

USER'S MANUAL FOR THE RACT/BACT/LAER CLEARINGHOUSE (RBLC) WEB

CLEAN AIR TECHNOLOGY CENTER

SPONSORED BY:

Measurement Policy Group (MPG)
Sector Policies and Programs Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711

Date: November 2006

DISCLAIMER

This report has been reviewed by the Sector Policies and Programs Division of the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency and approved for publication. Approval does not signify that the contents reflect the views and policies of the U.S. Environmental Protection Agency. Mention of trade names or commercial products is not intended to constitute endorsement or recommendation for use. Copies of this report are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, telephone (800) 553-6847, Web Address <http://www.ntis.gov>.

PREFACE

This user's manual was prepared for and funded by the RACT/BACT/LAER Clearinghouse (RBLC)¹, U.S. Environmental Protection Agency (EPA). The RBLC has been established and is maintained by the Clean Air Technology Center (CATC) to assist State and local air pollution control personnel in making control technology determinations and in sharing technology information.

The RBLC provides data on prevention and control technology determinations made primarily by State and local permitting agencies. The Clearinghouse contains over 6,000 determinations that can help the user to identify appropriate technologies to mitigate or treat most air pollutant emission streams. The RBLC was designed to help permit applicants and reviewers to make pollution prevention and control technology decisions for stationary air pollution sources and includes data submitted by 50 states and territories in the U.S. on over 200 different air pollutants and 1,800 industrial processes.

The Clearinghouse also has a regulation data base that summarizes all emission standards issued by EPA's Office of Air Quality Planning and Standards (OAQPS). This includes New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and Maximum Achievable Control Technology (MACT) standards. The regulation data base also includes prevention and control technology cost information related to each rule and references to supporting documentation.

Read the section, "Quick Start Instructions for the RBLC Data Base", in this document to begin using the RBLC Web.

¹ NOTE: RACT, BACT, and LAER are acronyms for different Clean Air Act program requirements combined to create the name "RACT/BACT/LAER Clearinghouse." RACT, or Reasonably Available Control Technology is required on existing sources in areas that are not meeting national ambient air quality standards (i.e., non-attainment areas). BACT, or Best Available Control Technology, is required on major new or modified sources in "clean" areas (i.e., attainment areas). LAER, or Lowest Achievable Emission Rate, is required on major new or modified sources in non-attainment areas. However, data in the Clearinghouse are not limited just to sources subject to these requirements. Noteworthy prevention and control technology decisions are included in the RBLC even if they are not related to RACT, BACT, or LAER decisions.

QUICK START INSTRUCTIONS FOR THE RBLC WEB

What is the RBLC?

The U.S. Environmental Protection Agency's (EPA) Clean Air Technology Center (CATC) maintains a permit data base called the RACT/BACT/LAER Clearinghouse or the RBLC. The RBLC permit data base contains information about recent control technology determinations submitted by State and local agencies. The regulation data base includes information about Federal regulations governing air pollutant emissions. The RBLC Web allows anyone to search these data bases without any user registration. These quick start instructions provide basic information on using the system and searching the data bases.

To access the RBLC Web, go to the CATC home page (at: <http://www.epa.gov/ttn/catc/>) and click on the RBLC logo. Options found on the RBLC Homepage include links to data base search options, documents, and related software.

Using the RBLC Web

The data base contains information on: facilities that apply for construction permits; the basis for emission limits (RACT, BACT, or LAER) for each facility; pertinent source operating parameters such as process types, pollutant emission rates, pollution prevention techniques, add-on control equipment or other technology; permitting agency contacts; and scheduling data. Details about all of the data elements can be found in Section 2.2 and Appendix A of the RBLC User's Manual.

The HELP System:

The on-line HELP system provides context-sensitive assistance throughout the system. Simply click on the button labeled AHelp@ to access a HELP file that explains the current item. The help function button looks like this:



The RBLC User's Manual can supply answers to more complex questions, and can be accessed on-line or saved to disk. A portable document format (PDF) version of the manual has the advantage of being searchable by the Adobe Acrobat7 software.

Searching the Permit Data Base:

Data Base Searches -- Click on ASearch Data Base@ on the RBLC home page. The Basic Search page is the default search page. Under the heading, AOther Search Options, Permit Data Base@, you may choose from the following additional search options:

- X **Find Lowest Emission Rate:** Find the lowest emission rate for a selected process type and pollutant.
- X **Standard Search:** Build a set of search criteria by choosing from facility, process, and pollutant properties. Where appropriate, pick-lists of allowable values are available.
- X **Advanced Search:** Choose from pick-lists of data elements and enter desired values to build a set of search criteria. Criteria can be combined for more selective searches.²¹
- X **RBLC ID Search:** Quickly find up to three determinations using the appropriate RBLC identifier (RBLC ID).

Continue in the RBLC interactive search mode by following the directions on the screen and making choices by entering text and/or clicking buttons. Details about searching the data base are in Section 2.3 of the User=s Manual.

Navigation buttons are provided near the top of each facility, process and pollutant data page to assist in moving through the search results, data base and Web site. Use these buttons rather than the Web browser=s navigation buttons to avoid potential errors that can result from the way that browsers cache information.

Viewing Results On-line:

A search allows the user to access the part of the data base meeting the search criteria specified. Once the search has located a result set, entries in the set may be viewed on-line or downloaded as a report file. The Basic Search, Standard Search, and Advanced Search results tables can be sorted by permit date (default), State/RBLC ID, or facility name by clicking on the appropriate ASort by@ button at the top of the table. The AFind Lowest Emission Rate@ search results table is sorted by the emission limit (lowest to highest).

Information about each of the determinations in the search results table is organized by facility, process, and pollutant. Click on a RBLC ID to access facility data (general information about this permitting action). Click on a process name to view details about the process and access links to pollutant information. The AFind Lowest Emission Rate@ search results table does not provide direct access to process details, but does provide direct access to pollutant information by clicking the emission limit. View other types of information by clicking on the navigational buttons near the top of each facility, process and pollutant data page.

¹ In general, a user should know what each data element contains to use this option effectively. Refer to Section 2.2 and Appendix A of the RBLC User=s Manual for more information about individual data elements.

Reports:

The RBLC Web provides several pre-defined formats for viewing and downloading search results. Two of these formats, "Free Form Report (Customizable fields selections)" and "Export/Import Report", allow the user to customize their report by selecting the data elements to be included in the report. Both summary and detail formats are available. The list of available formats is contained in a pick-list at the bottom of the Search Results page. Details about these reports can be found in Sections 2.4 and 2.5 of the RBLC User=s Manual.

Searching the Regulation Data Base:

The organization of the Regulation Data Base is similar to that of the RBLC's permit data base. Refer to Section 3.2 of the RBLC User=s Manual for more information about Regulation Data Base data elements. Each entry, or rule, in the regulation data base consists of regulation-, process-, and pollutant-level data. A rule is associated with the type of facility that is the source of pollutants governed by the regulation.

Choose one of the options under AOther Search Options, Regulation Data Base@ to locate information of interest in the regulation data base. Then, to continue in RBLC interactive search mode, simply follow the directions on the screen, making choices by entering text and clicking buttons. The RBLC Web offers the following search options:

- X **Scan All:** displays all regulations in the data base alphabetically by Regulation Name/Industry Sector.

- X **Standard Search:** enables the user to build a set of search criteria by choosing from date, facility, process, and pollutant properties. Where appropriate, pick-lists of allowable values are provided.

- X **Advanced Search:** enables the user to choose from pick-lists of data elements and enter desired values to build a set of search criteria. Criteria can be combined for more selective searches. This option is most effective for users with a good understanding of what each data element contains.

Choose the AScan All@ option to easily view the entire regulation data base. Entries are displayed in a results table. Choose either the AStandard Search@ or AAdvanced Search@ option to view only selected regulations. All of the RBLC search options present an overview of search results in a table that allows the user to examine details about matching facilities, their processes, and pollutants. The RBLC Web provides several pre-defined formats for viewing and downloading search results. Two of these formats, "Free Form Report (Customizable fields

selections)" and "Export/Import Report", allow the user to customize their report by selecting the data elements to be included in the report. The list of available formats is contained in a pick-list at the bottom of the Search Results page. Details about these reports can be found in Sections 3.3.3 of the RBLC User=s Manual.

On-Line Documentation for the RBLC

The RBLC is documented in this set of Quick Start Instructions, the RBLC Data Entry Form Instructions, the RBLC Annual Report, and the RBLC User=s Manual. Short descriptions of each are listed on the Web page where they are located. The user=s manual should be kept as a reference for codes, standard units, and detailed instructions for using the system. In addition to these traditional forms of documentation, the system includes the context-sensitive on-line HELP function that is available throughout the entire system.

Table of Contents (cont.)

Section	Page
TABLE OF CONTENTS	
VOLUME I: RBLC BASICS	
Disclaimer	ii
Preface	iii
Quick Start Instructions for the RBLC Web	iv
X What Is the RBLC?	
X Using the RBLC Web	
- The HELP System	
- Searching the Permit Data Base	
- Viewing Results On-Line	
- Reports	
- Searching the Regulation Data Base	
X On-Line Documentation for the RBLC	
Section	Page
Section 1: Introduction	1-1
1.1 Background	1-1
1.1.1 The Purpose of the RBLC	1-1
1.1.2 Regulatory Basis	1-2
1.1.3 Information in the RBLC Data Base	1-3
1.1.4 Contacting the RBLC	1-3
1.1.5 Making Suggestions and Reporting Problems	1-4
1.2 Overview of the RBLC Web Site	1-4
1.2.1 Web Site Organization	1-4
1.2.2 On-Line Help Options	1-6
1.2.3 On-Line Documents	1-6
Section 2: RBLC Permit Data Base Search and Data Structure	2-1
2.1 Permit Data Base Search Options	2-1

Table of Contents (cont.)

Section	Page
2.2 Permit Data Base Elements	2-2
2.2.1 RBLC Data Base Options	2-7
2.3 Searching the RBLC	2-8
2.3.1 Planning the Search	2-8
2.3.2 How To Run a Search	2-8
2.3.3 Basic Search	2-8
2.3.4 Find Lowest Emission Rate	2-9
2.3.5 Standard Search	2-11
2.3.6 Advanced Search	2-16
2.3.7 RBLC ID Search	2-19
2.4 Search Results	2-19
2.4.1 Navigating the Search Results	2-21
2.4.2 Viewing Search Results	2-22
2.5 Data Base Reports	2-25
2.5.1 Generating a Report	2-25
2.5.2 Downloading RBLC Information	2-28
Section 3: RBLC Regulation Data Base Searches and Data Structure	3-1
3.1 Data Base Elements and Structure	3-1
3.2 Searching the Regulation Data Base	3-5
3.2.1 Planning the Search	3-5
3.2.2 How To Run a Search	3-5
3.2.3 Regulation Data Base Search Options	3-5
3.2.3.1 Scan All	3-6
3.2.3.2 Standard Search	3-6
3.2.3.3 Advanced Search	3-10
3.3 Search Results	3-13
3.3.1 Navigating the Search Results	3-13

Table of Contents (cont.)

Section	Page
3.3.2 Viewing Search Results	3-14
3.3.3 Generating Data Base Reports	3-17
Volume II: Data Entry	
Section 4 - Data Entry Overview	
4.1 Access	
4.2 On-Line Help Options	
4.3 Making an Entry Publicly Viewable	
4.4 Navigating Data Entry	
4.4 Planning and Preparation	
4.5 Data Fields and Formats	
Section 5 - RBLC Web Permit Data Entry and Editing Procedures	
5.1 Add a New Determination	
5.2 Edit In-Process Determination	
5.3 Edit Completed Determination	
5.4 Paper (Hardcopy) Data Submission	
5.5 Standalone Editor	
Volume III: Appendices	
Appendix A -- Data Submittal Form and Instructions	A-1
Appendix B -- Agency Code Listing	B-1
Appendix C -- Process Type Code Listing	C-1
Appendix D -- Abbreviations for Processes, and Units	D-1
Abbreviations for Processes and Descriptors	
Abbreviations for Emission Limit Units	
Appendix E B RBLC Standard Emission Limit Units by Process Type Code	E-1
Appendix F -- Examples of RBLC Standard Reports	F-1
Process Index Report	
Process Type Summary Report	

Table of Contents (cont.)

Section	Page
Comprehensive Report Free Form Report (Customizable & Standard) Export/Import Report	
Appendix G -- Examples of Federal/State Regulation Standard Reports	G-1
Comprehensive Report Free Form Report (Customizable & Standard)	
Appendix H -- Pollutant List and Synonyms Index	H-1

LIST OF FIGURES

Section	Page
Figure 1-1	RBLC Web Home Page 1-5
Figure 2-1	RBLC Data Structure and Data Relationships 2-3
Figure 2-2	Basic Search 2-9
Figure 2-3	Find Lowest Emission Rate - Process Type and Pollutant Menu 2-10
Figure 2-4	Find Lowest Emission Rate - Date Entry 2-11
Figure 2-5	Advanced Search 2-17
Figure 2-6	Results Table for a Standard Search 2-20
Figure 2-7	Results Table for Find Lowest Emission Rate Search 2-21
Figure 2-8	Facility Level Detail Page 2-23
Figure 2-9	Process Level Detail Page 2-24
Figure 2-10	Pollutant Level Detail Page 2-25
Figure 2-11	Download Report Format Selection 2-27
Figure 3-1	Regulation Data Base Standard Search 3-7
Figure 3-2	Regulation Data Base Advanced Search 3-11
Figure 3-3	Results Table for Regulation Data Base 3-14
Figure 3-4	Regulation Details Page 3-15
Figure 3-5	Process Details Page 3-16
Figure 3-6	Pollutant Details Page 3-17
Figure 3-7	Report Format Options 3-18

SECTION 1: INTRODUCTION

1.1 BACKGROUND

Welcome to the RACT/BACT/LAER Clearinghouse (RBLC) Web. EPA initially established the RACT/BACT/LAER Clearinghouse to assist State and local air pollution control personnel in making control technology determinations and in sharing technology information. Moreover, the RBLC is a resource to industries and consultants when they are preparing permits and researching control options, and to the public and environmental groups when they are reviewing and commenting on permitting activities. This document describes how to use the RBLC Web to access information pertinent to these users.

1.1.1 The Purpose of the RBLC

The basic purposes of the RACT/BACT/LAER Clearinghouse are:

- X To provide information on current prevention and control technology determinations;
- X To provide data on the specific emission limits imposed on existing, new, or modified sources across the country; and
- X To present summaries of recent Federal air pollution regulations and offer a forum for State and local agencies to maintain similar information for their own rules.

