMISSION 313 HARRISON AVE. HARRISON, NJ 07029 (201)855-7002	NJ-HUDSON	
MO	SPRINGFIELD-GREENE COUNTY AIR POLLUTION CONTROL AUTHORITY 227 EAST CHESTNUT EXPRESSWAY SPRINGFIELD, MO 65802 (417)864-1462	MO	MS	MS	MS	NM	NM ENV. IMPROVEMENT DIV., AIR QUALITY BUR. BOX 968 SANTA FE, NM 87504 (505)827-0070	NM	
MS	MS DEPT. OF NATURAL RESOURCES, BUREAU OF POLLUTION CONTROL 2380 HIGHWAY 80 WEST JACKSON, MS 39209 (601)931-5171	MS	MT	MT-MISSOU	MT	NV	NV DIVISION OF ENVIRONMENTAL PROTECTION, AIR QUALITY CONTROL 201 S. FALL STREET CARSON CITY, NV 89710 (702)885-5065	NV-L.VEGAS	
MT	MT DEPT. OF HEALTH AND ENV. SCIENCES, AIR QUALITY BUREAU COOSWEIL BLDG. HELENA, MT 59620 (406)444-3454	MT	NC	NC-FORCO	NC	NV	AIR POLLUTION CONTROL DIV., DIST. HEALTH DEPT. OF CLARK CO. 625 SHADOW LANE LAS VEGAS, NV 89106 (702)383-1276	NV-L.VEGAS	
NC	MISSOURI CO. HEALTH DEPT. 301 W. ALDER MISSOURI, MT 59802 (406)721-5700	NC	NC	NC	NC	NC			
NC	FORSYTH COUNTY ENVIRONMENTAL AFFAIRS DEPARTMENT 537 N. SPRUCE STREET WINSTON-SALEM, NC 27101 (919)727-8060	NC	NC	NC	NC	NC			

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM	STATE	AGENCY	ACRONYM
NY	NY DEPT OF ENV. CONSERVATION, DIV. OF AIR QUALITY 50 WOLF ROAD ALBANY, NY 12223 (518)457-7688	NY	OK	TULSA CITY-COUNTY HEALTH DEPT., AIR QUALITY CONTROL 4616 EAST 15TH TULSA, OK 74112 (918)744-1000	OK-TULSA
NY	MASSAU CO. DEPT. OF HEALTH, BUR. OF AIR POLLUTION CONTROL 240 OLD COUNTRY ROAD MINEOLA, NY 11501 (516)535-3671	NY-NASSAU	OR	LANE REGIONAL AIR POLLUTION AUTHORITY 225 NORTH 5TH, SUITE 501 SPRINGFIELD, OR 97477 (503)726-2514	OR-LANE
OH	CLEVELAND DIV. OF AIR POL. CONTROL, DEPT. OF PUBLIC HEALTH 2735 BROADWAY AVE. CLEVELAND, OH 44115 (216)664-3591	OH-CLEVE.	OR	OR DEPT. OF ENV. QUALITY, AIR QUALITY CONTROL DIV. 811 SW 6TH AVE PORTLAND, OR 97204 (503)229-6111	OR
OH	MONTGOMERY CO. REGIONAL AIR POLLUTION CONTROL AGENCY BOX 972, 451 W. THIRD ST. DAYTON, OH 45422 (513)225-4435	OH-DAYTON	PA	PA DEPT. OF ENV. RESOURCES, BUR. OF AIR QUALITY CONTROL 200 N. THIRD STREET HARRISBURG, PA 17120 (717)781-9102	PA
OH	LAKE COUNTY GENERAL HEALTH DISTRICT P.O. BOX 490, 105 MAIN STREET PAINESVILLE, OH 44077 (216)357-2543	OH-LAKECO	PA	PHL. DEPT. OF PUBLIC HEALTH, AIR MANAGEMENT SERVICES 500 S. BROAD ST., 2ND FL. PHILADELPHIA, PA 19146 (215)686-7842	PA-PHL.
OH	OHIO EPA, DIV. OF AIR POLLUTION CONTROL P.O. BOX 1049, 1800 WATERMARK COLUMBUS, OH 43266 (614)481-4310	OH	PA	ALLEHENY CO. BUREAU OF AIR POLLUTION CONTROL 301 39TH STREET PITTSBURGH, PA 15201 (412)578-8111	PA-PITT.
OH	TOLEDO ENVIRONMENTAL SERVICES AGENCY 26 MAIN STREET TOLEDO, OH 43605 (419)693-0350	OH-TOLEDO	PR	PUERTO RICO ENVIRONMENTAL QUALITY BOARD 204 DEL PARQUE ST. SANJUAN, PR 00910 (809)725-5140	PR
OH	NORTH OHIO VALLEY AIR AUTHORITY 814 ADAMS STREET STEUBENVILLE, OH 43952 (614)282-3303	OH-NOVAA	RI	RI DEPT OF ENV. MGMT., DIV. OF AIR & HAZ. MATERIALS 75 DAVIS ST., 204 CANNON BLDG. PROVIDENCE, RI 02908 (401)277-2808	RI
OH	SOUTHWEST OHIO AIR POLLUTION CONTROL AGENCY 2400 REEDMAN STREET CINCINNATI, OH 45214 (513)251-8777	OH-SW	SC	SC DEPT. OF HEALTH & ENV. CONTROL, BUR. OF AIR QUAL. CONTROL 2600 BULL STREET COLUMBIA, SC 29201 (803)758-5406	SC
OK	OK DEPT. OF HEALTH, AIR QUALITY SERVICE BOX 53521, 1000 NE 10TH ST. OKLAHOMA CITY, OK 73152 (405)271-5220	OK	SD	SD DEPT. OF WATER & NAT. RES., OFFICE OF AIR QUALITY FOSS BUILDING, RM 217 PIERRE, SD 57501 (605)773-3153	SD

APPENDIX C. (Continued)

STATE	AGENCY	ACRONYM	STATE	AGENCY	ACRONYM
TN	CHATTANOOGA-HAMILTON CO. AIR POLLUTION CONTROL BUREAU 3511 ROSSVILLE BLVD. CHATTANOOGA, TN 37407 (615)867-4321	TN-CHAT.	WA	OLYMPIA AIR POLLUTION CONTROL AUTHORITY 120 E. STATE AVE OLYMPIA, WA 98501 (206)352-4881	WA-OLYMPIA
TN	TN DEPT. OF HEALTH AND ENVIRONMENT, DIV. OF APC 701 BROADWAY, 4TH FLOOR CUSTOM NASHVILLE, TN 37219-5403 (615)741-3651	TN	WA	WA DEPT. OF ECOLOGY, OFFICE OF HAZ. SUB. & AIR QUALITY CNTL. ROW SIX, P.B. -11 OLYMPIA, WA 98504 (206)459-6711	WA
TN	MEMPHIS-SHELBY CO. DEPT. OF HEALTH 814 JEFFERSON AVE. MEMPHIS, TN 38105 (901)576-7775	TN-MEMPHIS	WA	FUGET SOUND AIR POLLUTION CONTROL AGENCY 200 W MERCER ST #205 SEATTLE, WA 98119-958 (206)344-7335	WA-PUGET
TN	KNOX COUNTY DEPARTMENT OF AIR POLLUTION CONTROL 400 MAIN AVENUE, CITY-CO. BLDG KNOXVILLE, TN 37902 (615)521-2488	TN-KNOX	WA	GRANT COUNTY CLEAN AIR AUTHORITY P.O. BOX 37 Ephrata, WA 98823 (509)754-2031	WA-GRAINT
TN	METRO HEALTH DEPT. POLLUTION CONTROL DIVISION 311 23RD AVENUE, NORTH NASHVILLE, TN 37203 (615)327-9313	TN-NASH	WA	SOUTH WEST AIR POLLUTION CONTROL AUTHORITY 1308 N.E. 134TH STR. SUITE D VANCOUVER, WA 98685 (206)574-3058	WA-SWEST
TX	TX AIR CONTROL BOARD 6330 HIGHWAY 290 EAST AUSTIN, TX 78723 (512)451-5711	TX	WI	WI DEPT. OF NAT. RES., BUR. OF AIR MANAGEMENT BOX 7921 MADISON, WI 53707 (608)266-7718	WI
UT	UT DEPT. OF HEALTH, BUR. OF AIR QUALITY BOX 2560 SALT LAKE CITY, UT 84110 (801)533-6108	UT	WV	WV AIR POLLUTION CONTROL COMMISSION 1558 WASHINGTON ST., EAST CHARLESTON, WV 25311 (304)348-3286	WV
VA	VA AIR POLLUTION CONTROL BOARD 9TH ST. OFFICE BLDG., RM. 801 RICHMOND, VA 23219 (804)786-4867	VA	WY	WY DEPT. OF ENV. QUALITY, AIR QUALITY DIV. 122 WEST 25TH STREET CHEYENNE, WY 82002 (307)777-7391	WY
VI	DEPT. OF CONSERV. & CULTURAL AFFAIRS, U.S. VIRGIN ISLANDS P.O. BOX 4340 CHARLOTT AMALIE, VI 00801 (809)725-5140	VI	VT	VT DEPT. ENVIRONMENTAL CONSERVATION, AIR POLLUTION CNT DIV. 103 SO. MAIN ST. BLDG. 3 SOUTH WATERBURY, VT 05676 (802)244-8731	VT