The Clearinghouse should serve as a reference or a starting point for State and local agencies when considering RACT, BACT, or LAER decisions.

The RBLC data base system performs the following three functions:

- X Allows direct computer access to the data in the RACT/BACT/LAER Clearinghouse,
- X Allows rapid production of RACT/BACT/LAER Clearinghouse reports; and
- X Allows rapid updating of RACT/BACT/LAER determinations.

The most typical use of the information in the data base is to identify and compare available control technologies, either for the sake of selecting the most appropriate control in a specific situation or for identifying the range of controls available for a process.

The RBLC Web on-line search functions allow users to build searches specific to their needs. These searches can be used to identify the most commonly used control technologies for a particular pollutant and process, or those being used within a specific period of time or geographic region. These subsets can be downloaded and used with PC-based data base or spreadsheet software to do more complex searches. Search options and the mechanics of searches are discussed thoroughly in Sections 2 and 3.

1.1.2 Regulatory Basis

The Clean Air Act (CAA) of 1970 gave the U.S. Environmental Protection Agency (EPA) the responsibility and authority to control air pollution in the United States and its territories. One of the responsibilities given to EPA under Section 108 of the CAA is to publish information on air pollution control techniques. This information includes data on available technology and methods for prevention and control of air pollution.

Different provisions of the CAA require the Reasonably Available Control Technology (RACT), Best Available Control Technology (BACT), Lowest Achievable Emission Rate (LAER), and New Source Performance Standards (NSPS) as emission control and pollution prevention measures:

- X RACT requirements apply to existing sources located in nonattainment areas (i.e., areas that do not meet National Ambient Air Quality Standards (NAAQS)). RACT requirements are typically prescribed by State and local rules and regulations, but may also be made on a case-by-case basis.
- X New Source Review (NSR) requirements are case-by-case decisions or determinations made by the State or local agency based on the requirements of the applicable regulation. NSR BACT requirements apply to major new and modified sources located in attainment areas (i.e. areas that meet NAAQS), and subject to Prevention of Significant Air Quality Deterioration (PSD) permitting requirements.
- X NSR LAER requirements apply to major new and modified sources located in nonattainment areas (i.e. areas that do not meet a NAAQS), and are applied by State and local agencies before a permit to construct may be issued.
- X NSPS apply to both new and modified sources; they must reflect the degree of emission reduction achievable through the application of the best system of continuous emission reduction as determined by the EPA Administrator. An applicable NSPS acts as the baseline for BACT and LAER decisions.

Although the specific criteria governing RACT, BACT, LAER, or NSPS vary, the general underlying approach is to require the best abatement technology possible on all major existing,

new, or modified sources. Most State and local programs have accepted complete responsibility for issuing PSD and nonattainment permits. Thus, it is extremely important that information be available to assist control agencies in making the necessary control technology determinations in a nationally consistent manner. The Clean Air Act Amendments of 1990 made submittal of LAER to the RACT/BACT/LAER Clearinghouse Information System mandatory.

1.1.3 Information in the RBLC Data Base

The RACT/BACT/LAER Clearinghouse data base includes RACT, BACT, and LAER determinations made by various air pollution control agencies. Each data base entry contains information on the permitted facility at facility, process and pollutant levels. Examples of the data included for each level are:

- X Facility data: Permitting agency contacts, facility location, industrial classification (NAICS code), and scheduling data;
- X Process data: Fuel, capacity, and process descriptions; and
- X Pollutants: Basis for the limit (RACT, BACT, or LAER), pollutant emission limits, pollution prevention techniques, add-on control equipment or other technology, and control cost data.

1.1.4 Contacting the RBLC

The RBLC is accessible on the World Wide Web, and access requires only a PC, an Internet connection, and a browser. The RBLC is available from the Clean Air Technology Center (CATC) home page located at: www.epa.gov/ttn/catc/. No account or password is required to search and browse the data base.

Authorized State or local air pollution control agency personnel may enter and edit their RBLC data on-line. An RBLC edit user ID and a password are required for a user to be able to add information to the data base on-line. Contact the RBLC/CATC to receive an edit authorization form. An EPA staff person is available to assist authorized users in obtaining RBLC edit authority as well as security clearance for inputting determinations. Inquiries concerning the RBLC and completed data input forms and files (additions to the RBLC data base) should be directed to:

RACT/BACT/LAER Clearinghouse (D243-05)
Sector Policies and Programs Division
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711

Clean Air Technology Center (CATC): Voice - (919) 541-0800,
FAX - (919) 541-0242
E-Mail: catcmail@epa.gov

For Web-related issues, the RBLC Webmaster can be contacted through email:
Steigerwald.Joe@epa.gov.

1.1.5 Making Suggestions and Reporting Problems

Comments on the RBLC Web are always welcome. Improvements to the Web are a continuing goal of the CATC. Please use the contacts listed in Section 1.1.4 to make suggestions or report problems. You also may use the [AFeedback@](#) link in the RBLC sidebar menu or the [AContact Us@](#) link at the bottom of each RBLC Web page to contact the RBLC.

1.2 OVERVIEW OF THE RBLC WEB SITE

1.2.1 Web Site Organization

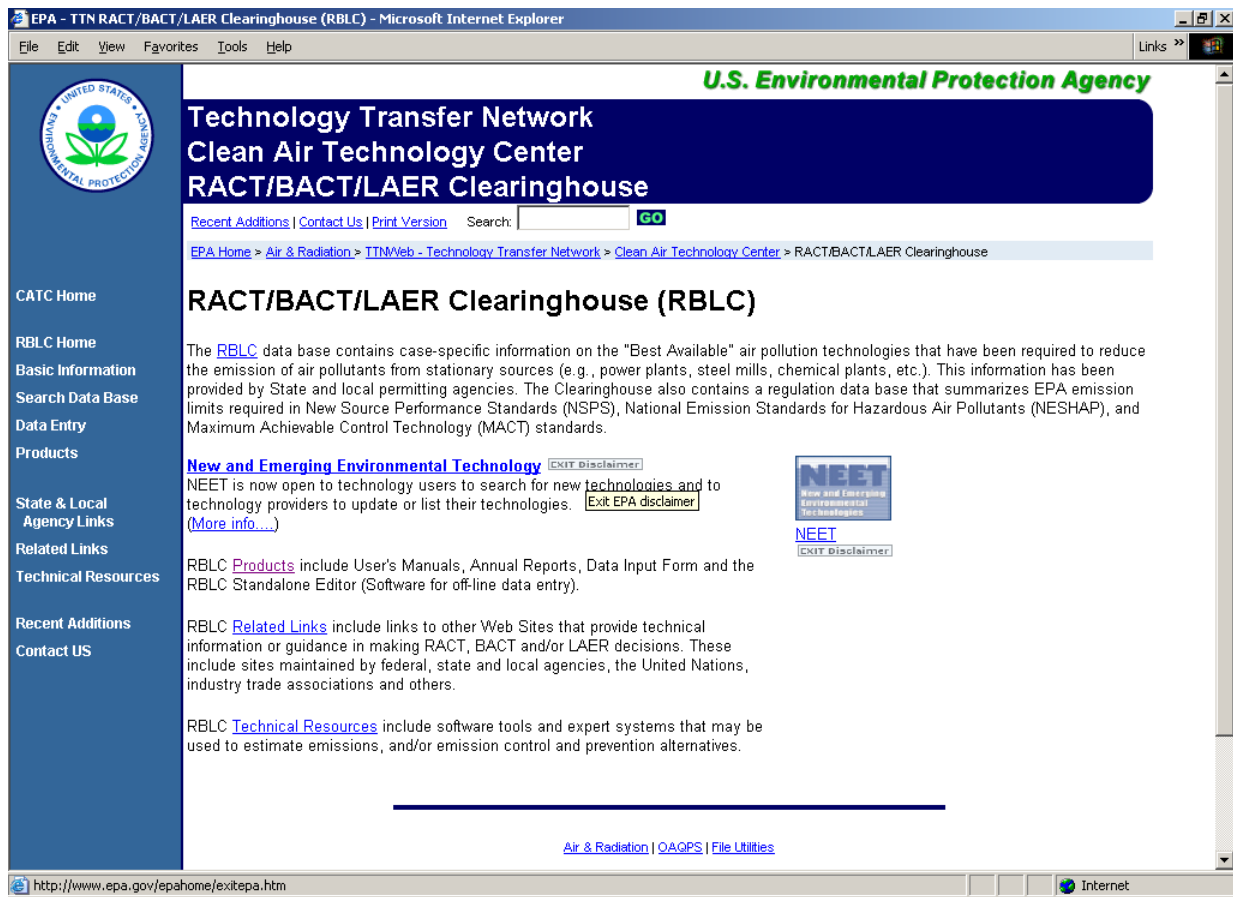
The RBLC home page (see Figure 1-1) provides access to the RBLC data bases and links to related sites. Connect to the RBLC home page from the CATC home page:
<http://www.epa.gov/ttn/catc/>. Options that are available from the RBLC home page are:

- X **Basic Information**-- Presents an overview of the RBLC and brief descriptions of how to use the RBLC data base.
- X **Search Data Base**-- Links to the data base search menu. Browse or search the entire RBLC data base of completed and in-process determinations, and regulations from this page.
- X **Data Entry** -- Links to the RBLC data entry page where authorized users can log in to add or update control technology determinations for their State or local agency.
- X **Products** -- Lists RBLC-related software, including the RBLC Web Standalone Editor, and the editor=s user=s manual. Includes downloadable files available on the RBLC web site. These files include published documents like RBLC annual reports, and this RBLC User's Manual. Also available for downloading are tables, instructions, and other technical information related to using the RBLC.
- X **State and Local Agency Links** -- Links to State and Local Air Pollution Control Agencies, including links for local agencies, links to permitting groups in State and local agencies, and contact names and phone numbers for the agencies and EPA

regions. We realize that these links are constantly changing. Please forward your updated links to the RBLC Webmaster.

- X **Related Links**-- Lists links to on-line NSR, industry, State, and other related technology reference sources.
- X **Technical Resources** -- Links to software tools that can be used to estimate emissions, evaluate alternative control and prevention technologies, or identify less polluting materials.
- X **Recent Additions** -- Highlights items recently added or updated on the RBLC Web.
- X **Contact Us** -- EPA welcomes your comments, especially comments on how the Web site can be improved. We strive to respond to every comment with an answer or an appropriate referral as quickly as possible. Most comments will be responded to within 10 business days.

Figure 1-1: RBLC Web Home Page



1.2.2 On-Line Help Options

The RBLC Web includes a context-sensitive on-line HELP function that is available throughout the entire system. The help function button looks like this:



On the RBLC Search page, click on the Ahelp@ link for an on-line version of this user=s manual, including step-by-step instructions on using the system=s permit and regulation search options, and data element definitions and reporting formats.

1.2.3 On-Line Documents

Reference documents available for the RBLC are the User=s Manual (this document), the Quick Start Instructions (included with the User=s Manual, Volume I), the RBLC Data Entry Form Instructions, and the RBLC Annual Report. These documents can be accessed on line or saved to disk as a portable document format (PDF) file. A PDF version of any of these

documents has the advantage of being searchable by the Adobe Acrobat7 software. Short descriptions of each are listed on the RBLC Documents Web page where they are located. The user=s manual is divided into multiple volumes:

- X Volume 1: RBLC Basics -- Provides introductory material for the RBLC data base, Quick Start Instructions for the RBLC Web, detailed descriptions of the permit and regulatory data bases, and guidance on using the search system with both data bases.
- X Volume 2: Data Entry -- Provides detailed descriptions of data entry procedures.
- X Volume 3: Appendices -- Contains reference tables with the values that can be used for processes, controls, and emission units; abbreviations for pollutants; codes for State and local air pollution control agencies and industrial processes; the data submittal form with instructions, and example RBLC standard reports.

The user=s manual should be kept as a reference for codes, standard units, and detailed instructions for using the system. The RBLC User=s Manual will be updated annually.

SECTION 2: RBLC PERMIT DATA BASE SEARCH AND DATA STRUCTURE

The RBLC permit data base contains information about control technology determinations submitted by State and local agencies. Click on ASearch Data Base@ from the RBLC home page to search the RBLC data bases. From the data base search page, users may view on-line help for the search options, perform a search on either the permit or the regulation data base, or link to additional resources. This section outlines the permit data base options, provides a detailed listing and description of the data elements in the permit data base, and shows how to use the five permit data base search options. The Federal/State Regulations data base is discussed in Section 3 of this Volume.

The RBLC is in the process of changing its terminology. Currently the terms "Search" and "Query" are both in use on the RBLC Web site. As the Web site is improved over time, the term "Search" will replace "Query." In the interim, users are advised that these terms mean the same thing and to ignore minor discrepancies in the use of these terms in this manual and on the RBLC Web site.

2.1 PERMIT DATA BASE SEARCH OPTIONS

Choose the Basic Search (default) option or one of the options under AOther Search Options: Permit Data Base@ to locate information in the permit data base. Then, follow the directions on the screen to define a search. The RBLC Web offers the following search options:

- X **Basic Search:** allows users to build a set of search criteria by specifying basic data elements.

- X **Find Lowest Emission Rate:** allows users to find the lowest emission rate for a selected process type and pollutant.

- X **Standard Search:** allows users to build a set of search criteria by choosing from facility, process, and pollutant properties. This search has more options than the basic search. Where appropriate, pick-lists of allowable values are provided.

- X **Advanced Search:** allows users to choose from pick-lists of data elements and enter desired values to build a set of search criteria. Criteria can be combined for more selective searches. In general, users should know what each data element contains to use this option effectively.

- X **RBLC ID Search:** quickly finds up to three determinations identified by their RBLC identifier (RBLC ID).

All of the RBLC search options present an overview of the search results in a table with links to pages that provide details about facilities, processes, and pollutants. Each option also supports saving results in any of the RBLC standard output formats.

Navigation buttons are provided near the top of each facility, process and pollutant data page to assist in moving through the search results, data base and Web site. Use these buttons rather than the Web browser=s navigation buttons to avoid potential errors that can result from the way that browsers cache information.

The RBLC navigation buttons can be used to return to the search page and re-specify search criteria for another search, or use the link at the bottom of the results page to return to the main RBLC page in order to choose another search option. If a search is not successful, return to the search page and re-specify the search criteria. Check to make sure that a misspelled word or an invalid value for a search element is not the problem.

2.2 PERMIT DATA BASE ELEMENTS

The RBLC data base contains information about a variety of data elements. This information is separated into three main categories: facility data, process data, and pollutant data. The data are organized so that each facility determination may have multiple processes and each process may emit multiple pollutants. Figure 2-1 shows the RBLC data structure and data relationships. Each facility has at least one process and at least one pollutant. The information that EPA maintains in the data base on each of the three levels (facility, process, and pollutant) is listed below. Data elements that can be used in a search are marked with an asterisk (*).

Facility Information:

- \$ RBLC ID*: The unique identification number assigned to each RBLC determination by EPA staff. The number consists of the state abbreviation and a four digit number, i.e. AK-0001 is the first determination entered from Alaska. A suffix may exist for old determinations for clarification.
- \$ CORPORATE/COMPANY NAME*: In some cases a parent company will own many facilities. The parent company=s name has been entered in this field. If the company that owns the facility has the same name as the facility, the name may be entered in both the company and facility name fields.
- \$ FACILITY NAME*: See the note for Company/Corporate Name. The facility name is entered here.
- \$ FACILITY DESCRIPTION: Additional information about the facility.

- § FACILITY LOCATION INFORMATION: The location of the facility, including:
 - S County;
 - S State* (assigned by the system);
 - S Zip Code;
 - S EPA Region* (assigned by the system); and
 - S Affected Class I /U.S. Border Areas* (e.g., National Parks, Wilderness Areas, etc.) located within 250 km of the facility.

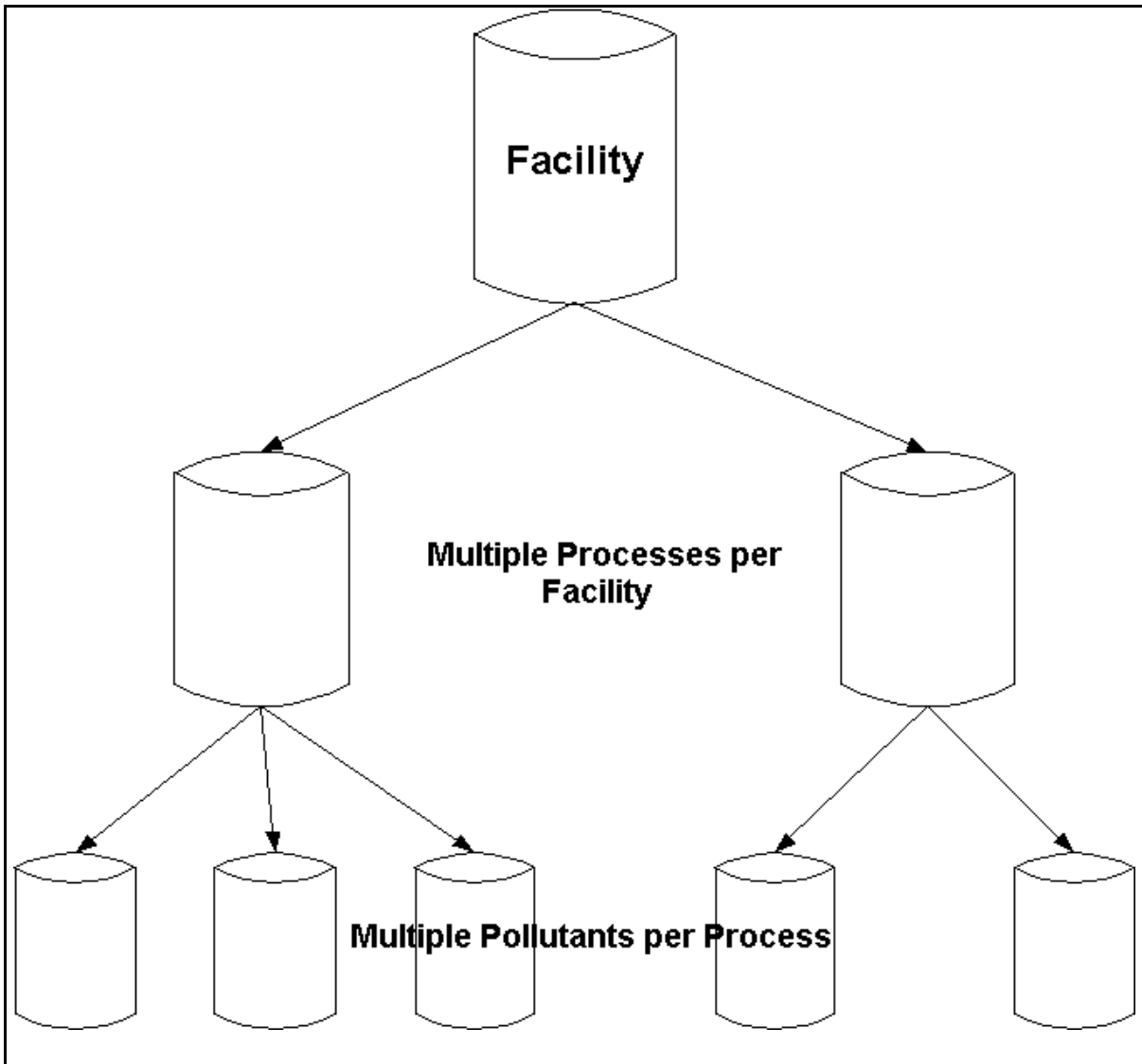


Figure 2-1: RBLC Data Structure and Data Relationships

- \$ FACILITY CONTACT INFORMATION: Fields which provide contact information for the person knowledgeable about the process at the facility being permitted. Fields are name, telephone number, and e-mail address.
- \$ PERMIT NUMBER*: An identification number assigned to the permit by the permit issuing agency.
- \$ FACILITY REGISTRY SYSTEM NUMBER: A unique identification number for the plant, used with the FRS integrated searches in Envirofacts, a single point of access to select U.S. EPA environmental data. FRNs can be found at: [http://oaspub.epa.gov/enviro/search\\$.startup](http://oaspub.epa.gov/enviro/search$.startup).
- \$ SIC CODE*: The Standard Industrial Classification (SIC) code for facilities used throughout the Office of Air and Radiation (OAR) at EPA. A list of valid SIC codes is available as a drop down list in the search and data entry portions of the RBLC web site. A link to a downloadable list present on the Clearinghouse for Inventories & Emission Factors (CHIEF) web site is provided in the RBLC Related Links.
- \$ NAICS CODE: The North American Industry Classification System (NAICS) code for facilities used throughout the Office of Air and Radiation (OAR) at EPA. Links to downloadable files listing NAICS codes and to the U.S. Census Bureau Web site are provided in the RBLC Related Links.
- \$ PERMITTING AGENCY INFORMATION*: Information on the issuing agency, and the primary contact for the agency. Agency names and agency codes are listed in Appendix B of this User=s Manual and in the RBLC Web system. Agency information: agency code, name, and phone; and agency contact name, phone number, and email; are included with each facility entry. The contact information is provided for RBLC users with questions regarding the determination.
- \$ PERMIT TYPE (NEW/MODIFIED FACILITY): A new facility will be marked as a Anew/greenfield facility@; a modification to an existing facility will be marked as AAdd new process to existing facility@, AModify existing process at existing facility@, or both.
- \$ SCHEDULING INFORMATION: Permitting scheduling dates stored in the system are the following:
- Application accepted date; and
 - Permit date*;

The RBLC data base includes a character field for each of the above dates

that indicates whether the date is estimated or an actual date.

- \$ OTHER PERMITTING INFORMATION: This field allows the user to include explanatory information about the determination, which he or she enters into the RBLC data base.
- \$ LAST UPDATE*: This field, assigned by the system, allows users to see when the last changes were made to each determination.
- \$ ENTRY DATE*: This field, assigned by the system, indicates the date that the determination was first entered into the RBLC data base.
- \$ FACILITYWIDE EMISSIONS*: The total emissions increase or decrease of CO, NO_x, PM, SO_x, and VOC from the entire facility resulting from this permitting action may be available here.

Process Information:

- \$ PROCESS NAME*: A descriptive name for the listed process (examples in Appendix A).
- \$ PROCESS TYPE CODE*: A numeric code assigned to each process used to categorize determinations. Codes and their descriptors can be found in Appendix C and in drop down lists in the search and data entry portions of the RBLC web site.
- \$ THROUGHPUT/CAPACITY AND UNITS: For each process listed in a determination, the RBLC data base can contain information about the throughput capacity of the process unit; e.g., boiler size is often specified using a throughput capacity measured in MMBTU per hour. In some cases, throughput may not be entered because it may be considered confidential business information. Unit abbreviations can be found in Appendix D.
- \$ PRIMARY FUEL: The primary fuel used by this process.
- \$ PROCESS NOTES: Explanatory information about the process is entered here.

Pollutant Information:

- \$ POLLUTANT NAME AND CAS NUMBER*: The name and Chemical Abstract Service (CAS) number of the pollutant being controlled. These can be found in Appendix H.
- \$ CONTROL METHOD*: The method was used to achieve the emission limits.

The choices that may be entered are:

- P -- Pollution prevention techniques, e.g., any required process modification, change in raw material, or management practice designed to decrease or prevent pollutant emissions;
- A -- Add-on control equipment;
- B -- Both pollution prevention and add-on equipment; and
- N -- No feasible controls.

\$ CONTROL METHOD DESCRIPTION*: A description of the specific pollution prevention and/or add-on control equipment used to meet the emission limits of the permit. **This field is unnecessary if ANo feasible controls@ is entered as the control method code.**

\$ DID FACTORS, OTHER THAN AIR POLLUTION TECHNOLOGY CONSIDERATIONS, INFLUENCE THE BACT (TECHNOLOGY) DECISION?: Answered as either yes or no.

\$ ESTIMATED PERCENT EFFICIENCY (%)*: The design efficiency expected from a particular type of control equipment or method. This figure is expressed as a percentage. Percent efficiency can be used in some permits as an enforceable limit. In these cases, the percent efficiency can be entered in lieu of the pollutant=s emission limit.

\$ COMPLIANCE VERIFICATION: Answered as either yes or unknown.

\$ EMISSION LIMIT 1, UNITS, AND OTHER CONDITIONS: The primary emission limit listed in the permit, as well as any conditions that apply to the limit. See Appendix D for a list of unit abbreviations.

\$ EMISSION LIMIT 2, UNITS, AND OTHER CONDITIONS: If provided on the permit, these numbers represent any alternative or additional emission limits which the facility may have, as well as any conditions that apply to the limit. See Appendix D for a list of unit abbreviations.

\$ RBLC STANDARDIZED EMISSION LIMIT*, UNITS, AND OTHER CONDITIONS: This limit allows comparison with other similar determinations in the data base. If standard units are provided for the process type and pollutant for which the user is searching (see Appendix E), users can compare the entries in this field to determine the most stringent limits.

\$ POLLUTANT NOTES: This field is available for explanatory information about the pollutant limit.

\$ CASE-BY-CASE BASIS*: The statutory basis for the case-by-case pollutant

limit. The choices which may be entered into the RBLC data base (only one may be chosen) are:

- Reasonably Available Control Technology (RACT);
- Best Available Control Technology (BACT-PSD);
- Lowest Achievable Emission Rate (LAER);
- Maximum Achievable Control Technology (MACT);
- Other -- Other case-by-case;
- Not Applicable (N/A);
- Best Available Retrofit Technology (BART); and
- Best Available Technology (BAT) (Non-U.S. only).

§ OTHER APPLICABLE REQUIREMENTS: This field lists additional requirements that may apply to emissions from a process:

- New Source Performance Standards (NSPS);
- National Emission Standards for Hazardous Air Pollutants (NESHAP);
- Maximum Achievable Control Technology (MACT);
- Generally Achievable Control Technology (GACT)
- State Implementation Plan (SIP);
- Operating Permit;
- Other; and
- N/A.

§ COST DATA: Information contained in these fields include:

- Cost verified by the permitting agency? (yes or no);
- Year of the dollar used in cost calculations;
- Cost effectiveness in dollars per ton; and
- Incremental cost effectiveness in dollars per ton.

§ POLLUTANT/COMPLIANCE NOTES: Additional notes about pollutant limits.

2.2.1 RBLC Data Base Options

The RBLC Web permit data base classifies permit data into three categories. These categories are:

- Draft Determinations BB These permit entries represent the most recent additions to the RBLC, but have not been verified as correct and complete by the RBLC staff. They may include permits that have not been issued (still in the review stages), and/or permit entries that are incomplete (i.e., key information is missing).
- Final Determinations (permitted since January 1, 1996) BB These permit entries

have been verified as correct and complete by the RBLC staff. They represent the most recent information in the RBLC .

- Final Determinations (permitted before January 1, 1996) BB These older permit entries provide historical information, but may not contain values in all key data fields, particularly those fields recently added to the data base.

The RBLC offers a separate data base for information on Federal regulations. Details about this data base are described in Section 3 of this Volume.

2.3 SEARCHING THE RBLC

2.3.1 Planning the Search

Before starting any search, consider the information to be gathered in the search. Review the description of each option in Section 2.1 to identify these options= specific uses and strengths. The standard and advanced searches allow the user to build a more sophisticated search, taking into account more search criteria than the basic search option. However, these search options can return an overwhelming number of determinations if the search is not specific. We recommend that users familiarize themselves with the search criteria that are available so that they can search efficiently.

2.3.2 How To Run a Search

A search allows the user to create a subset of the data base using available search criteria. A search may include any combination of data elements available. The user can select one, several, or all data elements as search criteria. After selecting one of the five search options on the RBLC Web, specify the search criteria in the input form and then start the search by clicking the ARun search now@ button. Once the search has located matching determinations, the results can be viewed on-line or downloaded as a report file. The results can be sorted by permit date, facility name or state (which also sorts by the RBLC ID). Additional instructions and search information are available on the search Web pages and through the help system.

2.3.3 Basic Search

The Basic Search option (shown in Figure 2-2) provides a simple mechanism to run a search based on some of the most basic data fields in the RBLC. The data elements available in the basic search are as follows:

- X Permit Date (the user sets a range of dates)
- X Process Type (choose from pick-list)
- X Process Name
- X Pollutant Name (choose from pick-list)
- X Corporate/Company or Facility Name

X Facility Location (choose state from pick-list)

After entering the search criteria, click the ARun search now@ button to execute the search. The results of the search are displayed in a table. Sections 2.4 and 2.5, Search Results and Data Base Reports, describe how to view and download search results.