APPENDIX D. CL-EAR INVENTORY IDENTIFIERS FOR CHEMICAL GROUPS

CL-CAS	POLLUTANT NAME	CL-CAS	POLLUTANT NAME
CL-ABRAS	ABRASIVES	CL-SOLVENT	SOLVENTS
CL-ACID	ACIDIC COMPOUNDS	CL-SULFATE	SULFATES
CL-ADIP	ADIPATES	CL-SULFIDE	SULFIDES
CL-ALDEHYD	ALDEHYDES	CL-SULFITE	SULFITES
CL-AMINE	AMINES	CL-SVOC	SEMOVABLE ORGANIC COMPOUNDS
CL-BROM	BROMINE COMPOUNDS	CL-TIN	ORGANIC TIN COMPOUNDS
CL-BTX	BENZENE, TOLUENE, XYLYLE	CL-TRS	TOTAL REDUCED SULFUR
CL-CARBON	TOTAL CARBON	CL-VARIOUS	VARIOUS POLLUTANTS
CL-CARCIN	CARCINOGENS	CL-VEG	VEGETABLE OIL MIST
CL-CFC	CHLOROFLUOROCARBONS	CL-VOC	VOLATILE ORGANIC COMPOUNDS
CL-CHC	CHLORINATED HYDROCARBONS	CL-WELD	WELDING FUMES
CL-CHLOR	CHLORINE COMPOUNDS	CL-WOOD	WOOD SMOKE
CL-CHROME	CHROMIUM COMPOUNDS		
CL-COE	COKE OVEN EMISSIONS		
CL-CREOSOL	CREOSOLS		
CL-CUTFLU	CUTTING FLUIDS		
CL-DGAEA	DIETHYLENE GLYCOL, ALKYL ETHERS/ACETATES		
CL-DIESEL	DIESEL FUEL EMISSIONS		
CL-DIISOCY	DIISOCYANATES		
CL-DIOXIN	DIOXINS		
CL-ETS	ENVIRONMENTAL TOBACCO SMOKE		
CL-EXPLO	EXPLOSIVES		
CL-FUELOIL	WASTE DERIVED FUEL OIL EMISSIONS		
CL-FURAN	FURANS		
CL-HALOME	HALOMETHANES		
CL-HAZWAST	HAZARDOUS WASTES		
CL-HCARB	HYDROCARBONS		
CL-IAP	INDOOR AIR POLLUTANTS		
CL-INORGAN	INORGANIC COMPOUNDS		
CL-METAL	METALLIC COMPOUNDS		
CL-MINDUST	MINERAL DUSTS		
CL-MINFIB	MINERAL FIBERS		
CL-MS	MINERAL SPIRITS		
CL-NITRATE	NITRATES		
CL-NITRITE	NITRITES		
CL-NITROSO	NITROSO COMPOUNDS		
CL-NMBIC	NON-METHANE HYDROCARBONS		
CL-OODOR	ODORS		
CL-OH	HYDROXIDE		
CL-ORGANIC	ORGANIC COMPOUNDS		
CL-PAH	POLYCYCLIC AROMATIC COMPOUNDS		
CL-PCO	PHOTO CHEMICAL OXIDANTS		
CL-PEST	PESTICIDES		
CL-PHENOL	PHENOLS		
CL-PHOSPHA	PHOSPHATES		
CL-PHTB	PHthalates		
CL-PLAS	PLASTICIZERS		
CL-PM	PARTICULATE MATTER		
CL-POM	POLYCYCLIC ORGANIC MATTER		
CL-RAD	RADIATION		
CL-RESIN	RESINS		
CL-SALTS	SALTS		
CL-SENSLUD	SEWAGE SLUDGE		

APPENDIX E, SIC CODES AND INDUSTRY DESCRIPTIONS

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
00	SIC CODE NOT AVAILABLE	0289	SIC - 0289
000	SIC CODE UNAVAILABLE	029	GENERAL FARMS, PRIMARILY LIVESTOCK
0000	SIC CODE UNAVAILABLE	0291	GENERAL FARMS, PRIMARILY LIVESTOCK
01	AGRICULTURAL PRODUCTION-CROPS	0299	SIC - 0299
011	CASH CROPS	0373	SIC - 0373
0111	MEAT	07	AGRICULTURAL SERVICES
0112	RICE	071	SOIL PREPARATION SERVICES
0115	CORN	0711	SOIL PREPARATION SERVICES
0116	SOYBEANS	072	CROP SERVICES
0119	CASH GRAINS, NEC	0721	CROP PLANTING, AND PROTECTION
013	FIELD CROPS, EXCEPT CASH GRAINS	0722	CROP HARVESTING
0131	COTTON	0723	CROP PREPARATION SERVICES FOR MARKET
0132	TOBACCO	0724	COTTON GINNING
0133	SUGAR CROPS	0729	GENERAL CROP SERVICES
0134	181N POTATOES	074	VETERINARY SERVICES, FARM LIVESTOCK
0139	FIELD CROPS, EXCEPT CASH GRAINS, NEC	0741	VETERINARY SERVICES, EXC SPECIALTIES
016	VEGETABLES AND MELONS	0742	VETERINARY SERVICES, SPECIALTIES
0161	VEGETABLES AND MELONS	0751	ANIMAL SERVICES, EXCEPT VETERINARY
017	FRUITS AND TREE NUTS	0752	LIVESTOCK SERVICES, EXC SPECIALTIES
0171	BERYLLY CROPS	0754	ANIMAL SPECIALTY SERVICES
0172	GRAPES	076	ANIMAL SERVICES
0173	TREE NUTS	0761	FARM LABOR AND MANAGEMENT SERVICES
0174	CITRUS FRUITS	0762	FARM MANAGEMENT SERVICES
0175	DECIDUOUS TREE FRUITS	076	LANDSCAPE AND HORTICULTURAL SERVICES
0179	FRUITS AND TREE NUTS, NEC	0781	LANDSCAPE CONSULTING AND PLANNING
018	AGRICULTURAL SPECIALTIES	0782	LAWN AND GARDEN SERVICES
0180	SIC - 0180 AGRICULTURAL SPECIALTIES	0783	ORNAMENTAL SHRUBS AND TREE SERVICES
0181	ORNAMENTAL NURSERY PRODUCTS	08	FORESTRY
0182	FOOD CROPS GROWN UNDER COVER	081	TIMBER TRACTS
0189	AGRICULTURAL SPECIALTIES, NEC	0811	FOREST NURSERIES AND SEED GATHERING
019	CHEMICAL FARMS, PRIMARILY CROP	082	FOREST NURSERIES AND SEED GATHERING
0191	GENERAL LIVESTOCK, NEC	0821	FOREST NURSERIES AND SEED GATHERING
02	AGRICULTURAL PRODUCTION-LIVESTOCK	084	GATHERING OF MISC FOREST PRODUCTS
021	LIVESTOCK, EXC DAIRY, POULTRY, ETC	0843	EXTRACTION OF PINE GUM
0211	HEIF CATTLE FEEDLOTS	0849	GATHERING OF FOREST PRODUCTS, NEC
0212	HEIF CATTLE, EXCEPT FEEDLOTS	085	FORESTRY SERVICES
0213	HOGS	0851	FORESTRY SERVICES
0214	SHEEP AND GOATS	09	FISHING, HUNTING, AND TRAPPING
0219	GENERAL LIVESTOCK, NEC	091	COMMERCIAL FISHING
024	DAIRY FARMS	0912	FISH
0241	DAIRY FARMS	0913	SELELYSH
025	POULTRY AND EGGS	0919	MISCELLANEOUS MARINE PRODUCTS
0251	BROILER, FRYER AND ROASTER CHICKENS	092	FISH HATCHERIES AND PRESERVES
0252	CHICKEN EGGS	0921	FISH HATCHERIES AND PRESERVES
0253	TURKEYS AND TURKEY EGGS	097	HUNTING, TRAPPING, GAME PROPAGATION
0254	POULTRY HATCHERIES	0971	HUNTING, TRAPPING, GAME PROPAGATION
0259	POULTRY AND EGGS	10	MINING
027	ANIMAL SPECIALTIES	101	IRON ORES
0271	FUR BEARING ANIMALS AND RABBITS	1011	IRON ORES
0272	HORSES AND OTHER EQUINES	102	COPPER ORES
0279	ANIMAL SPECIALTIES, NEC	1021	COPPER ORES
0282	SIC - 0282	103	LEAD AND ZINC ORES
		1031	LEAD AND ZINC ORES
		104	GOLD AND SILVER ORES
		1041	GOLD ORES
		1044	SILVER ORES
		105	BAUDITE AND OTHER ALUMINUM ORES
		1051	BAUDITE AND OTHER ALUMINUM ORES
		106	PERDORALOY ORES, EXCEPT VANADIUM
		1061	PERDORALOY ORES, EXCEPT VANADIUM
		108	METAL MINING SERVICES
		1081	METAL MINING SERVICES
		109	MISCELLANEOUS METAL ORES
		1092	MERCURY ORES
		1094	URANIUM, RADIUM, VANADIUM ORES
		1099	METAL ORES, NEC
		11	ANTHRACITE MINING
		111	ANTHRACITE MINING
		1111	ANTHRACITE MINING SERVICES
		1112	ANTHRACITE MINING
		12	BITUMINOUS COAL AND LIGITE MINING
		121	BITUMINOUS COAL AND LIGITE
		1211	BITUMINOUS COAL AND LIGITE
		1213	BITUMINOUS & LIGITE MINING SERVICES
		1216	SIC - 1216
		13	CRUDE OIL AND GAS EXTRACTION
		131	CRUDE PETROLEUM AND NATURAL GAS
		1311	CRUDE PETROLEUM AND NATURAL GAS
		132	NATURAL GAS LIQUIDS
		1321	NATURAL GAS LIQUIDS
		138	OIL AND GAS FIELD SERVICES
		1380	SIC - 1380 OIL AND GAS FIELD SERVICES
		1381	DRILLING OIL AND GAS WELLS
		1382	OIL AND GAS EXPLORATION SERVICES
		1383	OIL AND GAS FIELD SERVICES, NEC
		1389	OIL AND GAS FIELD SERVICES
		14	METALLIC MINERALS, EXCEPT FUELS
		141	DIMENSION STONE
		142	CRUSHED AND BROKEN STONE
		1420	SIC - 1420 CRUSHED AND BROKEN STONE
		1422	CRUSHED AND BROKEN LIMESTONE
		1423	CRUSHED AND BROKEN CHAMITE
		1429	CRUSHED AND BROKEN STONE, NEC
		144	SAND AND GRAVEL
		1442	CONSTRUCTION SAND AND GRAVEL
		1446	INDUSTRIAL SAND
		1448	CLAY, CERAMIC & REFRactory MINERALS
		1452	ENTONITE
		1453	FIRE CLAY
		1454	FULLER'S EARTH
		1455	KAOLIN AND BALL CLAY
		1459	CLAY AND RELATED MINERALS, NEC
		147	CHEMICAL AND FERTILIZER MINERALS