Figure 2-2: Basic Search

2.3.4 Find Lowest Emission Rate

This option finds the lowest emission rate for a selected process and pollutant. This search is currently limited to combustion sources but eventually will be available for any processes with an emission limit expressed in standardized emission units. To use the lowest emission rate search, first select the process type and pollutant from the dynamic menu by moving your cursor through the expanding menu (Figure 2-3). Click on the pollutant of interest in the final menu. Next, enter the date range to find the lowest emission rate (Figure 2-4). Click the ARun report now@ button to run the report. The AGo Back@ button will return the user to the process type and pollutant selection menu. Search results are displayed in a table, which is discussed in Section 2.4.

EPA - TTN RBLC Find Lowest Emission Rate - Microsoft Internet Explorer

U.S. Environmental Protection Agency

**Technology Transfer Network
Clean Air Technology Center
RACT/BACT/LAER Clearinghouse**

Recent Additions | Contact Us | Print Version Search: **GO**

EPA Home > Air & Radiation > TTNWeb - Technology Transfer Network > Clean Air Technology Center > RACT/BACT/LAER Clearinghouse > RBLC Find Lowest Emission Rate

RBLC Find Lowest Emission Rate [Help](#)

Choose the process type and pollutant from the following dynamic menu. Only the process types with an arrow in front are expandable. (The menu may take a few seconds to load.)

Other Search Options:

Permit Data Base

[Basic Search](#)
[Standard Search](#)
[Advanced Search](#)

Base

[Scan All](#)
[Standard Search](#)
[Advanced Search](#)

10.000 - Fuel Combustion	11.000 - Utility and Large Industrial-Size Boilers/Furnaces (more than 250 million Btu/yr)	11.100 - Solid Fuels	11.110 - Coal	CO
20.000 - (N/A)	11.200 - Liquid Fuels	11.120 - Biomass	NOX	PM
30.000 - (N/A)	12.000 - Industrial Boilers (100 - 250 MMBtu/hr)	11.300 - Gaseous Fuels	PM10	PM2.5
40.000 - (N/A)	13.000 - Commercial Boilers (< 100 MMBtu/hr)		SOX	
50.000 - (N/A)	14.000 - (N/A)			
	15.000 - Large Combustion Turbines (> 25 MW)			
	16.000 - Small Combustion Turbines (> 25 MW)			
	17.000 - Internal Combustion Engines			
	19.000 - (N/A)			

javascript:void(window.location='ranking_report_getdate.cfm?proctype=11%2E110&pollutant=48');

Figure 2-3: Find Lowest Emission Rate - Process Type and Pollutant Menu

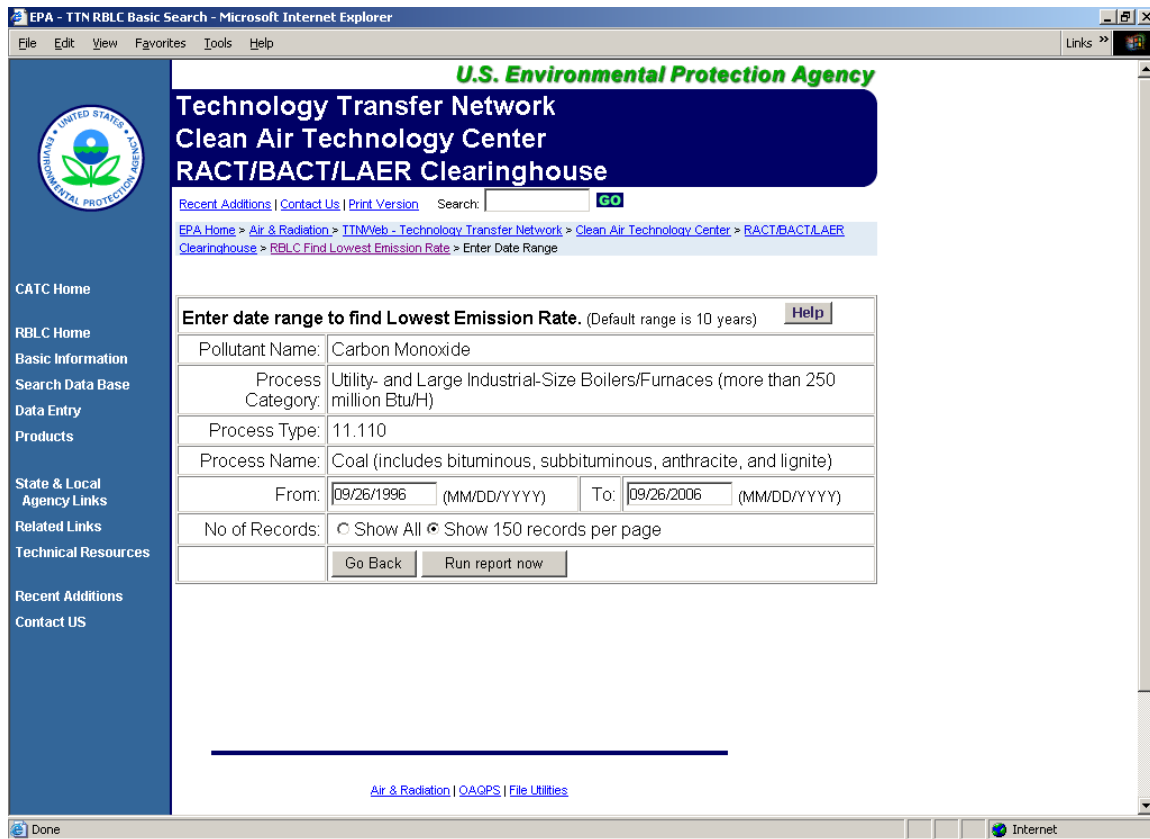


Figure 2-4: Find Lowest Emission Rate - Date Entry

2.3.5 Standard Search

The standard search option provides more flexibility in examining the permit data base. It allows searches on almost all searchable data fields and it supports searches based on multiple data fields. When a data value must be one of a particular set of choices, these choices are presented in a pick-list.

Multiple search criteria may be used. Try to select enough criteria to match a manageable number of records, without being so restrictive that the search finds no matches or so vague that the search is complex and it takes too long to run. Usually, two to three criteria work well. Be sure not to specify mutually exclusive criteria, such as selecting North Carolina as the facility location, but a permitting agency in Texas.

Search criteria are used to identify matching data base records. In most cases, the data specified will need to be exact matches. Some records (i.e., date of determination entry, facility identifier, and control efficiency) allow the use of comparison operators to define a range of potential values. For numbers, the allowable operators are equals, greater than, or less than. Operators for alphanumeric fields allow you to match any part of the data, match the beginning characters only, or specify an exact match of every character.

A total of seven data elements can be searched and include:

- 1) RBLC Date Selection
- 2) Facility or Industry Identifiers
- 3) Facility Location (State or EPA Region)
- 4) Permit Information
- 5) Process Information
- 6) Pollutant Information
- 7) Emissions Abatement Information

All of these seven data elements that can be searched using the RBLC standard search are described below, along with instructions on their use.

RBLC Date Selection

- X Choose one or more RBLC data base categories. (See Section 2.2.1 for more information)
 - X Draft Determinations
 - X Final Determinations (permitted since January 1, 1994)
 - X Final Determinations (permitted before January 1, 1994)

- X Choose a display option:
 - X Show All
 - X Show 150 records per page

- X Choose an additional date element from the date range pick-list:
 - X Date added to the RBLC
 - X Date last modified
 - X Date permit issued

Enter a Afrom@ date and/or a Ato@ date. The search will find dates the same as or more recent than the Afrom@ date and the same as or earlier than the Ato@ date.

EXAMPLE: SEARCH BY DATE

Problem: To get a summary of determinations entered and modified by a specific agency during the last three months of the year 1999.

Solution: Choose Date Last Modified, and in the date fields, enter 09/01/99 and 12/31/99. In the Permit Information section of the search, select the agency=s name from the pick-list (e.g., AZ002 - Maricopa Co. Air Pollution Control, AZ), then, run the search.

The RBLC Web is flexible about the format of dates. Dates may be entered in a numeric mm/dd/yyyy or m/dd/yy format or spelled out, i.e, >Jan 1, 1998=. If the system cannot recognize the date as it has been entered, it will prompt the user to go back and enter another date value.

Facility or Industry Identifiers

These selections allow the user to search based on a facility or company name, an RBLC ID, SIC code, or NAICS code. Select a facility identifier from the pick-list (see the items listed below) and enter the appropriate value to match.

- X Corporate/Company name
- X Facility name
- X RBLC Identifier (RBLC ID)

Any of these facility identifiers can be entered as either complete or partial names. Enter a complete RBLC ID to locate one specific determination. When the search criterion is the RBLC ID, the search will run faster if the exact match operator is used. Choose one of the following comparison operators:

- X **Containing** performs a word search and matches all facilities that contain the specified value anywhere in the facility name data element.
- X **Beginning with** finds only those facilities where the facility name data element begins with the value specified.
- X **Exact match** is the most restrictive operator and requires a character-by-character match between the value specified and the facility name data element.

Comparison operators are particularly useful when searching text fields such as the facility name. For example, when using the Beginning With operator and specifying **THE PA** as the value to match, the result set will include "THE PAPER CLIP FACTORY," "THE PA ELECTRIC PROJECT," and "THE PASTRY SHOP," but not "PASTEURIZATION INC." Using the Exact Match operator would probably give you an empty result set. Specifying **PA** as the value to match with the Containing operator would find all of these facilities, plus names such as "PRINCIPAL REPAIRS" and "CONSOLIDATED PAVERS."

For a more general industry-based search, choose from either the pick-list of SIC or NAICS codes to retrieve a broad set of facilities in a particular industry. Many older permits were added to the data base without a SIC code, so searches may not find all matching records.

Facility Location

The data base may be searched by EPA Region; State or U.S. territory; or Class One/U.S. Border areas in combination with the facility=s distance to Class One/U.S. Border areas (up to 20 areas may be selected at one time). The latter combination will find facilities that are near any of the National Parks and other protected areas that have been selected. Selection options are:

- X Select the EPA Region in which facilities are located; or
- X Enter a state abbreviation (this option will supersede an EPA Region selection); or
- X Select Class One affected boundaries.

Permit Information

The permit information option allows a search based on the permitting agency, or a permit number. Search options are:

- X Choose a State or local permitting agency from the list provided to obtain a listing of all determinations entered by a specific agency. Enter the first letter of the state of interest to scroll to the appropriate agency codes. Appendix B lists all agency codes used in the RBLC.
- X Enter a permit number to locate one specific determination. Every permitting agency uses its own format for permit numbers. It can be difficult to match a permit number exactly. Try using a more general search criterion, and make a note of the RBLC ID so the permit can be quickly located in the future.

Process Information

The data base can be searched by process information by entering a word or phrase that describes a particular process and by selecting from the pick-list of process type codes/names. Process type codes/names are the primary method of classifying source categories in the permit data base, and a search is most likely to be successful if the process code is specified. Process names can be used to narrowly define a broad process category. Detailed process information may not be available for NSR early notification entries.

- X Enter a partial or complete process name. This search criterion automatically uses the containing operator and works especially well when combined with one of the other process data elements. Appendix D lists abbreviations for common process names used in the RBLC.
- X Choose from the list of process type codes/names. Enter a number between 1 and 9 to scroll to the process codes starting with that digit. Appendix C lists all process codes used in the RBLC.

Pollutant Information

Pollutant information includes the pollutant name or its Chemical Abstracts Service (CAS) number. When conducting a search based on a pollutant, it is strongly recommend that some facility or process-level criteria be included in the search to reduce the size of the search results. Search options are:

- X Specify a pollutant name. Choose from one of the criteria pollutants in the pick-list, or choose >Specify other= and type the pollutant name. Appendix H of this User's Manual lists the names, Chemical Abstract Service Numbers, and alternate names of pollutants included in the Clearinghouse.
- X Enter a CAS number. This is the recommended method for finding a specific pollutant because it accounts for any variations in pollutant names. A listing of CAS numbers is in Appendix H of this User's Manual.

Emissions Abatement Information

Emissions abatement information includes the case-by-case regulatory program under which the limit was established, the method used to control emissions, a particular pollution prevention technique or add-on control that was used to achieve the emissions limit, and/or the percent efficiency of the control method used. Partial words work best for searches on control description, because they allow for spelling variations. For control efficiency information, specify a comparison operator.

- X Specify the case-by-case regulatory basis under which limits were established (e.g., BACT-PSD or LAER). Choose from the pick-list of case-by-case basis values in the data base.
- X Choose the control method name/code that describes the method used to achieve the emissions abatement. Control method codes are: A (add-on control), P (pollution prevention), B (both), and N (none). This selection works best when used in combination with other criteria because it matches a large number of data base entries.
- X Enter a word or phrase for the particular pollution prevention method or add-on equipment that was used.
- X Select a control efficiency threshold as a percentage. Thresholds can be specified as either equal, greater than or less than. Very often, a measure of efficiency is not provided with the submittal, so a search on this data element may not find many matching records.

EXAMPLE: USING THE STANDARD SEARCH FORM

Problem: Too many determinations.

The RBLC Web data base is being consulted to identify nitrogen oxide (NO_x) control methods applied to large, combined-cycle, natural gas turbines. A quick Basic Search using the generic process type code 15.000, Large Combustion Turbines (> 25 MW), and the pollutant selection NO_x yields 412 determinations, an overwhelming number. What sort of search options can be used to refine the search?

Solution: Define needs, experiment with options, run several searches.

The study is focusing on just combined-cycle, natural gas turbines, so the generic process type is not the best selection for the search. Refining the process type code selection will help. Combustion source process type codes are now broken down into very specific subsets of similar sources. In this example, there is a corresponding process type code that closely matches the search criteria: 15.210: Natural Gas, Combined-Cycle or Cogeneration, Large Combustion Turbines (> 25MW). The search can be further refined by searching the process name for the word Acombined@ to eliminate cogeneration processes. However, using the specific process type code, the pollutant NO_x, and Acombined@ in the process name field still yields 108 determinations.

A further limit is that results of this work will be used in the state of California, therefore, specifying California determinations should reflect State rules and practices. Using the location/state option, along with those previously selected, results in 7 determinations and 8 processes, both very manageable numbers. Further research could identify states with similar NO_x rules, or, having identified a likely pollution control method, the standard search or advanced search could be used to identify all instances of that control method for review.

Once all search criteria for the standard search have been specified, click on the ARun search now@ button to begin the search, or click the AReset@ button to start over with a blank standard search form.

The results of the search are displayed in a table. Examining the results of the search and downloading the results to a local PC are discussed in Section 2.4.

2.3.6 Advanced Search

The advanced search option lets the user create search criteria by choosing from pick-lists of all searchable data elements and data operators, and entering desired values. Three search criteria can be combined using >AND= or >OR= logical connectors for more selective searches. Figure 2-5 illustrates the initial part of the advanced search page. Although similar to the standard search, the advanced search option does not provide sets of allowable values for data

elements. These values must be entered by the user. In general, the user should know what information each data element contains to use this option effectively. Use the on-line help and this document's discussions of data base elements in Section 2.2, and standard search options in Section 2.3.5, when running the advanced search. As with other search options, the user must select one or more RBLC permit data bases. See Section 2.2.1 for more information.

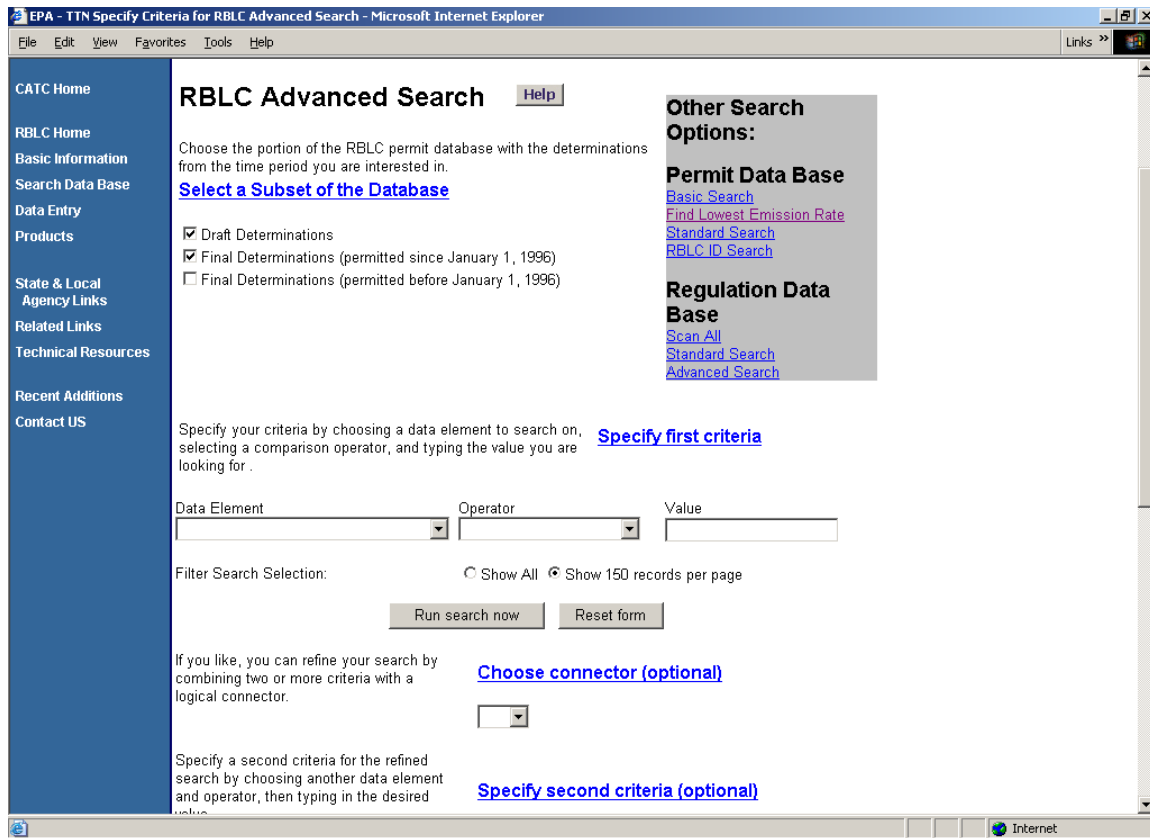


Figure 2-5: Advanced Search

Specify the first search criteria by choosing a data element and a comparison operator from the pick-lists. Then type the desired alphanumeric value for the data element in the text box. Entries are not case sensitive. The searchable data elements are:

- X Agency code;
- X Case-by-case basis;
- X CAS number;
- X Corporate/Company name;
- X Control method code;
- X Control method description;
- X Date added to the RBLC;
- X Date last modified;
- X Date permit issued;
- X Distance to Class 1 areas;

- X Estimated efficiency;
- X Identifier (RBLC ID);
- X Permit Number;
- X Facility name;
- X Facilitywide emissions (pollutant name);
- X Pollutant name;
- X Process name;
- X Process type code;
- X Region;
- X SIC code;
- X NAICS code; and
- X State (search using two-character US Post Office abbreviation for the state).

The operator you choose defines which values of the specified data element you are interested in. In the simplest criteria, you are usually trying to match a value and will use the equals operator, for example, AState equals TX@. Not all operators work with all types of data. The available operators are:

- X Equals;
- X Begins with;
- X Contains (word search);
- X Greater than;
- X Less than;
- X Greater than or equal to; and
- X Less than, or equal to.

The "equals" operator and the inequality operators (>, <, >=, <=) can be used with all data elements. The Acontains@ operator cannot be used with date or numeric data elements.

All three fields (i.e., data element, operator, and value) must be entered. At this point, the user can click the ARun search now@ button to run the search using only one set of search criteria, or a second set of search criteria can be added by choosing one the following logical connectors:

- X **AAnd@** finds records that match **both** of the search criteria.
- X **AOr@** finds records that match **either one** of the search criteria.

If a connector is selected, the second criteria set must be specified by choosing data elements from the second criteria pick-lists and entering a desired value. Be careful not to specify mutually exclusive criteria. For example, specifying AState equals NC and State equals FL@ will not find any matching records.

At this point, the user can click the ARun search now@ button to run the search using two sets of search criteria, or a third set of search criteria can be added by choosing data elements from the third criteria pick-list, and entering a desired value. The same logical connector selected above applies to the third set of search criteria.

Click the ARun search now@ button to run the search. The AReset form@ button can be used to start over with a blank search form. Search results are displayed in a table, which is discussed in Section 2.4.

2.3.7 RBLC ID Search

This option is the fastest way to find a permit on the RBLC web. A search by the RBLC Identifier requires only one input, the RBLC ID. Up to three RBLC identifiers can be used in a single search. This search will find all valid RBLC IDs (Draft and Final) in the RBLC data base.

The correct format of an RBLC ID is **AA-nnnn**, where **AA** is the 2-letter state abbreviation and **nnnn** is a 4-digit number that uniquely identifies the permit. Some older permits use a single letter suffix (e.g., CA-0001.A) to further distinguish among related determinations. Input for this single letter suffix field is not case sensitive.

Click the ARun search now@ button to start the search. Search results are displayed in a table that is discussed in Section 2.4.

2.4 SEARCH RESULTS

The results for all RBLC search options are displayed as a table of links to additional information. For all searches except the Find Lowest Emission Rate Search, the table (see Figure 2-6) displays the RBLC ID, corporate/company and facility name, city, state, process type code, process name, permit number, and permit date. Initially, the results table is sorted by permit date, but the results can also be sorted state/RBLC ID (the first two characters of the RBLC ID are the state abbreviation), or corporate/company and facility name by using the ASort By@ buttons at the top of the table. Each row in the table represents a determination and process that matched the search criteria. A facility may appear with multiple rows, one for each matching process found by the search. Results can be viewed on-line or saved in any of the RBLC standard output formats, which are discussed in Section 2.5. To view and navigate through data on-line, click on the RBLC IDs or process description links. The RBLC ID numbers are linked to facility level data (general information about the permitting action). Process descriptions are linked to the process details page that includes links to pollutant data.

EPA - TTN RBLC Standard Search Results - Microsoft Internet Explorer

File Edit View Favorites Tools Help Links »

RBLC Search Results

Your search has found **6** facilities and **6** processes that match your search criteria. You can view details for one or more facilities by clicking on the highlighted RBLC identifier or the process description in the list below. To create a report, select one of the standard output formats from the [list of reports](#) at the bottom of this page. Only facilities that are checked in the table below will be included in your report. Click on the check box next to any facility to switch between checked and unchecked or use the "Check" or "Un-Check" all facilities buttons at the top of the list to check or uncheck all records in the list.

Matching Facilities for Search Criteria:

Portion of Database: Draft Determinations And RBLC Permits issued during or after January, 1996
and region = 4 and Process Type Contains '30.212'

NOTE: Draft determinations are marked with a "*" beside the RBLC ID.

RBLC ID	CORPORATE/COMPANY & FACILITY NAME	CODE	PROCESS DESCRIPTION	PERMIT NUMBER PERMIT DATE
<input type="button" value="Sort By"/>	<input type="button" value="Sort By"/>			<input type="button" value="Sort By"/>
<input checked="" type="checkbox"/> * MS-0075	GEORGIA PACIFIC CORP. MONTICELLO MILL	30.212	SMELT DISSOLVING TANKS (4)	1500-00007 07/09/2003
<input checked="" type="checkbox"/> SC-0083	WEYERHAEUSER COMPANY WEYERHAEUSER COMPANY- MARLBORO PAPER MILL	30.212	SMELT DISSOLVING TANK	1680-0043DE- DG 12/10/2002
<input checked="" type="checkbox"/> NC-0092	INTERNATIONAL PAPER COMPANY RIEGELWOOD MILL	30.212	SMELT TANKS	03138R16 05/10/2001
<input checked="" type="checkbox"/> AL-0116	GULF STATES PAPER CORPORATION GULF STATES PAPER CORPORATION	30.212	SMELT DISSOLVING TANK	105-0001-X027 12/10/1997

Internet

Figure 2-6: Results Table for a Standard Search

Depending on which option you have selected, the results table displays either all of the records or 150 records at a time. Any reports generated from the results table will contain only the facilities displayed on the current page. If you have selected "Show 150 records per page" and more than 150 records are returned by a search, a link to the next 150 records appears just above and below the results table. Users can move through pages of results using the ANext 150 Facilities@ and Aprevious 150 Facilities@ links.



Figure 2-7: Results Table for Find Lowest Emission Rate Search

For the Find Lowest Emission Rate Search, the resulting Ranking Report (see Figure 2-7) displays the RBLC ID, permit date, corporation/company name and facility name, and standard emission limit. The search criteria used for the search (Process Code, Process Name and Pollutant) appear towards the top of the page as a reminder. To view and navigate through data on-line, click on the RBLC IDs or standard emission limit links. The RBLC ID numbers are linked to facility level data (general information about the permitting action). Standard emission limits are linked to the pollutant details page. Although all of the usual report formats are available, no report format lists just the lowest emissions results. Users can print or save the results table itself.

2.4.1 Navigating the Search Results

Each RBLC Web page that displays facility, process or pollutant permit data has navigation buttons near the top of the page to assist in moving through the Web site, search results and data screens. Buttons are provided for the following: ARBLC Home@, ANew Search@, ASearch Results@, AFacility Information@, AProcess List@, AProcess Information@,

and APollutant Information@. Figures 2-8 through 2-10 show these navigation buttons. Use the navigation buttons and links rather than the Web browser=s navigation buttons to avoid potential errors that can result from the way that browsers cache information. If a search is not successful, return to the search page and re-specify the search criteria. Check to make sure that a misspelled word or an invalid value for a search element is not the problem.

2.4.2 Viewing Search Results

Information about each permit determination in the RBLC data base is organized by facility, process, and pollutant. Each RBLC ID in a search results table links to details about the permitted facility for that determination. Each process listed in the results table links to details about that process in the permitted facility. Process links are not provided in the Find Lowest Emission Rate search results table; however, each standard emission limit listed in the Find Lowest Emission Rate search results table is linked to pollutant details for the pollutant selected. Successively deeper levels of information are viewed by clicking on the navigation buttons that appear near the top of each data page or links provided on the page. Refer to Section 2.2 for more information about facility, process, and pollutant level data elements. For other than Find Lowest Emission Rate searches, pollutant level data is accessed from links located on its associated process level page. Use the ASearch Results@ navigation button near the top of the page to return to the search results table and pick another facility to view.

Facility Level Data

The first page that is displayed when the RBLC ID link is selected is the determination=s facility level information (see Figure 2-8 for an example). Navigation buttons are available on this page for viewing search results and process/pollutant information.

If a facility has multiple processes, they are all displayed on a process list page. Use the AProcess List@ navigation button to display the list of processes. Each process in the list is a link to a process detail page that displays additional information about that process. The process detail page appears immediately upon selecting the AProcess List@ button if the facility has only one process.



Figure 2-8: Facility Level Detail Page

Process Level Data

The process detail page (Figure 2-9) presents specifics about the process. Use the navigation button near the top of the screen to go back to the process list (if any) to select other processes for viewing. A pollutant list for the process is present in the lower right corner of the page. Each pollutant name is an active link to the pollutant level detail page.

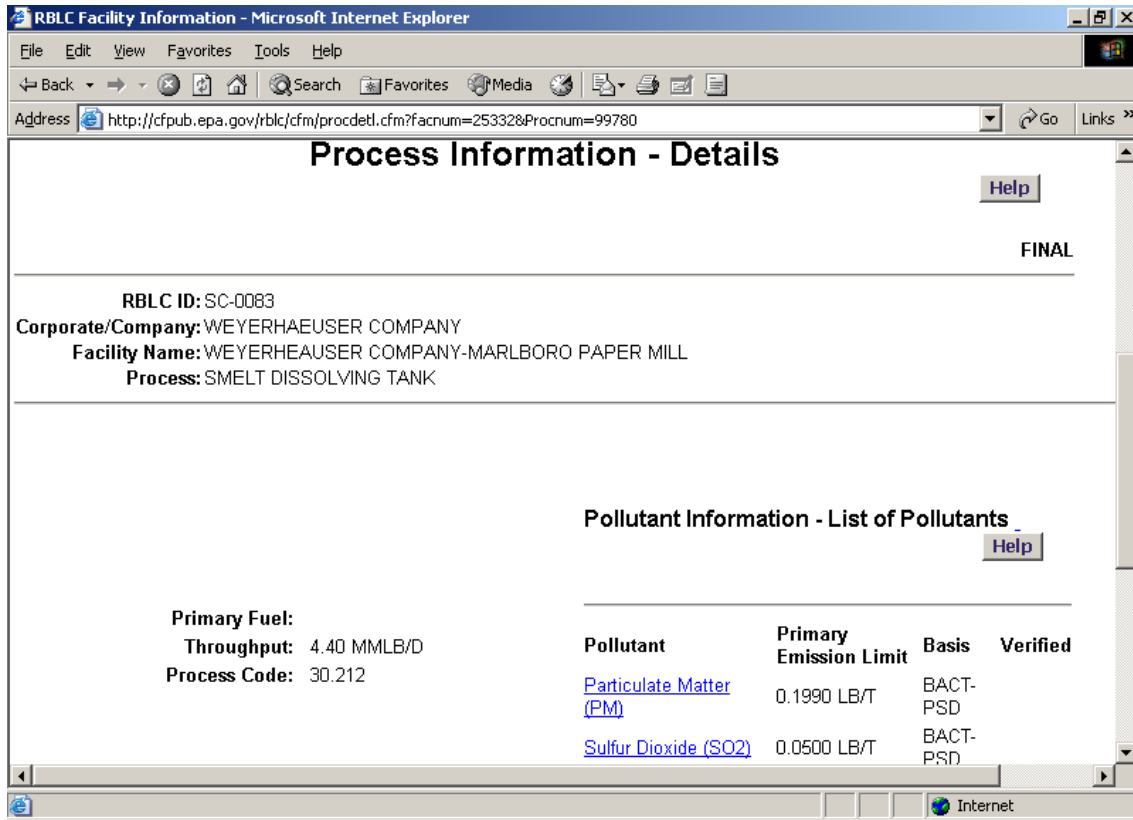


Figure 2-9: Process Level Detail Page

Pollutant Level Data

The pollutant detail page (Figure 2-10) presents specifics about emissions of the particular pollutant. Use the AProcess/Pollutant Information@ navigation button at the top of the screen to go back to the process/pollutant list to select and view other pollutants (if any).