A! PENDIX E. (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
1472	MARBLE	1792	STRUCTURAL STEEL, ERECTION
1473	FLOORS, MARBLE, SODA, AND MORTAR MINERALS	1793	GLASS AND GLAZING WORK
1474	PHOSPHATE ROCK	1793	EXCAVATING AND FOUNDATION WORK
1475	ROCK, SALT	1794	WRECKING AND DEMOLITION WORK
1476	SULFUR	1794	INSTALLING BUILDING EQUIPMENT, NEC
1477	CHEMICAL AND FERTILIZER MINING, NEC	1795	SPECIAL TRADE CONTRACTORS, NEC
1478	MONOMETALLIC MINERALS SERVICES	1850	SIC - 1930
1481	MISCELLANEOUS NONMETALLIC MINERALS	1851	SIC - 1951
1492	CIPSIUM	2000	FOOD AND KINDRED PRODUCTS
1496	TALC, SOAPSTONE, AND PYROPHYLLITE	2001	MEAT PRODUCTS
1499	NONMETALLIC MINERALS, NEC	2010	MEAT PACKING PLANTS
15	GENERAL BUILDING CONTRACTORS	2013	SAUSAGES AND OTHER PREPARED MEATS
1501	BUILDING CONSTRUCTION	2016	POLLYTRY DRESSING PLANTS
1521	RESIDENTIAL BUILDING CONSTRUCTION	2017	DAIRY PRODUCTS
1521	SINGLE FAMILY HOUSING CONSTRUCTION	2021	CHEESE, BUTTER
1522	RESIDENTIAL CONSTRUCTION, NEC	2022	CHEESE, MILK, AND PROCESSED
153	OPERATIVE BUILDERS	2023	CONDENSED AND EVAPORATED MILK
1531	OPERATIVE BUILDERS	2024	ICE CREAM AND FROZEN DESSERTS
154	NONRESIDENTIAL BUILDING CONSTRUCTION	2026	FLUID MILK
1541	INDUSTRIAL BUILDINGS ANDWAREHOUSESS	203	PRESERVED FRUITS AND VEGETABLES
1542	BUSINESS/RESIDENTIAL CONSTRUCTION, NEC	2032	CANNED FRUITS AND VEGETABLES
16	HEAVY CONSTRUCTION CONTRACTORS	2034	DEHYDRATED FRUITS, VEGETABLES, SOUPS
161	HIGHWAY AND STREET CONSTRUCTION	2013	PICKLES, SAUCES, AND SALAD DRESSINGS
1611	HIGHWAY AND STREET CONSTRUCTION	2016	CANNED FRUITS AND VEGETABLES
1616	HEAVY CONSTRUCTION, EXCEPT HIGHWAY	2017	FROZEN FRUITS AND VEGETABLES
162	BRIDGE, TUNNEL, & ELEVATED HIGHWAY	2038	CHAIN MILL PRODUCTS
1623	WATER, SEWER, AND UTILITY LINES	204	FLOUR AND OTHER GRAIN MILL PRODUCTS
1629	HEAVY CONSTRUCTION, NEC	2043	CEREAL BREAKFAST FOODS
17	SPECIAL TRADE CONTRACTORS	2044	NICE MILLING
171	PLUMBING, HEATING, AIR CONDITIONING	2045	BLENDED AND PREPARED FLOUR
1711	PLUMBING, HEATING, AIR CONDITIONING	2046	WET CORN MILLING
1712	PAINTING, PAPER HANGING, DECORATING	2048	PREPARED FEEDS, NEC
1721	PAINTING, PAPER HANGING, DECORATING	2051	BAKERY PRODUCTS
173	ELECTRICAL WORK	2052	COOKIES AND CRACKERS
1731	CARPENTERING	2054	BAKERY PRODUCTS
174	MASONRY, STONEWORK, AND PLASTERING	2056	SUGAR AND CONFECTIONERY PRODUCTS
1741	MASONRY AND OTHER STONEMARK	2061	RAW CANE SUGAR
1742	PLASTERING, DRY WALL, AND INSULATION	2062	CANE SUGAR REFINING
1743	TERAZIO, TILE, MARBLE, MOSAIC WORK	2063	BEET SUGAR
175	CARPENTERING AND FLOORING	2065	CONFECTIIONERY PRODUCTS
1751	CARPENTERING	2066	CHOCOLATE AND COCOA PRODUCTS
1752	FLOOR LAVING AND FLOOR WORK, NEC	2067	CHEMING, CUM
176	ROOFING AND SHEET METAL WORK	2071	FATS AND OILS
1761	ROOFING AND SHEET METAL WORK	2074	COTTONSEED OIL MILLS
177	CONCRETE WORK	2075	SOYBEAN OIL MILLS
1771	CONCRETE WORK		
178	WATER WELL DRILLING		
1781	WATER WELL DRILLING		
179	MISC SPECIAL TRADE CONTRACTORS		

APPENDIX F. (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
2272	TUFTED CARPETS AND RUGS	2391	CURTAINS AND DRAPERYES
2279	CARPETS AND RUGS, NEC	2392	HOUSE FURNISHINGS, NEC
228	YARN AND THREAD MILLS	2393	TEXTILE BAGS
2281	YARN MILLS, EXCEPT WOOL	2394	CANVAS AND RELATED PRODUCTS
2282	THROWING AND WINDING MILLS	2395	FLETING AND STITCHING
2283	WOOL YARN MILLS	2396	AUTOMOTIVE AND APPAREL TRIMMINGS
2284	THREAD MILLS	2397	SCHIFFLI MACHINE EMBROIDERIES
2289	MISCELLANEOUS TEXTILE GOODS	2399	FABRICATED TEXTILE PRODUCTS, NEC
2291	FELT GOODS, EXC. WOVEN PELTS & HATS	24	LUMBER AND WOOD PRODUCTS
2292	LACE GOODS	2408	LUMBER AND WOOD PRODUCTS
2293	PADDINGS AND UPHOLSTERY FILLING	241	LOGGING CAMPS & LOGGING CONTRACTORS
2294	PROCESSED TEXTILE WASTE	2411	LOGGING CAMPS & LOGGING CONTRACTORS
2295	COATED FABRICS, NOT RUBBERIZED	2412	SAWNILLS AND PLANTING MILLS
2296	TIRE CORD AND FABRIC	2413	SAWNILLS AND PLANTING MILLS, GENERAL
2297	NONWOVEN FABRICS	2426	HARDWOOD DIMENSION AND FLOORING
2298	CORDAGE AND TWINE	2429	SPECIAL PRODUCT SAWNILLS, NEC
2299	TEXTILE GOODS, NEC	243	MILLWORK, PLYWOOD & STRUCTURAL MEMBERS
23	APPAREL AND OTHER TEXTILE PRODUCTS	2431	MILLWORK
231	Men's and Boys' SUITS AND COATS	2432	MILLWORK
2311	Men's and Boys' SUITS AND COATS	2434	WOOD KITCHEN CABINETS
2312	Men's and Boys' SHIRTS AND NIGHTWEAR	2435	HARDWOOD VENEER AND PLYWOOD
2313	Men's and Boys' FURNISHINGS	2436	SOFTWOOD VENEER AND PLYWOOD
2314	Men's and Boys' SHIRTS AND NIGHTWEAR	2439	STRUCTURAL WOOD MEMBERS, NEC
2315	Men's and Boys' UNDERWEAR	244	WOOD CONTAINERS
2316	Men's and Boys' NECKWEAR	2441	NAILLED WOOD BOXES AND SHOOR
2317	Men's and Boys' SEPARATE TROUSERS	2448	WOOD PALLETS AND SKIDS
2318	Men's and Boys' HOME CLOTHING	2449	WOOD CONTAINERS, NEC
2319	Men's and Boys' CLOTHING, NEC	245	WOOD BUILDINGS AND MOBILE HOMES
233	WOMEN'S AND MISSES' OUTWEAR	2451	MOBILE HOMES
2331	WOMEN'S & MISSES' BLOUSES & WAISTS	2452	PREFABRICATED WOOD BUILDINGS
2333	WOMEN'S AND MISSES' DRESSES	2459	WOOD PRESERVING
2337	WOMEN'S AND MISSES' DRESSES AND COATS	2469	WOOD PRODUCTS, NEC
2339	WOMEN'S AND MISSES' OUTWEAR, NEC	25	FURNITURE AND FIXTURES
234	WOMEN'S AND CHILDREN'S UNDERGARMENTS	251	HOUSEHOLD FURNITURE
2341	WOMEN'S AND CHILDREN'S OUTWEAR	2511	WOOD HOUSEHOLD FURNITURE
2342	BRASSETTES AND ALLIED GARMENTS	2512	UPHOLSTERED HOUSEHOLD FURNITURE
235	HATS, CAPS, AND MILLINERY	2514	RETAIL HOUSEHOLD FURNITURE
2351	MILLINERY	2515	MATTRESSSES AND BEDSPRINGS
2352	BATS AND CAPS, EXCEPT MILLINERY	2517	WOOD TV AND RADIO CABINETS
236	CHILDREN'S OUTWEAR	2519	HOUSEHOLD FURNITURE, NEC
2381	CHILDREN'S DRESSES AND BLOUSES	252	OFFICE FURNITURE
2383	CHILDREN'S COATS AND SUITS	2521	WOOD OFFICE FURNITURE
2389	CHILDREN'S OUTWEAR, NEC	2522	METAL OFFICE FURNITURE
239	FUR GOODS	253	PUBLIC BUILDING & RELATED FURNITURE
2390	MISCELLANEOUS APPAREL AND ACCESSORIES	2531	PUBLIC BUILDING & RELATED FURNITURE
2391	FABRIC DRESSES AND WORK GLOVES	2535	PUBLIC BUILDING AND RELATED FURNITURE
2394	ROBES AND DRESSING COATS	2539	PUBLIC BUILDING AND RELATED FURNITURE
2395	WATERPROOF OUTGARMENTS	254	PARTITIONS AND FIXTURES
2396	LEATHER AND SHEEP LINED CLOTHING	27/1	GREETING CARD PUBLISHING
2397	APPAREL BELTS	27/2	GETTING CARD PUBLISHING
2398	APPAREL AND ACCESSORIES, NEC		
2399	FABRICATED TEXTILE PRODUCTS		