(checked or unchecked, up to 1000 records) in the report.

If you selected AShow 150 records per page@ in your search criteria on the previous Web page, only 150 records can be displayed on a results page. If your search identifies 150 or fewer records, all records will be displayed on the same page and the report options will function as indicated above. However, if your search has more than 150 records, the AShow only selected records on this page@ option will be limited to the selected (checked) records on the current Web page. You must select the APrint all records@ report option to print all (first 1000) records that met the search criteria on the current and subsequent pages. You may also choose the AShow only selected records on this page@ option and generate separate reports for the records displayed on each results page.

Available report formats are listed in a pick-list at the bottom of the results page (see Figure 2-11). Both summary and detail formats are available. Summary reports include all of the facilities displayed in the results table. These reports are fairly short and do not take a long time to create. Detail reports can be very lengthy depending on the size of the result set. Formatting time for reports can be reduced by selecting specific facilities using the check box in the first column next to each Rule ID in the results table. Initially all affected facilities are checked and will be included in the detail reports. Use the check box next to an affected facility to de-select the facility. The ACheck@ and Uncheck@ buttons at the top of the results table can also be used.

Choose a format from the list, then click the ACreate report@ button to generate the report. Formatting a report may take some time, especially for a large number of facilities. The detail reports take the longest time to generate because they include the most information. All reports are created as ASCII text. Also see Appendix F - Examples of RBLC Standard Reports.

The following report formats are available:

- X **Process Index Report (as Sorted in Results Table):** This formats reports RBLC ID, facility name, permit date, and process code and description.
- X **Process Type Summary Report:** Process records are sorted by numeric process code. In addition to the process code and name, this report includes the following data elements: RBLC ID, facility name, permit date, permitting agency, and name and telephone number for the current agency contact person who is knowledgeable about the determination.
- X **Comprehensive Report (as Sorted in Results Table):** This format reports most of the information in the permit data base for selected facilities. Because it includes details about all processes and pollutants, this is a very lengthy report.

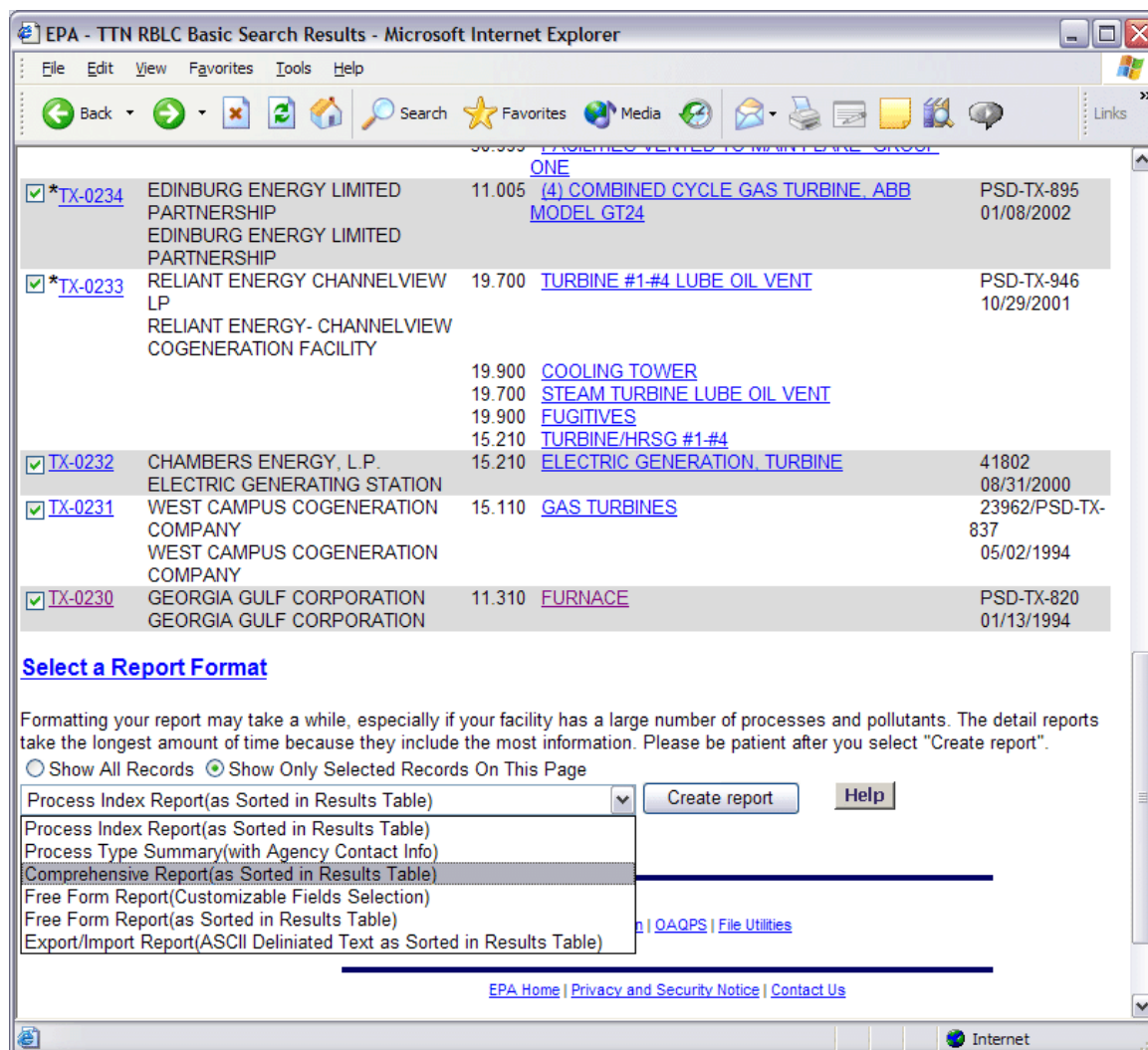


Figure 2-11: Download Report Format Selection

- X **Free Form Reports (as Sorted in Results Table):** There are two options for this report. The customizable fields option allows the user to select the fields displayed in the report. The other option literally displays all information in the permit data base for the selected facilities. Each data field displays as one line in the report. Depending on the number of fields selected and the number of determinations in the search results table, this may be a very long report.
- X **Export/Import Report (as Sorted in Results Table):** This report is customized, and allows the user to select only those data fields that are needed. This report saves selected data fields in a quoted, comma-delimited format that is suitable for importing into desktop data bases or spreadsheets.

2.5.2 Downloading RBLC Information

When the RBLC Web has finished creating the report, either a **Save** dialog box or the report itself will be displayed. The exact action depends upon the browser configuration. If the report appears on the browser, choose the **ASave As@** command from the browser File menu to save the report file. Then, use the **ABack@** button to return to the results table. Netscape8 users must specify a ".txt" file extension when saving a report. The default extension is ".cfm" which could cause problems when the file is re-opened. When using other browsers, using a **A.txt@** file extension is also recommended if the file will be used with word processing or spreadsheet software.

A report can also be printed directly from the RBLC Web using the browser print function.

SECTION 3: RBLC REGULATION DATA BASE SEARCH ROUTINES AND DATA STRUCTURE

The RBLC Regulation data base contains summaries of U.S. EPA emission standards enacted in response to the Clean Air Act and its Amendments. These regulations include Maximum Achievable Control Technology (MACT) standards, National Emission Standards for Hazardous Air Pollutants (NESHAP), New Source Performance Standards (NSPS), Control Techniques Guidelines (CTG) documents, which specify requirements for Reasonably Available Control Technology (RACT), and Section 183(e) (Best Available Control) regulations (i.e., consumer products standards).

Registration is not required to use the RBLC Web regulation data base. Click on ASearch Data Base@ from the RBLC home page sidebar menu. From the “RBLC Basic Search” page under AOther Search Options,@ select one of the regulation data base search options to search or browse the regulation data.

This section discusses: (1) regulation data base elements and structure; (2) search methodologies; (3) the three regulation data base search options; and (4) standard regulation data base output reports that are available for your search results.

3.1 DATA BASE ELEMENTS AND STRUCTURE

The organization of the regulation data base is similar to that of the RBLC's permit data base. Each entry, or regulation in the data base contains three levels of data:

- \$ Regulation data,
- \$ Process data, and
- \$ Pollutant data.

Each regulation is associated with a type of facility and related processes that emit pollutants. The facility might be a particular type of industrial plant, such as a coke oven or vinyl chloride manufacturing plant, or a generic operation such as waste transfer.

Each regulation addresses one or more different processes. Regulations can specify different emission standards for new and/or existing sources; or for sources that are different in size (throughput). Therefore, a regulation may address the same general process multiple times, but with different emission limits for sources with different capacities or construction dates. Each process, in turn, is linked to information on one or more pollutants and the emission limits required by the regulation. Each regulation must have at least one process and at least one pollutant.

The information that EPA maintains in the data base is listed below. Data elements that

can be used in a search are marked with an asterisk (*).

Regulation Name / Industry Sector Information

- X RBLC ID*: The unique identification number assigned to each regulation by the system. For Federal regulations, the number consists of the letter "R" followed by the abbreviation AUS@ and a four-digit number, e.g., RUS-0001 is the first entry made for Federal regulations. Although no State and local agency regulations are currently in the data base, they may be added in the future. State and local regulations would use the appropriate State abbreviation in the RBLC ID instead of AUS.@
- X REGULATION NAME/INDUSTRY SECTOR*: A character field describing the facility, plant, or operation affected by the regulation.
- X SIC CODE*: The standard industrial classification (SIC) code for facilities used throughout the United States. This classification system is being phased out and replaced by the North American Classification System (NAICS) code (see below). A list of valid SIC codes is available as a drop down list in the search portion of the RBLC web site, or the list can be downloaded as a file from the RBLC Documents list.
- X NAICS CODE*: The North American Industrial Classification System (NAICS) code was established pursuant to the North American Free Trade Agreement (NAFTA) and is replacing the SIC code (see above). A list of valid NAICS codes is available as a drop down list in the search portion of the RBLC web site, or the list can be downloaded as a file from the U.S. Department of Commerce Web site using links to the NACIS provided from the "Related Links" page on the RBLC Web.
- X STATE: Two-character abbreviation for the State in which the regulation applies. "US" is the abbreviation used for Federal regulations.
- X EPA REGION: Zero (0) is used as the region for Federal regulations. If State regulations are added, the EPA region number (1-10) will indicate the region in which the State that issued the regulation is located.
- X REGULATORY BASIS*: The statutory basis under which the agency issues the regulation. The choices which may be entered are:
 - 183(E)/BAC -- Consumer & Commercial Products VOC Limits;
 - CTG -- Control Technique Guidelines/CTG (RACT for VOC);
 - FIPMACT -- Federal Implementation Plan (MACT Related);
 - NESHAP -- National Emission Standards for HAP (NESHAP) – Health based;

- NESHAP -- National Emission Standards for HAP (NESHAP) – MACT based;
- NSPS -- New Source Performance Standards (NSPS); and
- Other Regulations.

- X STATUS OF THE REGULATION: A character field describing the legal status of the regulation (proposed, in effect, etc.).
- X AGENCY INFORMATION: Four fields which provide information on the regulatory agency. The first field is the agency code (see Appendix B); the second is the agency name (automatically assigned based on the agency code). The third and fourth fields provide a contact name and phone number for the person at the regulatory agency who can answer questions regarding the regulation.
- X REGULATION NUMBER*: A number which the regulatory agency assigns to the regulation. If the regulation is issued by U.S. EPA, this number would identify the appropriate part and subpart of the U.S. Code of Federal Regulations (CFR).
- X BACKGROUND INFORMATION DOCUMENT (BID): The identification number which the regulatory agency assigns to the document that contains technical, cost, and other information supporting the regulation. A second field is available for the title of the document.
- X SCHEDULING INFORMATION: Key dates in the development of the regulation are stored in the data base, such as the following:
 - Date technical support documentation was completed;
 - Date public notice was given;
 - Date regulation was proposed;
 - Date when the regulation was first entered into the regulation data base*;
 - Date when changes were last made to the data base for this regulation*;
 - Date final regulation became effective*.

The data base also includes character fields for a reference to the legal publication in which regulations were announced. For Federal regulations, this is the Federal Register (FR).

- X NOTES: Field that includes explanatory information about the regulation.
- X ON-LINE FILE INFORMATION: These two fields are for Federal regulations only and list the documents (text of regulation, any supporting documentation, etc.) and their location if the regulation is available for downloading from the OAR Policy and Guidance web site.
- X ENTRY DATE*: Date when the regulation was first entered into the regulation data

base.

- X LAST UPDATE*: Date when changes were last made to the data base for this regulation.

Process Information:

- X PROCESS DESCRIPTION*: The description of the process being regulated.
- X PROCESS TYPE CODE*: A numeric code assigned to each process used to categorize determinations. Codes and their descriptors can be found in Appendix C and in a drop down list in the standard regulation search portion of the RBLC web site.
- X SIZE/CAPACITY AND UNITS: Information on the size or capacity of the process unit, often specified using a range or a capacity threshold.
- X PROCESS NOTES: This field includes explanatory information specific to the regulation of this process.