APPENDIX E, (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
210	BLANK BOOKS AND BOOKBINDING	3199	LEATHER GOODS, NEC
2102	BLANK BOOKS AND LOOSE LEAF BINDERS	32	STONE, CLAY, AND GLASS PRODUCTS
2109	BOOKBINDING AND RELATED WORK	320	STONE, CLAY, AND CONCRETE PRODUCTS
2109	PRINTING TRADE SERVICES	3200	STONE, CLAY, AND GLASS PRODUCTS
2791	TYPESETTING	3208	STONE, CLAY, GLASS AND CONCRETE PRODUCTS
2792	SERVICE INDUSTRIES FOR THE PRINTING TRADE	3211	FLAT GLASS
2793	PHOTOCRAVING	3216	FLAT GLASS
2794	ELECTROTYPEING AND STEROTYPING	322	GLASS AND GLASSWARE, PRESSED OR BLOWN
2795	LITHOGRAPHIC PLATEMAKING SERVICES	3220	SIC - 3220 GLASS AND GLASSWARE, PRESSED OR BLOWN
2799	SERVICE INDUSTRIES FOR THE PRINTING TRADE	3221	GLASS CONTAINERS
28	CHEMICALS AND ALLIED PRODUCTS	3229	PRESSED AND BLOWN GLASS, NEC
2800	SIC - 2800 CHEMICALS AND ALLIED PRODUCTS	323	PRODUCTS OF PURCHASED GLASS
2801	INDUSTRIAL INORGANIC CHEMICALS	3231	PRODUCTS OF PURCHASED GLASS
2810	INDUSTRIAL INORGANIC CHEMICALS	324	CEMENT, HYDRAULIC
2812	ALKALIES AND CHLORINE	3241	CEMENT, HYDRAULIC
2813	INDUSTRIAL GASES	325	STRUCTURAL CLAY PRODUCTS
2815	INDUSTRIAL INORGANIC CHEMICALS	3251	BRICK AND STRUCTURAL CLAY TILE
2816	INORGANIC PIGMENTS	3253	CERAMIC WALL AND FLOOR TILE
2818	INDUSTRIAL INORGANIC CHEMICALS, NEC	3255	CLAY REFRACTORIES
2819	INDUSTRIAL INORGANIC CHEMICALS, NEC	3259	STRUCTURAL CLAY PRODUCTS, NEC
282	PLASTICS MATERIALS AND SYNTHETICS	326	POTTERY AND RELATED PRODUCTS
2821	PLASTICS MATERIALS AND RESINS	3261	VITREOUS PLUMBING FIXTURES
2822	SYNTHETIC RUBBER	3262	VITREOUS CHINA FOOD UTENSILS
2823	CELLULOSE MAN-MADE FIBERS	3263	FINE ENAMELWARE FOOD UTENSILS
2824	ORGANIC FIBERS, MONOCULISTIC	3264	PORCELAIN ELECTRICAL SUPPLIES
2827	PLASTIC BLOW BOTTLE MANUFACTURING	3269	POTTERY PRODUCTS, NEC
283	DURUMS	3271	CONCRETE, GYPSUM, AND PLASTER PRODUCTS
2831	BILOGICAL PRODUCTS	3271	CONCRETE BLOCK AND BRICK
2833	MEDICINALS AND BOTANICALS	3272	CONCRETE PRODUCTS, NEC
2834	PHARMACEUTICAL PREPARATIONS	3273	READY-MIXED CONCRETE
284	SOAP, CLEANERS, AND TOILET GOODS	3274	LIME
2841	SOAP, CLEANERS, AND TOILET GOODS	3275	Gypsum products
2842	SOAP AND OTHER DETERGENTS	328	CUT STONE AND STONE PRODUCTS
2843	POLISHES AND SANITATION GOODS	3281	CUT STONE AND STONE PRODUCTS
2844	SURFACE ACTIVE AGENTS	329	NONMETALLIC MINERAL PRODUCTS, NEC
2845	TOILET PREPARATIONS	3291	ABRASIVE PRODUCTS
285	PAINTS AND ALLIED PRODUCTS	3292	ASBESTOS PRODUCTS
2851	PAINTS AND ALLIED PRODUCTS	3293	GASKETS, PACKING, AND SEALING DEVICES
286	INDUSTRIAL ORGANIC CHEMICALS	3294	MINERALS, GROUND OR TREATED
2860	INDUSTRIAL ORGANIC CHEMICALS	3296	METALLIC WOOL
2861	CAN AND WOOD CHEMICALS	3297	MONOCLAY REFRactories
2865	CYCLIC CRUDES AND INTERMEDIATES	3299	NONMETALLIC INDUSTRIES
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC	33	PRIMARY METAL INDUSTRIES
287	AGRICULTURAL CHEMICALS	331	BLAST FURNACE AND BASIC STEEL PRODUCTS
2870	AGRICULTURAL CHEMICALS	3312	BLAST FURNACES AND STEEL MILLS
2872	AGRICULTURAL CHEMICALS	3313	ELECTROMETALLURICAL PRODUCTS
2873	NITROGENOUS FERTILIZERS	3315	STEEL WIRE AND RELATED PRODUCTS
2874	PHOSPHATIC FERTILIZERS	3316	COLD FINISHING OF STEEL SHAPES
2875	FERTILIZERS, MIXING ONLY	3317	STEEL PIPE AND TUBES
2879	AGRICULTURAL CHEMICALS, NEC	332	IRON AND STEEL FOUNDRIES
289	MISCELLANEOUS CHEMICAL PRODUCTS	3321	GRAY IRON FOUNTRIES
2891	ADHESIVES AND SEALANTS		

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
3322	MALLEABLE IRON FOUNDRIES	3446	ARCHITECTURAL METAL WORK
3323	IRON AND STEEL FOUNDRY	3447	FABRICATED METAL PRODUCTS
3324	STEEL INVESTMENT FOUNDRIES	3448	PREFABRICATED METAL BUILDINGS
3325	STEEL FOUNDRIES, NEC	3449	MISCELLANEOUS METAL WORK
333	PRIMARY NONFERROUS METALS	345	SCREEN MACHINE PRODUCTS, BOLTS, ETC
3331	PRIMARY COPPER	3451	SCREEN MACHINE PRODUCTS
3332	PRIMARY LEAD	3452	BOLTS, NUTS, RIVETS, AND WASHERS
3333	PRIMARY ZINC	3453	METAL FORGINGS AND STAMPINGS
3334	PRIMARY ALUMINUM	3461	METAL FORGING AND STAMPING
3339	PRIMARY NONFERROUS METALS, NEC	3462	IRON AND STEEL FORGINGS
334	SECONDARY NONFERROUS METALS	3463	NONFERROUS FORGINGS
3341	SECONDARY NONFERROUS METALS	3465	AUTOMOTIVE STAMPINGS
3342	SECONDARY SMELTING AND REFINING OF NON-FERROUS METALS	3466	CHAINS AND CLOSURES
335	NONFERROUS ROLLING AND DRAWING	3469	METAL STAMPINGS, NEC
3350	ROLLING, DRAWING, AND EXTRUDING OF NON-FERROUS METALS	347	METAL SERVICES, NEC
3351	COPPER, ROLLING AND DRAWING	3470	METAL SERVICES, MACHINERY
3352	ROLLING, DRAWING, AND EXTRUDING OF NON-FERROUS METALS	3471	PLATING AND POLISHING
3353	ALUMINUM SHEET, PLATE, AND FOIL	3472	CODING, ENGRAVING, AND ALLIED SERVICES
3354	ALUMINUM EXTRUDED PRODUCTS	3473	METAL COATING AND ALLIED SERVICES
3355	ALUMINUM ROLLING AND DRAWING, NEC	3474	ORDNANCE AND ACCESSORIES
3356	MISCELLANEOUS ROLLING AND DRAWING, NEC	3481	ORDNANCE AND ACCESSORIES
3357	MISCELLANEOUS WIRE DRAWING & INSULATING	3482	SMALL ARMS AMMUNITION
336	MISCELLANEOUS FOUNDRIES	3483	AMMUNITION, EXC. FOR SMALL ARMS, NEC
3360	MISCELLANEOUS FOUNDRIES	3484	SMALL ARMS
3361	ALUMINUM FOUNDRIES	3485	ORDNANCE AND ACCESSORIES, NEC
3362	BRASS, BRONZE, AND COPPER FOUNDRIES	349	MISC. FABRICATED METAL PRODUCTS
3369	MISCELLANEOUS FOUNDRIES, NEC	3490	MISC. FABRICATED METAL PRODUCTS
338	MISCELLANEOUS PRIMARY METAL PRODUCTS	3491	MISCELLANEOUS FABRICATED METAL PRODUCTS
3391	MISCELLANEOUS PRIMARY METAL PRODUCTS	3492	MISCELLANEOUS FABRICATED METAL PRODUCTS
3392	MISCELLANEOUS PRIMARY METAL PRODUCTS	3493	SPRING, EXCEPT WIRE
3398	METAL BEAT TREATING	3494	VALVES AND PIPE FITTINGS
3399	PRIMARY METAL PRODUCTS, NEC	3495	WIRE SPRINGS
34	FABRICATED METAL PRODUCTS	3496	MISC. FABRICATED WIRE PRODUCTS
3400	FABRICATED METAL PRODUCTS	3497	METAL POIL AND LEAF
341	METAL CANS AND SHIPPING CONTAINERS	3498	FABRICATED PIPE AND FITTINGS
3411	METAL CANS	3499	FABRICATED METAL PRODUCTS, NEC
3412	METAL BARRELS, DRUMS, AND PAILS	35	MACHINERY, EXCEPT ELECTRICAL
342	CUTTING, HAND TOOLS, AND HARWARE	3500	MACHINERY, EXCEPT ELECTRICAL
3421	CUTLERY	351	ENGINES AND TURBINES
3423	HAND AND EDGE TOOLS, NEC	3511	TURBINES AND TURBINE GENERATOR SETS
3425	HAND SAWS AND SAW BLADES	3519	INTERNAL COMBUSTION ENGINES, NEC
3429	HARDWARE, NEC	352	FARM AND GARDEN MACHINERY
343	PLUMBING AND HEATING, EXCEPT ELECTRIC	3522	FARM AND GARDEN MACHINERY
3431	METAL SANITARYWARE	3523	PARK MACHINERY AND EQUIPMENT
3432	PLUMBING FITTINGS AND BRASS GOODS	3524	LAWN AND GARDEN EQUIPMENT
3433	HEATING EQUIPMENT, EXCEPT ELECTRIC	353	CONSTRUCTION AND RELATED MACHINERY
3434	FABRICATED STRUCTURAL METAL PRODUCTS	3531	CONSTRUCTION MACHINERY
3440	FABRICATED STRUCTURAL METAL PRODUCTS	3532	MINING MACHINERY
3441	FABRICATED STRUCTURAL METAL	3533	OIL FIELD MACHINERY
3442	METAL DOORS, SASH, AND TRIM	3534	ELEVATORS AND MOVING STAIRWAYS
3443	FABRICATED PLATE WORK (BOILER SHOPS)	3535	CONVEYORS AND CONVEYING EQUIPMENT
3444	SHEET METAL WORK	3536	HOISTS, CHANES, AND MONORAILS
		3619	ELECTRIC TRANSMISSION EQUIPMENT

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
362 ELECTRICAL INDUSTRIAL APPARATUS	3713 TRUCK AND BUS BODIES	387 WATCHES, CLOCKS, AND MATCHCASES	
3620 ELECTRICAL INDUSTRIAL APPARATUS MOTORS AND GENERATORS	3714 MOTOR VEHICLE PARTS AND ACCESSORIES	3871 WATCHES, CLOCKS, AND MATCHCASES	
3621 INDUSTRIAL CONTROLS	3715 TRUCK TRAILERS	3873 WATCHES, CLOCKS, AND MATCHCASES	
3622 HEATING APPARATUS, ELECTRIC	3716 MOTOR HOMES	39 MISCELLANEOUS MANUFACTURING INDUSTRIES	
3623 CARBON AND GRAPHITE PRODUCTS	3717 MOTOR VEHICLES	3960 MISCELLANEOUS MANUFACTURING INDUSTRIES	
3624 ELECTRICAL INDUSTRIAL APPARATUS, NEC	3718 AIRCRAFT AND PARTS	391 JEWELRY, SILVERWARE, AND PLATED WARE	
3625 HOUSEHOLD APPLIANCES	3721 AIRCRAFT AND PARTS	3911 JEWELRY, PRECIOUS METAL	
3630 HOUSEHOLD COOKING EQUIPMENT	3722 AIRCRAFT AND PARTS	3914 SILVERWARE AND PLATED WARE	
3631 HOUSEHOLD REFRIGERATORS AND FREEZERS	3724 AIRCRAFT ENGINES AND ENGINE PARTS	3915 JEWELERS' MATERIALS & LAPIDARY WORK	
3632 HOUSEHOLD LAUNDRY EQUIPMENT	3728 AIRCRAFT EQUIPMENT, NEC	3916 MUSICAL INSTRUMENTS	
3633 ELECTRIC HOUSEMARES AND FANS	3729 AIRCRAFT AND PARTS	3921 MUSICAL INSTRUMENTS	
3635 HOUSEHOLD VACUUM CLEANERS	3733 SHIP AND BOAT BUILDING AND REPAIRING	3924 TOYS AND SPORTING GOODS	
3636 SEWING MACHINES	3741 SHIP BUILDING AND REPAIRING	3941 SIC - 3941	
3639 HOUSEHOLD APPLIANCES, NEC	3742 RAILROAD EQUIPMENT	3942 DOLLS	
364 ELECTRIC LIGHTING AND WIRING EQUIPMENT	3742 RAILROAD EQUIPMENT	3943 SIC - 3943	
3641 ELECTRIC LAMPS	3743 MOTORCYCLES, BICYCLES, AND PARTS	3944 GAMES, TOYS, AND CHILDREN'S VEHICLES	
3642 ELECTRIC LIGHTING AND WIRING EQUIPMENT	3751 MOTORCYCLES, BICYCLES, AND PARTS	3949 SPORTING AND ATHLETIC GOODS, NEC	
3643 CURRENT-CARRYING WIRING DEVICES	376 GUIDED MISSILES, SPACE VEHICLES, PARTS	395 PENS, PENCILS, OFFICE AND ART SUPPLIES	
3644 NONCURRENT-CARRYING WIRING DEVICES	3764 GUIDED MISSILES AND SPACE VEHICLES	3951 PENS AND MECHANICAL PENCILS	
3645 RESIDENTIAL LIGHTING FIXTURES	3764 SPACE PROPULSION UNITS AND PARTS	3952 LEAD PENCILS AND ART GOODS	
3646 COMMERCIAL LIGHTING FIXTURES	3769 SPACE VEHICLE EQUIPMENT, NEC	3955 MARKING DEVICES	
3647 VERICULAR LIGHTING FIXTURES	379 MISCELLANEOUS TRANSPORTATION EQUIPMENT	3956 CARRION PAPER AND JINNED RIBBONS	
3648 LIGHTING EQUIPMENT, NEC	3792 TRAVEL TRAILERS AND CAMPER	3959 COSTUME JEWELRY AND NOTIONS	
3649 RADIO AND TV RECEIVING EQUIPMENT	3793 TANKS AND TANK COMPONENTS	3962 COSTUME JEWELRY	
3651 RADIO AND TV RECEIVING SETS	3792 TRANSPORTATION EQUIPMENT, NEC	3962 ARTIFICIAL FLOWERS	
3652 PHONOGRAPH RECORDS	3793 INSTRUMENTS AND RELATED PRODUCTS	3963 BUTTONS	
366 COMMUNICATION EQUIPMENT	3800 INSTRUMENTS AND RELATED PRODUCTS	3964 NEEDLES, PINS, AND FASTENERS	
3661 TELEPHONE AND TELEGRAPH APPARATUS	3861 ENGINEERING & SCIENTIFIC INSTRUMENTS	3965 MISCELLANEOUS MANUFACTURES	
3662 RADIO AND TV COMMUNICATION EQUIPMENT	3861 ENGINEERING & SCIENTIFIC INSTRUMENTS	3991 BRUSHES AND BRUSHES	
3663 ELECTRONIC COMPONENTS AND ACCESSORIES	3861 ENGINEERING & SCIENTIFIC INSTRUMENTS	3993 SIGNS AND ADVERTISING DISPLAYS	
367 ELECTRONIC RESISTORS	3862 MEASURING AND CONTROLLING DEVICES	3995 BURIAL CASETS	
3670 ELECTRONIC TUBES, RECEIVING TYPE	3862 MEASURING AND CONTROLLING DEVICES	3996 HARD SURFACE FLOOR COVERINGS	
3671 ELECTRON TUBES, TRANSMITTING	3862 MEASURING AND CONTROLLING DEVICES	3999 MANUFACTURING INDUSTRIES, NEC	
3672 SEMICONDUCTORS AND RELATED DEVICES	3863 ENVIRONMENTAL CONTROLS	401 RAILROAD TRANSPORTATION	
3673 ELECTRONIC CAPACITORS	3863 ENVIRONMENTAL CONTROLS	4011 RAILROADS, LINE-HAUL, OPERATING	
3675 X-RAY APPARATUS	3863 PROCESS CONTROL INSTRUMENTS	4013 SHUTTLEING AND TERMINAL SERVICES	
3676 ELECTRONIC RESISTORS	3863 FLUID METERS AND COUNTING DEVICES	41 LOCAL AND INTERURBAN PASSENGER TRANSPORTATION	
3677 ELECTRONIC COILS AND TRANSFORMERS	3863 INSTRUMENTS TO MEASURE ELECTRICITY	411 LOCAL AND SUBURBAN TRANSPORTATION	
3678 CATHODE RAY TELEVISION PICTURE TUBES	3863 MEASURING & CONTROLLING DEVICES, NEC	4111 LOCAL PASSENGER TRANSPORTATION	
3679 ELECTRONIC COMPONENTS, NEC	3863 OPTICAL INSTRUMENTS AND LENSES	4119 LOCAL PASSENGER TRANSPORTATION, NEC	
3680 MISCELLANEOUS ELECTRICAL EQUIPMENT	3863 OPTICAL INSTRUMENTS AND LENSES	412 TAXICABS	
3691 STORAGEM BATTERIES	3864 MEDICAL INSTRUMENTS AND SUPPLIES	4121 INTERCITY HIGHWAY TRANSPORTATION	
3692 PRIMARY BATTERIES, DRY AND WET	3864 MEDICAL INSTRUMENTS AND SUPPLIES	413 INTERCITY HIGHWAY TRANSPORTATION	
3693 X-RAY APPARATUS AND TUBES	3864 SURGICAL AND MEDICAL INSTRUMENTS	4131 TRANSPORTATION CHARTER SERVICE	
3694 ELECTRICAL EQUIPMENT & SUPPLIES, NEC	3864 SURGICAL APPLIANCES AND SUPPLIES	414 LOCAL PASSENGER CHARTER SERVICE	
37 TRANSPORTATION EQUIPMENT	38643 DENTAL EQUIPMENT AND SUPPLIES	4142 CHARTER SERVICE, EXCEPT LOCAL	
371 MOTOR VEHICLES AND EQUIPMENT	3865 OPHTHALMIC GOODS	415 SCHOOL BUSES	
3710 MOTOR VEHICLES AND EQUIPMENT	38651 OPHTHALMIC GOODS	4151 SCHOOL BUSES	
3711 MOTOR VEHICLES AND CAR BODIES	3866 PHOTOGRAPHIC EQUIPMENT AND SUPPLIES	417 BUS TERMINAL AND SERVICE FACILITIES	
	38661 PHOTOGRAPHIC EQUIPMENT AND SUPPLIES	4171 BUS TERMINAL FACILITIES	

APPENDIX F. (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
4172	BUS SERVICE FACILITIES	5013	HOME FURNISHINGS
42	TRUCKING AND WAREHOUSING	5033	LUMBER AND CONSTRUCTION MATERIALS
421	TRUCKING, LOCAL AND LONG DISTANCE	5034	LUMBER, PLYWOOD AND MILLWORK
4212	LOCAL TRUCKING, WITHOUT STORAGE	5039	CONSTRUCTION MATERIALS, NEC
4213	TRUCKING, EXCEPT LOCAL	50A	SPORTING GOODS, TOYS AND HOBBY GOODS
4214	LOCAL TRUCKING AND STORAGE	50A1	SPORTING AND RECREATIONAL GOODS
422	PUBLIC WAREHOUSING	50A2	TOYS AND HOBBY GOODS AND SUPPLIES
4221	FARM PRODUCT WAREHOUSING AND STORAGE	50A3	PHOTOGRAPHIC EQUIPMENT AND SUPPLIES
4222	REFRIGERATED WAREHOUSING INC	505	METALS AND MINERALS, EXCEPT PETROLEUM
4224	HOUSEHOLD GOODS WAREHOUSING	5051	METALS, SERVICE CENTERS AND OFFICES
4225	GENERAL WAREHOUSING AND STORAGE	5052	COAL AND OTHER MINERALS AND ORES
4226	SPECIAL WAREHOUSING AND STORAGE, NEC	506	ELECTRICAL GOODS
423	TRUCKING TERMINAL FACILITIES	5063	ELECTRICAL APPLIANCES, TV AND RADIOS
4231	TRUCKING TERMINAL FACILITIES	5064	ELECTRONIC PARTS AND EQUIPMENT
43	U.S. POSTAL SERVICE	507	HARDWARE, PLUMBING & HEATING EQUIPMENT
431	U.S. POSTAL SERVICE	5072	HARDWARE
4311	U.S. POSTAL SERVICES	5074	PLUMBING & HYDROSTATIC HEATING SUPPLIES
44	WATER TRANSPORTATION	5075	MACH AIR HEATING & AIR CONDITIONING
441	DEEP SEA FOREIGN TRANSPORTATION	4821	TELEGRAPH COMMUNICATION
4411	DEEP SEA FOREIGN TRANSPORTATION	4821	RADIO AND TELEVISION BROADCASTING
4412	DEEP SEA DOMESTIC TRANSPORTATION	4812	RADIO BROADCASTING
4421	NONCONTIGUOUS AREA TRANSPORTATION	4813	TELEVISION BROADCASTING
4422	COASTWISE TRANSPORTATION	489	COMMUNICATION SERVICES, NEC
4423	INTERCOASTAL TRANSPORTATION	4899	COMMUNICATION SERVICES, NEC
443	GREAT LAKES TRANSPORTATION	49	ELECTRIC, GAS, AND SANITARY SERVICES
4431	GREAT LAKES TRANSPORTATION	491	ELECTRIC SERVICES
444	TRANSPORTATION ON RIVERS AND CANALS	4911	ELECTRIC SERVICES
4441	TRANSPORTATION ON RIVERS AND CANALS	492	GAS PRODUCTION AND DISTRIBUTION
4445	LOCAL WATER TRANSPORTATION	4922	NATURAL GAS TRANSMISSION
4452	PIERIES	4923	GAS TRANSMISSION AND DISTRIBUTION
4453	LIGHTERAGE	4924	NATURAL GAS DISTRIBUTION
4454	TOWING AND TUGBOAT SERVICE	493	GAS PRODUCTION AND/OR DISTRIBUTION
4459	LOCAL WATER TRANSPORTATION, NEC	4931	COMBINATION UTILITY SERVICES
446	WATER TRANSPORTATION SERVICES	4932	ELECTRIC AND OTHER SERVICES COMBINED
4463	MARINE CARGO HANDLING	4939	COMBINATION UTILITY SERVICES, NEC
4464	CANAL OPERATION	494	WATER SUPPLY
4469	WATER TRANSPORTATION SERVICES, NEC	4941	WATER SUPPLY
45	TRANSPORTATION BY AIR	495	SANITARY SERVICES
451	CERTIFIED AIR TRANSPORTATION	4952	SEWERAGE SYSTEMS
4511	CERTIFIED AIR TRANSPORTATION	4953	REFUSE SYSTEMS
452	NONCERTIFIED AIR TRANSPORTATION	4959	SANITARY SERVICES, NEC
4521	NONCERTIFIED AIR TRANSPORTATION	496	STEAM SUPPLY
458	AIR TRANSPORTATION SERVICES	4961	STEAM SUPPLY
4582	AIRPORTS AND FLYING PILOTS	497	IRRIGATION SYSTEMS
4583	AIRPORT TERMINAL SERVICES	4971	IRRIGATION SYSTEMS
46	PIPE LINES, EXCEPT NATURAL GAS	50	WHOLESALE TRADE, DURABLE GOODS
4600	PIPE LINES, EXCEPT NATURAL GAS	501	MOTOR VEHICLES & AUTOMOTIVE EQUIPMENT
461	PIPE LINES, EXCEPT NATURAL GAS	5012	AUTOMOBILES AND OTHER MOTOR VEHICLES
4612	CRUDE PETROLEUM PIPE LINES	5013	AUTOMOTIVE PARTS AND SUPPLIES
4613	REFINED PETROLEUM PIPE LINES	5014	TIRES AND TUBES
4619	PIPE LINES, NEC	502	FURNITURE AND HOME FURNISHINGS
47	TRANSPORTATION SERVICES	5021	FURNITURE
		5141	GROCERIES, GENERAL LINE
		5142	FROZEN FOODS