Pollutant Information:

- X POLLUTANT NAME*: The name of the pollutant being controlled.
- X CHEMICAL ABSTRACT SERVICE (CAS) NUMBER*: The Chemical Abstract Service number for the pollutant.
- X PRIMARY EMISSION LIMIT AND UNITS: The primary emission limit listed in the regulation. For regulations that do not have numeric limits, the units may refer to the demonstrated technology descriptions or to the notes.
- X ALTERNATIVE EMISSION LIMIT AND UNITS: If provided in the regulation, these numbers represent any alternative emission limitations that may be an option or required for a pollutant.
- X PERCENT EFFICIENCY (CONTROL EFFICIENCY)*: The design efficiency required by the regulation, often based on a particular type of control equipment and/or pollution prevention method, and expressed as a percentage.
- X TYPE OF EMISSION CONTROLLED*: A one-character field indicating whether the emission is classified as fugitive (F), point source (P), or area source (A).
- X DEMONSTRATED TECHNOLOGY DESCRIPTION*: A description of the specific add-on control equipment or pollution prevention techniques on which the emission limits of the regulation are based. Pollution prevention often includes continuous

monitoring requirements, work practice standards, or operator training and qualification.

- X **COST DATA:** Control costs for a model facility. The model plant is generally described in the process notes. Costs contained in the regulation data base include:
- Year of the dollar used in cost calculations;
 - Capital cost to purchase and install control equipment;
 - Annualized cost (amortized capital costs plus annual operation and maintenance (O&M) costs); and
 - Cost effectiveness in dollars per ton.

3.2 SEARCHING THE REGULATION DATA BASE

3.2.1 Planning the Search

The RBLC regulation data base can be searched using three search options as discussed below. These options allow the user to browse the regulation listings or build sophisticated searches using multiple search criteria. Users should review the data base elements listed in the preceding section, and note those that can be used in a search.

3.2.2 How to run a search

The three search options available for the RBLC Regulation data base are listed and described directly below in Section 3.2.3. Choose one of these options to begin a search. Search criteria are selected using the same tools as those in the permit data base search system: pick-lists, buttons, and text fields. After defining criteria, click on the ARun search now@ button to run the search.

All of the RBLC Regulation data base search options present results in a table that lists the RBLC Regulation ID, the CFR citation, the regulation name/industry sector, the process code, and the process description. Each option also supports viewing and saving the results in any of the RBLC standard output formats. See Section 3.3 to learn more about viewing results and generating reports.

3.2.3 Regulation Data Base Search Options

Choose one of the following three options under ARegulation Data Base Searches@ to locate information in the regulation data base. Then, follow the directions on the screen to define a search.

- X **Scan All Regulations** displays all regulations in the data base, sorted alphabetically by Regulation Name/Industry Sector.
- X **Standard Search** provides a search form with a format similar to that used for the permit data base standard search. Standard search allows users to build search criteria by choosing from multiple data elements, such as regulation identifiers, facility type, pollutants, and control information. Where appropriate, pick-lists of

allowable values are provided.

- X **Advanced Search** allows users to choose from pick-lists of data elements and enter desired values to build a set of search criteria. Criteria can be combined for more selective searches. In general, users should know what each data element contains to use this option effectively.

3.2.3.1 Scan All

Choose the AScan All@ option to easily view the entire regulation data base. All entries to the data base are displayed in a table, and entries can be selected for download. Results are sorted alphabetically by Regulation Name/Industry Sector. However, the results can be resorted by the RBLC ID or CFR Citation by clicking on the “Sort By” button above each of those columns in the results table.

3.2.3.2 Standard Search

The AStandard Search@ option offers flexibility in examining the regulation data base (currently 223 rules). It allows searches on several data fields (for example, process type code, process name, or pollutant), and it supports combining data fields for more selective searches.

The initial part of the AStandard Search@ option displays links to groups of related search fields, (e.g., regulation identification or process information). These links can be used to move directly to those fields, or the user can scroll through the page. Search criteria are defined by filling out the appropriate sections of the form. Figure 3-1 shows part of the standard search input form for the regulation identification section. Brief instructions for each group of data elements appear below each group's input fields.

Some data elements can be matched in one of several ways. These elements are presented in the search form with a comparison operator and a value field for entering matching text or numbers. For example, the allowable operators for numbers are equals, greater than, or less than. Operators for alphanumeric fields allow a match of any part of the data, beginning characters only, or an exact match of every character.

One or more of the search criteria fields can be filled out for the standard search. Try to select enough criteria to match a manageable number of records, without being so restrictive that the search finds no matches or being so vague that the search is complex and takes a long time to run. Usually, two to three criteria work well. Be sure not to specify mutually exclusive criteria.

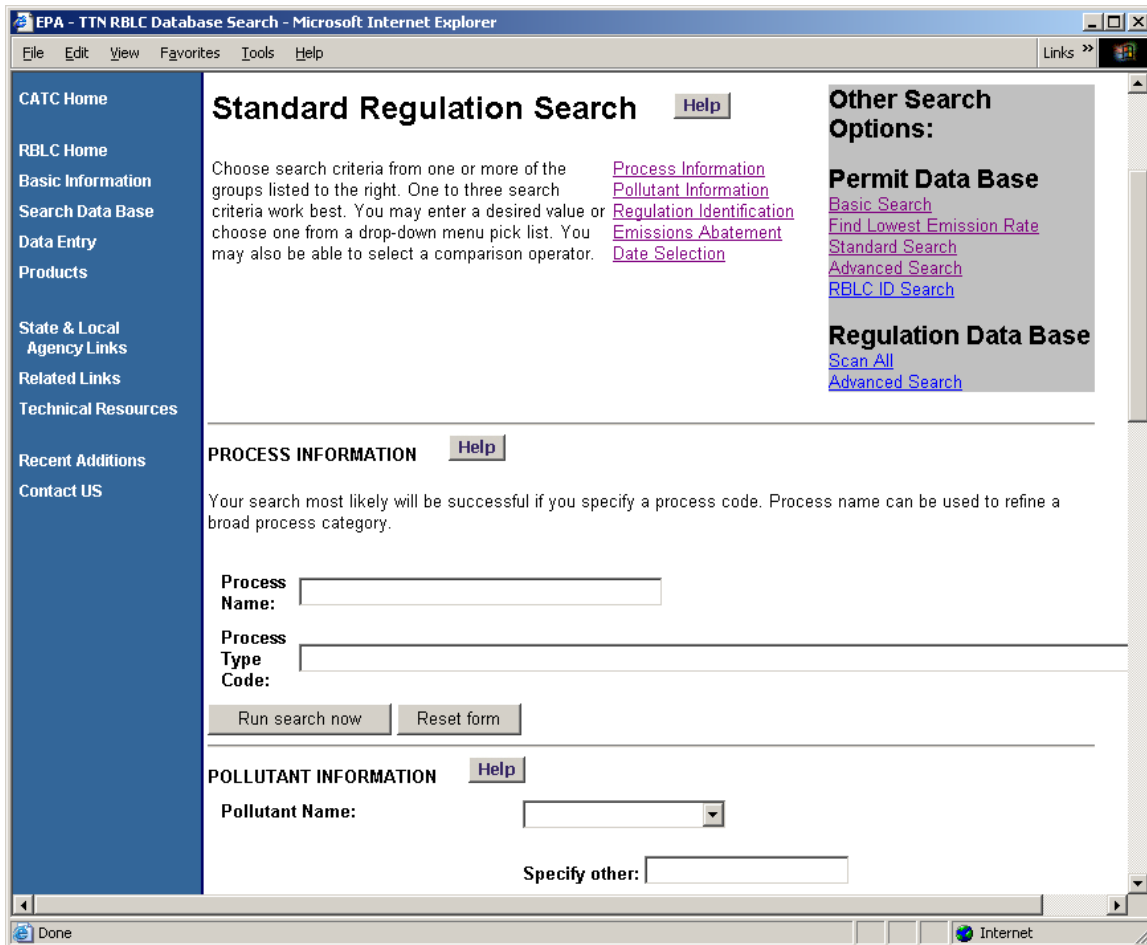


Figure 3-1: Regulation Data Base Standard Search

Five groups of data elements can be searched by the RBLC standard search:

- 1) Process Information;
- 2) Pollutant Information;
- 3) Regulation Identification;
- 4) Emission Abatement; and
- 5) Date Selection.

These groups are discussed below.

Process Information

- X Enter a partial or complete process name. This search criterion automatically uses the Acontaining@ operator and works especially well when combined with one of the other process data elements. Appendix D lists common process names used in the RBLC.

- X Choose a process type code from the pick-list. Enter a number between 1 and 9 to scroll to that part of the process code list: 1 for fuel combustion sources; 2 for waste disposal; 3 for the wood products industries; 4 for organic evaporative losses; 5 for petroleum/natural gas production and refining; 6 for chemicals manufacturing; 7 for food and agricultural products; 8 for the metallurgical industry; and 9 for mineral products and miscellaneous sources. Appendix C lists allowable process codes. A higher level process type code (i.e., ANN.000" where NN represents the first two digits of the process type code and is followed by a decimal point and three zeros) can be used to identify a larger group of related process types that share the same initial digits in the process type code.

Pollutant Information

- X Specify a pollutant name. Choose from one of the pollutants in the pick-list Appendix H of this User=s Manual lists names, Chemical Abstract Service Numbers, and alternative names for pollutants included in the RBLC.
- X Choose from the list of available emission types (point, area, or fugitive). This selection works best when used in combination with other criteria because it matches a large number of data base entries.

Regulation Identifiers

- X Select an identifier from the pick-list (see below) and enter the desired value to match, using comparison operators to find entries containing, beginning with, or exactly matching the entered text. Regulation identifiers are:

- S Regulation Name/Industry Sector
- S CFR Citation
- S RBLC ID (Regulation number)

Enter an RBLC ID or CFR citation in the value field to locate one specific regulation. The format for RBLC Regulation IDs is ARAA-NNNN@, with "R" as a prefix (see the description of Rule ID in Section 3.1) and "AA" indicating US for a Federal regulations or a state abbreviation for a state regulation (Note: At this time, only Federal regulations are currently in the RBLC Regulation data base). The format for CFR citation varies. Most Federal regulations take the form "40 CFR Part nn Subpart aaa" where "nn" is the 2 digit part number (e.g., part 60 for NSPS, part 61 for NESHAP, and part 63 for MACT standards) and "aaa" is the subpart designation which may vary in length from one to five letters. If the appropriate part and subpart of the CFR in which a regulation was published are known, use the CFR citation. CTG entries do not have regulation numbers.

- X Choose from the pick-list of SIC codes to retrieve a set of facilities in a particular industry. A link to a downloadable list present on the CHIEF web site is provided

in the RBLC Reference Library.

- X Choose from the pick-list of NAICS Industry Sector codes to select the first two digits of the NAICS code, then use the NAICS Industry Code pick list to pick the remaining four digits. A link to a downloadable list present on the CHIEF web site is provided in the RBLC Reference Library.
- X Select a regulatory basis from the pick-list to retrieve all rules enacted under a particular Federal statute.

The comparison operators used when searching a regulation identifier are:

- X **Containing** - performs a word search and matches all affected facilities that contain the specified value anywhere in the selected data element. This is the recommended comparison operator for all regulation identifiers except Rule ID.
- X **Beginning with** - finds only those affected facilities whose facility name begins with the value specified.
- X **Exact match** - is the most restrictive operator and requires a character by character match between the value specified and the facility data element. This is the recommended comparison operator for matching Rule ID.

Emissions Abatement Information

- X Enter a word or phrase for the demonstrated technology description, i.e., the pollution prevention or add-on equipment control method to be used in the search.
- X Specify a control efficiency threshold as a percentage. Very often, a measure of efficiency is not specified with the regulation, so a search on this data element may not find many matching records.
- X When the search criteria are complete, click the ARun search now@ button to begin the search. Click the AReset form@ button to start over with a blank standard search form.

An overview of the results of the search is displayed in a table. The results table can be sorted either by the RBLC ID, CFR citation, or affected facility name using the ASort By@ buttons at the top of the table. Examining the results of the search and downloading the results are discussed in Section 3.3.

Dates

- X Choose a date element from the date range pick-list:

- S Date added to the RBLC
- S Date last modified

Enter a Afrom@ date and/or a Ato@ date to define the date range. The search will find dates the same as or more recent than the Afrom@ date and the same as or earlier than the Ato@ date.

Dates should be entered in a numeric mm/dd/yyyy format. If the system cannot recognize the date as it has been entered, it will prompt the user to go back and enter another date value.

When the search criteria are complete, click on the "Run search now" button to begin the search. Click the "Reset form" button to start over with a blank standard search form.

An overview of the results of the search is displayed in a table. The results table can be sorted either by the RBLC ID, CFR citation, or regulation name/industry sector using the "Sort By" buttons at the top of these columns in the table. Examining the results of the search and downloading the results are discussed in Section 3.3.

3.2.3.3 Advanced Search

The advanced search option lets the user create search criteria by choosing from pick-lists of data elements and data operators, and entering desired values. Up to three search criteria can be combined using >AND= or >OR= logical connectors for more selective searches. Figure 3-2 illustrates the initial part of the advanced search page. Although similar to the standard search, the advanced search option does not provide sets of allowable values for data elements. These values must be entered by the user. In general, the user should know what information each data element contains to use this option effectively. Use the on-line help and this document=s discussions of data base elements in Section 3.1 and standard search options in Section 3.2.3.2 when running the advanced search.