APPENDIX E, (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
5113 DAIRY PRODUCTS	FRUIT STORES AND VEGETABLE MARKETS	5431	HOUSEHOLD APPLIANCES STORES
5124 POULTRY AND POULTRY PRODUCTS	CANDY, NUT, AND CONFECTIONERY STORES	5441	RADIO, TELEVISION, AND MUSIC STORES
5143 CONFETIONERY	MUSIC STORES	545	RADIO AND TELEVISION STORES
5146 FISH AND SEAFOODS	RATING AND DRINKING PLACES	546	RATING AND DRINKING PLACES
5147 MEATS AND MEAT PRODUCTS	RATING PLACES	5462	RATING PLACES
5148 FRESH FRUITS AND VEGETABLES	DRINKING PLACES	5463	DRINKING PLACES
5149 GROCERIES AND RELATED PRODUCTS, NEC	RETAIL BAKERIES-BAKING AND SELLING ONLY	547	MISCELLANEOUS RETAIL
515 FARM-PRODUCT RAW MATERIALS	MISCELLANEOUS FOOD STORES	548	DRUG STORES AND PROPRIETARY STORES
5152 COTTON	MISCELLANEOUS FOOD STORES	549	DRUG STORES AND PROPRIETARY STORES
5153 CHAIN	AUTOMOTIVE DEALERS & SERVICE STATIONS	551	LICOR STORES
5154 LIVESTOCK	NEW AND USED CAR DEALERS	5511	LICOR STORES
5159 FARM PRODUCT RAW MATERIALS, NEC	NEW AND USED CAR DEALERS	552	USED MERCHANDISE STORES
516 CHEMICALS AND ALLIED PRODUCTS	USED CAR DEALERS	553	USED MERCHANDISE STORES
5161 CHEMICALS AND PETROLEUM PRODUCTS	USED CAR DEALERS	554	MISCELLANEOUS SHOPPING GOODS STORES
517 PETROLEUM AND PETROLEUM PRODUCTS	AUTO AND HOME SUPPLY STORES	555	SPORTING GOODS AND BICYCLE SHOPS
5171 PETROLEUM BULK STATIONS & TERMINALS	AUTO AND HOME SUPPLY STORES	556	BOOKSTORES
5172 PETROLEUM PRODUCTS, NEC	GASOLINE SERVICE STATIONS	557	STATIONERY STORES
518 BEER, WINE, AND DISTILLED BEVERAGES	GASOLINE SERVICE STATIONS	558	JEWELRY STORES
5181 BEER AND ALE	BOAT DEALERS	559	Hobby, Toy, and Game Shops
5182 WINES AND DISTILLED BEVERAGES	BOAT DEALERS	560	CAMERA & PHOTOGRAPHIC SUPPLY STORES
519 MISCELLANEOUS NONDURABLE GOODS	RECREATION & UTILITY TRAILER DEALERS	561	GIFT, NOVELTY, AND SOUVENIR SHOPS
5191 FARM SUPPLIES	RECREATION & UTILITY TRAILER DEALERS	562	LINENAGE AND LEATHER GOODS STORES
5194 TOBACCO AND TOBACCO PRODUCTS	MOTORCYCLE DEALERS	563	SEWING, NEEDLEWORK, AND PIECE GOODS
5198 PAINTS, VARNISHES, AND SUPPLIES	MOTORCYCLE DEALERS	564	MONSTORE RETAILERS
5199 NONDURABLE GOODS, NEC	AUTOMOTIVE DEALERS, NEC	565	MAIL ORDER HOUSES
52 BUILDING MATERIALS & GARDEN SUPPLIES	APPAREL AND ACCESSORY STORES	566	MERCHANDISING MACHINE OPERATORS
521 LUMBER AND OTHER BUILDING MATERIALS	CHILDREN'S & BOYS' CLOTHING & FURNISHINGS	567	DIRECT-SELLING ORGANIZATIONS
5211 RETAIL NURSERIES AND GARDEN STORES	CHILDREN'S & BOYS' CLOTHING & FURNISHINGS	568	PUB. AND ICE DEALERS
5212 SIC - 5212	WOMEN'S READY-TO-WEAR STORES	569	FUEL AND ICE DEALERS, NEC
523 PAINT, GLASS, AND WALLPAPER STORES	WOMEN'S ACCESSORY & SPECIALTY STORES	570	LIQUIDATED PETROLEUM GAS DEALERS
5231 PAINT, GLASS, AND WALLPAPER STORES	WOMEN'S ACCESSORY & SPECIALTY STORES	571	DETAIIL STORES, NEC
5232 HARDWARE STORES	CHILDREN'S AND INFANTS' WEAR STORES	572	FLORISTS
5231 HARDWARE STORES	CHILDREN'S AND INFANTS' WEAR STORES	573	CIGAR STORES AND STANDS
526 RETAIL NURSERIES AND GARDEN STORES	CHILDREN'S AND INFANTS' WEAR STORES	574	NEWS DEALERS AND NEWSSTANDS
5261 RETAIL NURSERIES AND GARDEN STORES	CHILDREN'S AND INFANTS' WEAR STORES	575	MISCELLANEOUS RETAIL STORES, NEC
527 MOBILE HOME DEALERS	FAMILY CLOTHING STORES	576	RAMING
5271 MOBILE HOME DEALERS	FAMILY CLOTHING STORES	577	FEDERAL RESERVE BANKS
53 GENERAL MERCHANDISE STORES	SHOE STORES	578	FEDERAL RESERVE BANKS
531 DEPARTMENT STORES	SHOE STORES	579	FEDERAL RESERVE BANKS
5311 DEPARTMENT STORES	FURNITURE AND FUR SHOPS	580	FEDERAL RESERVE BANKS
533 VARIETY STORES	FURNITURE AND FUR SHOPS	581	FEDERAL RESERVE BANKS
5331 VARIETY STORES	FURNITURE AND FUR SHOPS	582	NATIONAL BANKS, NOT FDIC
5341 SIC - 5341	MISCELLANEOUS APPAREL & ACCESSORIES	583	STATE BANKS, FEDERAL RESERVE
539 MISC. GENERAL MERCHANDISE STORES	MISCELLANEOUS APPAREL & ACCESSORIES	584	STATE BANKS, NOT FED RESERVE, FDIC
5399 MISC. GENERAL MERCHANDISE STORES	FURNITURE AND HOME FURNISHINGS STORES	585	STATE BANKS, NOT FED RES, NOT FDIC
54 FOOD STORES	FURNITURE AND HOME FURNISHINGS STORES	586	NATIONAL BANKS, FEDERAL RESERVE
541 GROCERY STORES	FURNITURE AND HOME FURNISHINGS STORES	587	NATIONAL BANKS, NOT FED RES, FDIC
5411 GROCERY STORES	FURNITURE STORES	588	NATIONAL BANKS, NOT FDIC
542 MEAT MARKETS & FREEZER PROVISIONERS	FLOOR COVERING STORES	589	PRIVATE BANKS, NOT INCORP., NOT FDIC
5422 FREEZER AND LOCKER MEAT PROVISIONERS	DRAPERY AND UPHOLSTERY STORES	590	MUTUAL SAVINGS BANKS
5423 MEAT AND FISH (SEAFOOD) MARKETS	MISC. HOME FURNISHINGS STORES	591	MUTUAL SAVINGS BANKS, FED RESERVE
543 FRUIT STORES AND VEGETABLE MARKETS	MISC. HOME FURNISHINGS STORES	592	MUTUAL SAVINGS BANKS, NEC
	HOUSEHOLD APPLIANCE STORES	593	MUTUAL SAVINGS BANKS, NEC

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
6034 MUTUAL SAVINGS BANKS, NOT FDIC	6351 SURETY INSURANCE	7021 ROOMING AND BOARDING HOUSES	
604 TRUST COMPANIES, MONODEPOSIT	6356 TITLE INSURANCE	703 CAMPS AND TRAILERING PARKS	
6042 MONODEPOSIT TRUSTS, FIDUCIAL RESERVE	6361 TITLE INSURANCE	7032 SPORTING AND RECREATIONAL CAMPS	
6044 MONODEPOSIT TRUSTS, NOT FDIC	SIC - 6362	7033 TRAILERING PARKS FOR TRANSIENTS	
6045 FUNCTIONS CLOSELY RELATED TO BANKING	PENSION, HEALTH, AND WELFARE FUNDS	704 MEMBERSHIP-BASIS ORGANIZATION HOTELS	
605 PENSION, HEALTH, AND WELFARE FUNDS	6371 PENSION, HEALTH, AND WELFARE FUNDS	7041 MEMBERSHIP-BASIS ORGANIZATION HOTELS	
6052 FOREIGN EXCHANGE ESTABLISHMENTS	639 INSURANCE CARRIERS, NEC	7051 SIC - 7051	
6054 SAFE DEPOSIT COMPANIES	6399 INSURANCE CARRIERS, NEC	72 PERSONAL SERVICES	
6055 CLEARINGHOUSE ASSOCIATIONS	64 INSURANCE AGENTS, BROKERS, & SERVICE	721 LAUNDRY, CLEANING, & GARMENT SERVICES	
6056 CORPORATIONS FOR BANKING ABROAD	INSURANCE AGENTS, BROKERS, & SERVICE	7210 LAUNDRY, CLEANING, & GARMENT SERVICES	
FUNCTIONS RELATED TO BANKING, NEC	6411 INSURANCE AGENTS, BROKERS, & SERVICE	7211 PODER LAUNDRIES, FAMILY & COMMERCIAL	
61 CREDIT AGENCIES OTHER THAN BANKS	SIC - 6499	7212 GARMENT PRESSING & CLEANERS' AGENTS	
611 REDISCOUNTING, NOT FOR AGRICULTURAL	6499 SIC - 6499	7213 LINEN SUPPLY	
6112 REDISCOUNTING, FOR AGRICULTURAL	65 REAL ESTATE	7214 DIAPER SERVICES	
6113 SAVINGS AND LOAN ASSOCIATIONS	6511 NONRESIDENTIAL BUILDING OPERATORS	7215 COIN-OPERATED LAUNDRIES AND CLEANING	
612 FEDERAL SAVINGS & LOAN ASSOCIATIONS	6512 APARTMENT BUILDING OPERATORS, EXC APARTMENTS	7216 DRY CLEANING PLANTS, EXC RUGS	
6123 STATE ASSOCIATIONS, NONINSURED, FILIB	6514 DWELLING OPERATORS, EXC APARTMENTS	7217 CARPET AND UPHOLSTERY CLEANING	
6124 STATE ASSOCIATIONS, NONINSURED, NEC	6515 MOBILE HOME SITE OPERATORS	7218 INDUSTRIAL LAUNDRIES	
6125 AGRICULTURAL CREDIT INSTITUTIONS	6517 RAILROAD PROPERTY LESSORS	7219 LAUNDRY AND GARMENT SERVICES, NEC	
613 AGRICULTURAL CREDIT INSTITUTIONS	6519 REAL PROPERTY LESSORS, NEC	722 PHOTOGRAPHIC STUDIOS, PORTRAIT	
6131 AGRICULTURAL CREDIT INSTITUTIONS	653 REAL ESTATE AGENTS AND MANAGERS	7221 PHOTOGRAPHIC STUDIOS, PORTRAIT	
614 PERSONAL CREDIT INSTITUTIONS	6531 REAL ESTATE AGENTS AND MANAGERS	723 BEAUTY SHOPS	
6142 FEDERAL CREDIT UNIONS	654 TITLE ABSTRACT OFFICES	7231 BEAUTY SHOPS	
6143 STATE CREDIT UNIONS	6541 TITLE ABSTRACT OFFICES	724 BARBER SHOPS	
6144 FEDERAL INDUSTRIAL LOAN COMPANIES	655 SUBDIVIDERS AND DEVELOPERS	7241 BARBER SHOPS	
6145 LICENSED SMALL LOAN LENDERS AND BROKERS	6552 SUBDIVIDERS AND DEVELOPERS, NEC	725 SHOE REPAIR AND BAT CLEANING SHOPS	
6146 INSTALMENT SALES FINANCE COMPANIES	6553 CEMETERY SUBDIVIDERS AND DEVELOPERS	7251 SHOE REPAIR AND BAT CLEANING SHOPS	
6149 MISC. PERSONAL CREDIT INSTITUTIONS	66 COMBINED REAL ESTATE, INSURANCE, ETC	726 FUNERAL SERVICE AND CREMATORIES	
615 BUSINESS CREDIT INSTITUTIONS	661 COMBINED REAL ESTATE, INSURANCE, ETC	7261 FUNERAL SERVICE AND CREMATORIES	
6152 SHORT-TERM BUSINESS CREDIT	6611 COMBINED REAL ESTATE, INSURANCE, ETC	729 MISCELLANEOUS PERSONAL SERVICES	
6153 MORTGAGE BANKERS AND BROKERS	67 HOLDING AND OTHER INVESTMENT OFFICES	7291 SIC - 7291	
6154 MORTGAGE BANKERS AND CORRESPONDENTS	6711 HOLDING OFFICES	7299 MISCELLANEOUS PERSONAL SERVICES	
616 SECURITY BROKERS AND DEALERS	672 INVESTMENT OFFICES	73 BUSINESS SERVICES	
6162 SECURITY BROKERS AND DEALERS	6722 MANAGEMENT INVESTMENT, OPEN-END	731 ADVERTISING	
6163 LOAN BROKERS	6723 MANAGEMENT INVESTMENT, CLOSED-END	7311 ADVERTISING AGENCIES	
62 SECURITY CONTRACTS BROKERS, DEALERS	6724 UNIT INVESTMENT TRUSTS	7312 OUTDOOR ADVERTISING SERVICES	
621 SECURITY BROKERS AND DEALERS	6725 FACE-AMOUNT CERTIFICATE OFFICES	7313 RADIO, TV, PUBLISHER REPRESENTATIVES	
6211 SECURITY BROKERS AND DEALERS	673 TRUSTS	7319 ADVERTISING, NEC	
6212 COMMODITY CONTRACTS BROKERS, DEALERS	6731 EDUCATIONAL, RELIGIOUS, ETC TRUSTS	732 CREDIT REPORTING AND COLLECTION	
6213 SECURITY AND COMMODITY EXCHANGES	6732 INVESTMENT OFFICES	7321 MAILING, REPRODUCTION, STENOGRAPHIC	
6214 SECURITY AND COMMODITY SERVICES	6733 TRUSTS, NEC	7322 MAILING, REPRODUCTION, STENOGRAPHIC	
6215 SECURITY AND COMMODITY SERVICES	6739 MISCELLANEOUS INVESTING	7331 DIRECT MAIL ADVERTISING SERVICES	
6216 INSURANCE CARRIERS	6792 OIL ROYALTY TRADERS	7332 BLUEPRINTING AND PHOTOCOPYING	
63 LIFE INSURANCE	6793 COMMODITY TRADERS	7333 COMMERCIAL PHOTOGRAPHY AND ART	
6311 REAL ESTATE INVESTMENT TRUSTS	6794 PATENT OWNERS AND LESSORS	7339 STENOGRAPHIC AND REPRODUCTION, NEC	
6312 MEDICAL, SERVICE AND HEALTH INSURANCE	6798 INVESTORS, NEC	734 SERVICES TO BUILDINGS	
6313 ACCIDENT AND HEALTH INSURANCE	6799 HOTELS AND OTHER LODGING PLACES	7341 WINDOW CLEANING	
6321 HOSPITAL AND MEDICAL SERVICE PLANS	70 HOTELS, MOTELS, AND TOURIST COURTS	7342 DISINFECTING AND EXTERMINATING	
6324 FIRE, MARINE, AND CASUALTY INSURANCE	701 HOTELS, MOTELS, AND TOURIST COURTS	7349 BUILDING MAINTENANCE SERVICES, NEC	
6331 FIRE, MARINE, AND CASUALTY INSURANCE	7011 HOTELS, MOTELS, AND TOURIST COURTS	735 NEWS SYNDICATES	
6335 SURETY INSURANCE	7013 SIC - 7013	7351 NEWS SYNDICATES	
	702 ROOMING AND BOARDING HOUSES		

APPENDIX E. (Continued)

SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
716 PERSONNEL SUPPLY SERVICES	716 SIC - 7716	716 MEDICAL AND DENTAL LABORATORIES	807 MEDICAL LABORATORIES
7161 EMPLOYMENT AGENCIES	7161 TEMPORARY HELP SUPPLY SERVICES	8071 MEDICAL LABORATORIES	8071 MEDICAL LABORATORIES
7162 PERSONNEL SUPPLY SERVICES, NEC	7162 OUTPATIENT CARE FACILITIES	8072 OUTPATIENT CARE FACILITIES	8072 OUTPATIENT CARE FACILITIES
7169 PERSONNEL SUPPLY SERVICES	7163 MOTION PICTURE PRODUCTION, EXCEPT TV	8081 OUTPATIENT CARE FACILITIES	8081 OUTPATENT CARE FACILITIES
717 COMPUTER AND DATA PROCESSING SERVICES	7164 MOTION PICTURE PRODUCTION FOR TV	8081 HEALTH AND ALLIED SERVICES, NEC	8081 HEALTH AND ALLIED SERVICES, NEC
7172 COMPUTER PROGRAMMING AND SOFTWARE	7165 SERVICES ALLIED TO MOTION PICTURES	8091 HEALTH AND ALLIED SERVICES, NEC	8091 HEALTH AND ALLIED SERVICES, NEC
7174 DATA PROCESSING SERVICES	7166 MOTION PICTURE DISTRIBUTION & SERVICES	81 LEGAL SERVICES	81 LEGAL SERVICES
7179 COMPUTER RELATED SERVICES, NEC	7167 MOTION PICTURE FILM EXCHANGES	811 LEGAL SERVICES	811 LEGAL SERVICES
719 MISCELLANEOUS BUSINESS SERVICES	7168 MOTION OR TAPE DISTRIBUTION FOR TV	8111 LEGAL SERVICES	8111 LEGAL SERVICES
7191 RESEARCH & DEVELOPMENT LABORATORIES	7169 MOTION PICTURE DISTRIBUTION SERVICES	812 JUNIOR COLLEGES AND SCHOOLS	812 JUNIOR COLLEGES AND SCHOOLS
7192 MANAGEMENT AND PUBLIC RELATIONS	717 MOTION PICTURE THEATERS	82 ELEMENTARY AND SECONDARY SCHOOLS	82 ELEMENTARY AND SECONDARY SCHOOLS
7193 DETECTIVE AND PROTECTIVE SERVICES	7182 MOTION PICTURE THEATERS, EX DRIVE-IN	821 LIBRARIES AND INFORMATION CENTERS	821 LIBRARIES AND INFORMATION CENTERS
7194 EQUIPMENT RENTAL AND LEASING	7183 DRIVE-IN MOTION PICTURE THEATERS	8211 ELEMENTARY AND SECONDARY SCHOOLS	8211 ELEMENTARY AND SECONDARY SCHOOLS
7195 PHOTOFINISHING LABORATORIES	7184 ENTERTAINERS & ENTERTAINMENT GROUPS	8212 COLLEGES AND UNIVERSITIES	8212 COLLEGES AND UNIVERSITIES
7196 TRADING STAMP SERVICES	7185 AMUSEMENT & RECREATION SERVICES, NEC	8213 CORRESPONDENCE SCHOOLS	8213 CORRESPONDENCE SCHOOLS
7197 COMMERCIAL TESTING LABORATORIES	7186 DANCE BALLS, STUDIOS, AND SCHOOLS	8214 DATA PROCESSING, SECRETARIAL SCHOOLS	8214 DATA PROCESSING, SECRETARIAL SCHOOLS
7199 BUSINESS SERVICES, NEC	7187 DANCE BALLS, STUDIOS, AND SCHOOLS	8215 VOCATIONAL SCHOOLS, NEC	8215 VOCATIONAL SCHOOLS, NEC
7161 SIC - 7461	7188 PRODUCERS, ORCHESTRAS, ENTERTAINERS	8216 SCHOOLS & EDUCATIONAL SERVICES, NEC	8216 SCHOOLS & EDUCATIONAL SERVICES, NEC
7199 SIC - 7499	7189 THEATRICAL PRODUCERS AND SERVICES	8217 SCHOOLS & EDUCATIONAL SERVICES, NEC	8217 SCHOOLS & EDUCATIONAL SERVICES, NEC
75 AUTO REPAIR, SERVICES, AND GARAGES	7190 ENTERTAINERS & ENTERTAINMENT GROUPS	8218 SOCIAL SERVICES	8218 SOCIAL SERVICES
751 AUTOMOTIVE RENTALS, WITHOUT DRIVERS	7191 BILLIARD AND BILLIARD ESTABLISHMENTS	822 INDIVIDUAL AND FAMILY SERVICES	822 INDIVIDUAL AND FAMILY SERVICES
7511 SIC - 7511	7192 BILLIARD AND POOL ESTABLISHMENTS	8221 INDIVIDUAL AND FAMILY SERVICES	8221 INDIVIDUAL AND FAMILY SERVICES
7512 PASSENGER CAR RENTAL AND LEASING	7193 BOWLING ALLEYS	8222 JOB TRAINING AND RELATED SERVICES	8222 JOB TRAINING AND RELATED SERVICES
7513 TRUCK RENTAL AND LEASING	7194 COMMERCIAL SPORTS	8223 JOB TRAINING AND RELATED SERVICES	8223 JOB TRAINING AND RELATED SERVICES
7519 UTILITY TRAILER RENTAL	7194 SPORTS CLUBS, MANAGERS, & PROMOTERS	8224 CHILD DAY CARE SERVICES	8224 CHILD DAY CARE SERVICES
752 AUTOMOBILE PARKING	7195 RACING, INCLUDING TRACK OPERATION	8225 CHILD DAY CARE SERVICES	8225 CHILD DAY CARE SERVICES
7523 PARKING LOTS	7196 MISC. AMUSEMENT, RECREATIONAL SERVICES	826 RESIDENTIAL CARE	826 RESIDENTIAL CARE
7525 PARKING STRUCTURES	7197 PUBLIC GOLF COURSES	8261 RESIDENTIAL CARE	8261 RESIDENTIAL CARE
753 AUTOMOTIVE REPAIR SHOPS	7198 CO-OPERATED AMUSEMENT DEVICES	839 SOCIAL SERVICES, NEC	839 SOCIAL SERVICES, NEC
7531 AUTOMOTIVE REPAIR SHOPS	7199 AMUSEMENT PARKS & RECREATION CLUBS	8399 SOCIAL SERVICES, NEC	8399 SOCIAL SERVICES, NEC
7531 TOP AND BODY REPAIR SHOPS	7997 MEMBERSHIP SPORTS & RECREATION, NEC	841 MUSEUMS, BOTANICAL, ZOOLOGICAL GARDENS	841 MUSEUMS, BOTANICAL, ZOOLOGICAL GARDENS
7534 TIRE RETREADING AND REPAIR SHOPS	800 AMUSEMENT AND RECREATION, NEC	8411 MUSEUMS AND ART GALLERIES	8411 MUSEUMS AND ART GALLERIES
7535 PAINT SHOPS	800 HEALTH SERVICES	842 BOTANICAL AND ZOOLOGICAL GARDENS	842 BOTANICAL AND ZOOLOGICAL GARDENS
7538 GENERAL AUTOMOTIVE REPAIR SHOPS	801 OFFICES OF PHYSICIANS	8421 BOTANICAL AND ZOOLOGICAL GARDENS	8421 BOTANICAL AND ZOOLOGICAL GARDENS
7539 AUTOMOTIVE REPAIR SHOPS, NEC	802 OFFICES OF DENTISTS	86 MEMBERSHIP ORGANIZATIONS	86 MEMBERSHIP ORGANIZATIONS
754 AUTOMOTIVE SERVICES, EXCEPT REPAIR	8021 OFFICES OF DENTISTS	861 BUSINESS ASSOCIATIONS	861 BUSINESS ASSOCIATIONS
7541 SIC - 7541	803 OFFICES OF OSTEOPATHIC PHYSICIANS	8611 BUSINESS ASSOCIATIONS	8611 BUSINESS ASSOCIATIONS
7542 CAR WASHES	8031 OFFICES OF OSTEOPATHIC PHYSICIANS	862 PROFESSIONAL ORGANIZATIONS	862 PROFESSIONAL ORGANIZATIONS
7549 AUTOMOTIVE SERVICES, NEC	804 OFFICES OF OTHER HEALTH PRACTITIONERS	8621 PROFESSIONAL ORGANIZATIONS	8621 PROFESSIONAL ORGANIZATIONS
76 MISCELLANEOUS REPAIR SERVICES	8041 OFFICES OF CHIROPRACTORS	863 LABOR ORGANIZATIONS	863 LABOR ORGANIZATIONS
761 ELECTRICAL REPAIR SHOPS	8042 OFFICES OF OPTOMETRISTS	8631 LABOR ORGANIZATIONS	8631 LABOR ORGANIZATIONS
762 RADIO AND TELEVISION REPAIR	8049 OFFICES OF HEALTH PRACTITIONERS, NEC	864 CIVIC AND SOCIAL ASSOCIATIONS	864 CIVIC AND SOCIAL ASSOCIATIONS
7623 REFRIGERATION SERVICE AND REPAIR	805 NURSING AND PERSONAL CARE FACILITIES	8641 CIVIC AND SOCIAL ASSOCIATIONS	8641 CIVIC AND SOCIAL ASSOCIATIONS
7629 ELECTRICAL REPAIR SHOPS, NEC	8051 SKILLED NURSING CARE FACILITIES	865 POLITICAL ORGANIZATIONS	865 POLITICAL ORGANIZATIONS
763 WATCH, CLOCK, AND JEWELRY REPAIR	8059 NURSING AND PERSONAL CARE, NEC		
7631 WATCH, CLOCK, AND JEWELRY REPAIR	806 HOSPITALS		
764 REUPHOLSTERY AND FURNITURE REPAIR	8060 SIC 8060 HOSPITALS		
7641 REUPHOLSTERY AND FURNITURE REPAIR	8061 SIC - 8061		
769 MISCELLANEOUS REPAIR SHOPS	8062 GENERAL MEDICAL & SURGICAL HOSPITALS		
7692 WELDING REPAIR	8063 PSYCHIATRIC HOSPITALS		
7694 AUTOMOTIVE RETREADING SHOPS	8069 SPECIALTY HOSPITALS, EXC PSYCHIATRIC		
7699 REPAIR SERVICES, NEC			

APPENDIX F. (Continued)

SIC CLASS	SIC CODE	DESCRIPTION	SIC CODE	DESCRIPTION
8631		POLITICAL ORGANIZATIONS	9311	AIR, WATER & SOLID WASTE MANAGEMENT
8645		RELIGIOUS ORGANIZATIONS	9312	LAND, MINERAL, WILDLIFE CONSERVATION
8651		RELIGIOUS ORGANIZATIONS	9331	HOUSING AND URBAN DEVELOPMENT
869		MEMBERSHIP ORGANIZATIONS, NEC	9331	HOUSING PROGRAMS
8659		MEMBERSHIP ORGANIZATIONS, NEC	9332	URBAN AND COMMUNITY DEVELOPMENT
88		PRIVATE HOUSEHOLDS	96	ADMINISTRATION OF ECONOMIC PROGRAMS
881		PRIVATE HOUSEHOLDS	961	ADMIN. OF GENERAL ECONOMIC PROGRAMS
8811		PRIVATE HOUSEHOLDS	9611	ADMIN. OF CEREAL ECONOMIC PROGRAMS
89		MISCELLANEOUS SERVICES	962	REGULATION, ADMIN. OF TRANSPORTATION
891		ENGINEERING & ARCHITECTURAL SERVICES	9621	REGULATION, ADMIN. OF UTILITIES
8910		ENGINEERING & ARCHITECTURAL SERVICES	9631	REGULATION, ADMIN. OF UTILITIES
8911		ENGINEERING & ARCHITECTURAL SERVICES	964	REGULATION OF AGRICULTURAL MARKETING
892		NONCOMMERCIAL RESEARCH ORGANIZATIONS	9641	REGULATION OF AGRICULTURAL MARKETING
8922		NONCOMMERCIAL RESEARCH ORGANIZATIONS	965	REGULATION MISC COMMERCIAL SECTORS
893		ACCOUNTING, AUDITING, & BOOKKEEPING	9651	REGULATION MISC COMMERCIAL SECTORS
8931		ACCOUNTING, AUDITING, & BOOKKEEPING, INC	966	SPACE RESEARCH AND TECHNOLOGY
899		SERVICES, NEC	9661	NATIONAL SECURITY AND INTEL AFFAIRS
8999		SERVICES, NEC	97	NATIONAL SECURITY AND INTEL AFFAIRS
91		EXECUTIVE, LEGISLATIVE, AND GENERAL	971	NATIONAL SECURITY
911		EXECUTIVE OFFICES	9711	NATIONAL SECURITY
9111		EXECUTIVE OFFICES	972	INTERNATIONAL AFFAIRS
912		LEGISLATIVE BODIES	9721	INTERNATIONAL AFFAIRS
9121		LEGISLATIVE BODIES	99	NONCLASSIFIABLE ESTABLISHMENTS
913		EXECUTIVE AND LEGISLATIVE COMBINED	999	NONCLASSIFIABLE ESTABLISHMENTS
9131		EXECUTIVE AND LEGISLATIVE COMBINED	9999	NONCLASSIFIABLE ESTABLISHMENTS
9189		SIC - 9189		
919		GENERAL GOVERNMENT, NEC		
92		JUSTICE, PUBLIC ORDER, AND SAFETY		
921		COURTS		
9211		COURTS		
922		PUBLIC ORDER AND SAFETY		
9221		PUBLIC PROTECTION		
9222		LEGAL COUNSEL AND PROSECUTION		
9223		CORRECTIONAL INSTITUTIONS		
9224		FIRE PROTECTION		
9229		PUBLIC ORDER AND SAFETY, NEC		
93		FINANCE, TAXATION, & MONETARY POLICY		
931		FINANCE, TAXATION, & MONETARY POLICY		
9311		FINANCE, TAXATION, & MONETARY POLICY		
9349		SIC - 9349		
94		ADMINISTRATION OF HUMAN RESOURCES		
941		ADMIN. OF EDUCATIONAL PROGRAMS		
9411		ADMIN. OF EDUCATIONAL PROGRAMS		
943		ADMIN. OF PUBLIC HEALTH PROGRAMS		
9431		ADMIN. OF PUBLIC HEALTH PROGRAMS		
944		ADMIN. OF SOCIAL & MANPOWER PROGRAMS		
9441		ADMIN. OF SOCIAL & MANPOWER PROGRAMS		
945		ADMINISTRATION OF VETERANS' AFFAIRS		
9451		ADMINISTRATION OF VETERANS' AFFAIRS		
95		ENVIRONMENTAL QUALITY AND HOUSING		
951		ENVIRONMENTAL QUALITY		