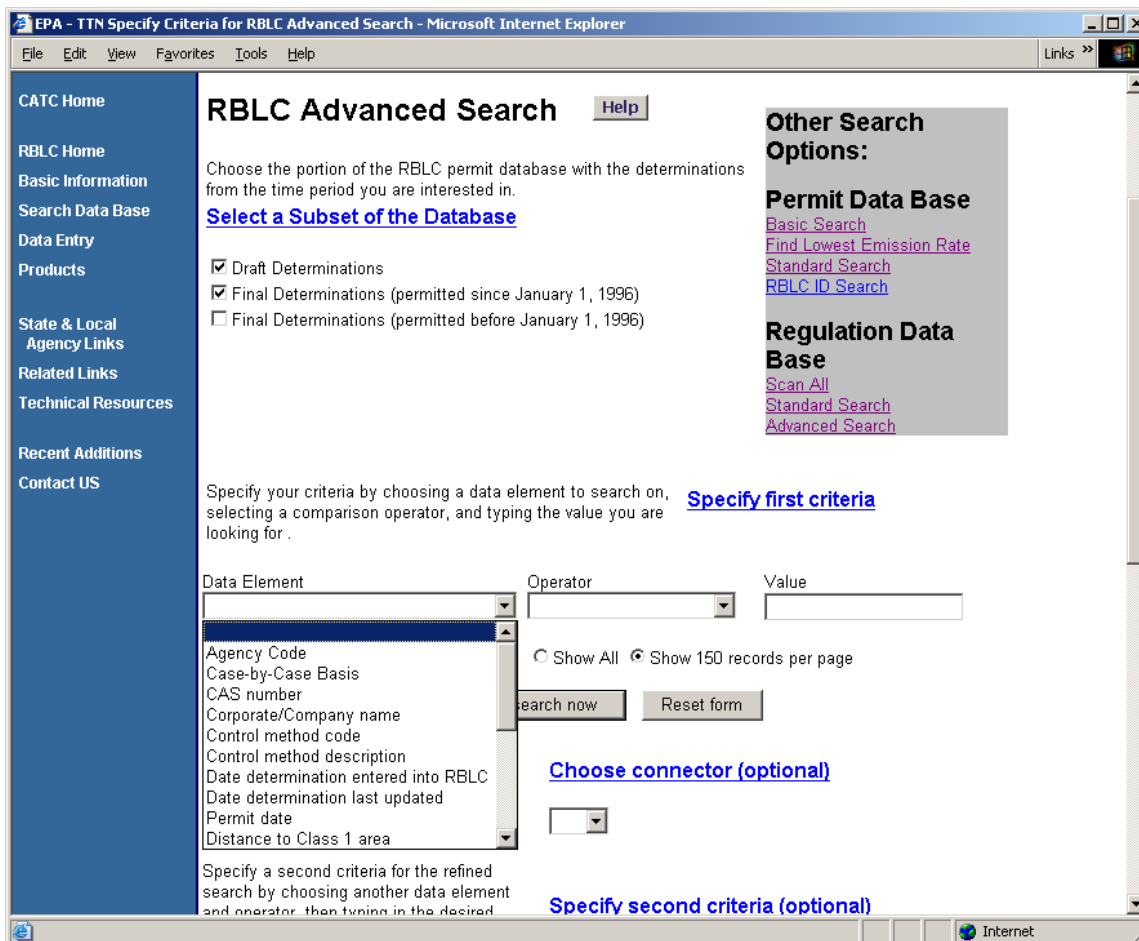


Figure 3-2: Regulation Data Base Advanced Search

Specify the first search criteria by choosing a data element and a comparison operator from the pick-lists. Then type the desired value for the data element in the text box. Entries are not case sensitive. The searchable data elements are:

- X Regulation Name/Industry Sector;
- X CAS number;
- X CFR Citation;
- X Control efficiency;
- X Control method description (demonstrated technology description);
- X Date added to the RBLC;
- X Date last modified;
- X Date rule is effective;
- X Emission type;
- X Pollutant name;
- X Process name;
- X Process type code;
- X RBLC ID;

- X Regulatory basis;
- X Regulation number;
- X SIC code; and
- X NAICS or SIC code.

For each search criteria all three fields (data element, operator, and value) must be entered. The operator you choose defines which values of the specified data element you are interested in. In the simplest criterion, you are usually trying to match a value and will use the equals operator, for example, "State equals TX". Not all operators work with all types of data. The available operators are:

- X Equals;
- X Contains (word search);
- X Greater than;
- X Less than;
- X Greater than or equal to; and
- X Less than or equal to.

The "equals" operator and the inequality operators (>, <, >=, <=) can be used with all data elements. The Acontains@ operator cannot be used with date or numeric data elements.

At this point, the user can click the ARun search now@ button to run the search using only one set of search criteria, or a second set of search criteria can be added by choosing one of the following logical connectors:

- X **AND** finds records that match **both** of the search criteria.
- X **OR** finds records that match **either one** of the search criteria.

If a connector is selected, the second criteria set must be specified by choosing data elements from the second criteria set pick-lists, and entering a desired value, as described above. Be careful not to specify mutually exclusive criteria. For example, specifying APollutant equals CO AND CAS number equals 10102-44-0 (the CAS number for NO₂)@ will not find any matching records.

At this point, the user can click the ARun search now@ button to run the search using two sets of search criteria, or a third set of search criteria can be added by choosing data elements from the third criteria pick-list, and entering a desired value. The same logical connector selected above applies to the third set of search criteria.

Click the ARun search now@ button to run the search. The AReset form@ button can be used to start over with a blank search form. Search results are displayed in a table, which is discussed in Section 3.3.

3.3 SEARCH RESULTS

The results for all of the RBLC search options are displayed as a table with links to additional information (Figure 3-3). Each row in the table represents a regulation. The table displays the RBLC ID, CFR citation, regulation name, process code, and process description. The ASort By@ buttons at the top of the table can be used to sort by the RBLC ID, CFR citation, or regulation name/industry sector. When a standard or advanced search has been run, the search criteria used for the search appear towards the top of the page. Results can be viewed on-line or saved in any of the RBLC standard output formats, which are discussed in Section 3.3.2 below.

3.3.1 Navigating the Search Results

The RBLC Web regulation, process and pollutant data pages have navigation buttons near the top of the page to assist in moving through the Web site, search results and data screens. Buttons are provided for the following: RBLC Home; New Search; Search Results; Regulation Information; Process List; Process Information; and Pollutant Information. (Note: the Process Information button only appears when a particular process has been selected from the Process List page. Similarly, the Pollutant Information button only appears when a pollutant has been selected from the Process Information page.) Use these navigation buttons when they are available rather than the Web browser=s navigation buttons to avoid potential errors that can result from the way that browsers cache information. If a search returns a result of ANo matching regulations found,@ click the back button to return to the search page to re-specify the search criteria. Check to make sure that a misspelled word or an invalid value for a search element is not the problem. If you do not find the regulation you expected, use the navigation button ANew Search@ to specify new search criteria.

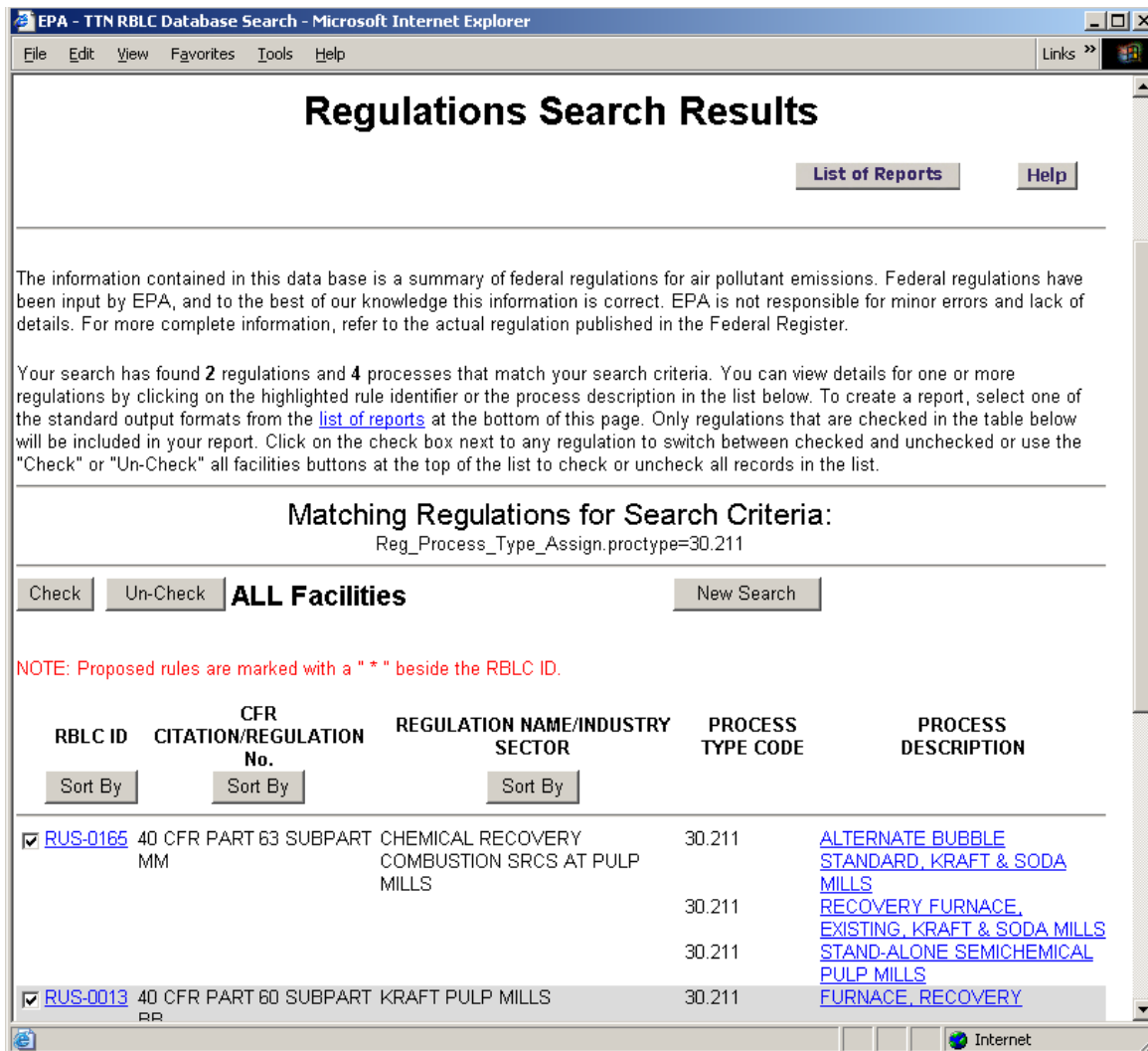


Figure 3-3: Results Table for Regulation Data Base

3.3.2 Viewing Search Results

Information about each of the regulations in the RBLC Web is organized by regulation, process, and pollutant. The RBLC ID in the search results table links to details for each regulation. Each process listed in the search results table links to details about that regulated process. Successively deeper levels of information are viewed by clicking on the navigation buttons near the top of each detail page. Links to pollutant information are provided on the process details page. Use the ASearch Results@ button near the top of the page to return to the search results table and pick another rule or process to view.

Use the ARegulation Information@ button to view detailed information about the regulation itself (Figure 3-4). Use the AProcess List@ button to return to the process list. Refer to Section 3.1 for more information on regulation, process and pollutant data elements.

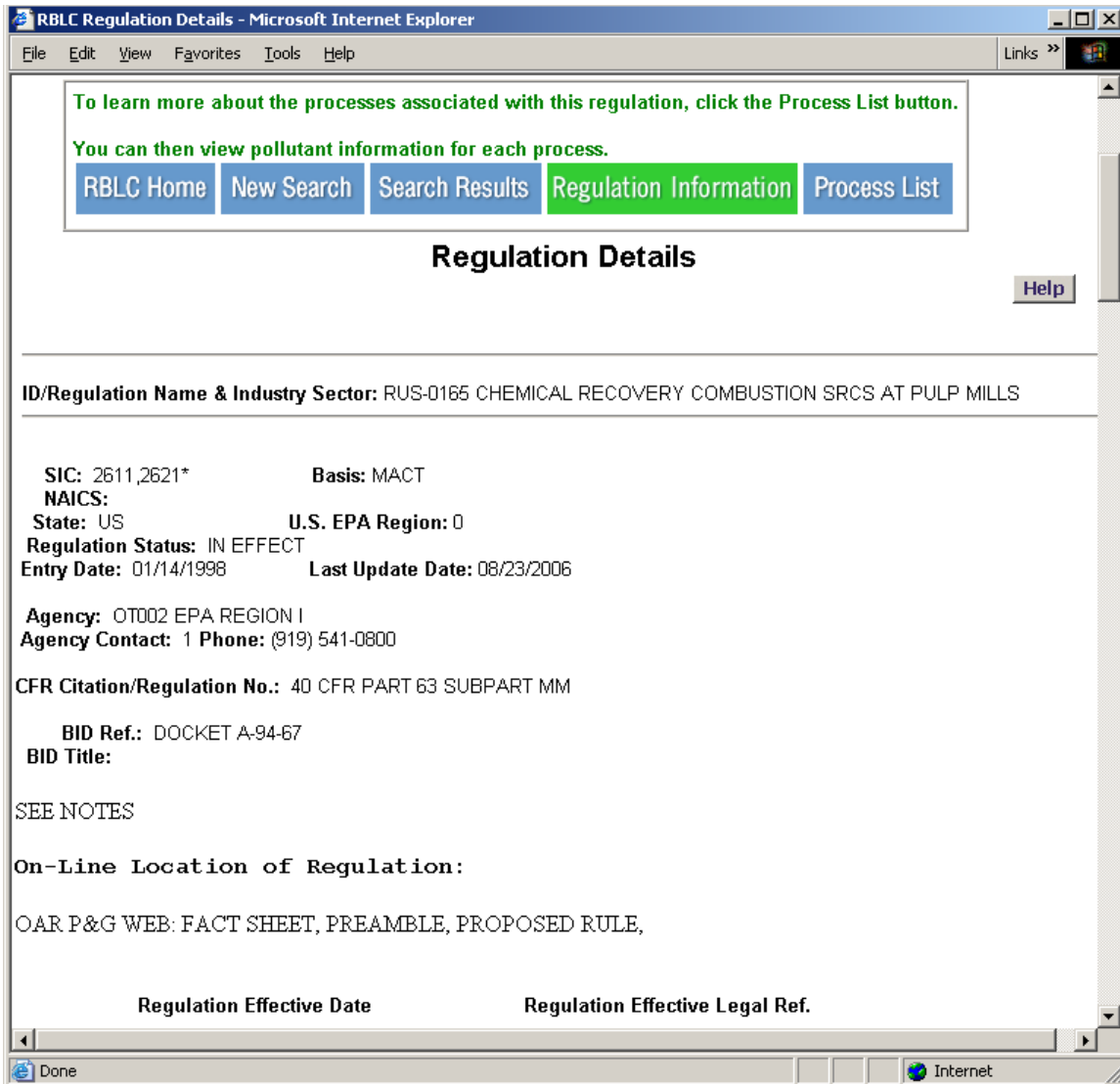


Figure 3-4: Regulation Details Page

The process details page presents specifics about the process (see Figure 3-5). Use the [Process List@](#) button to go to the process list to select processes for viewing.

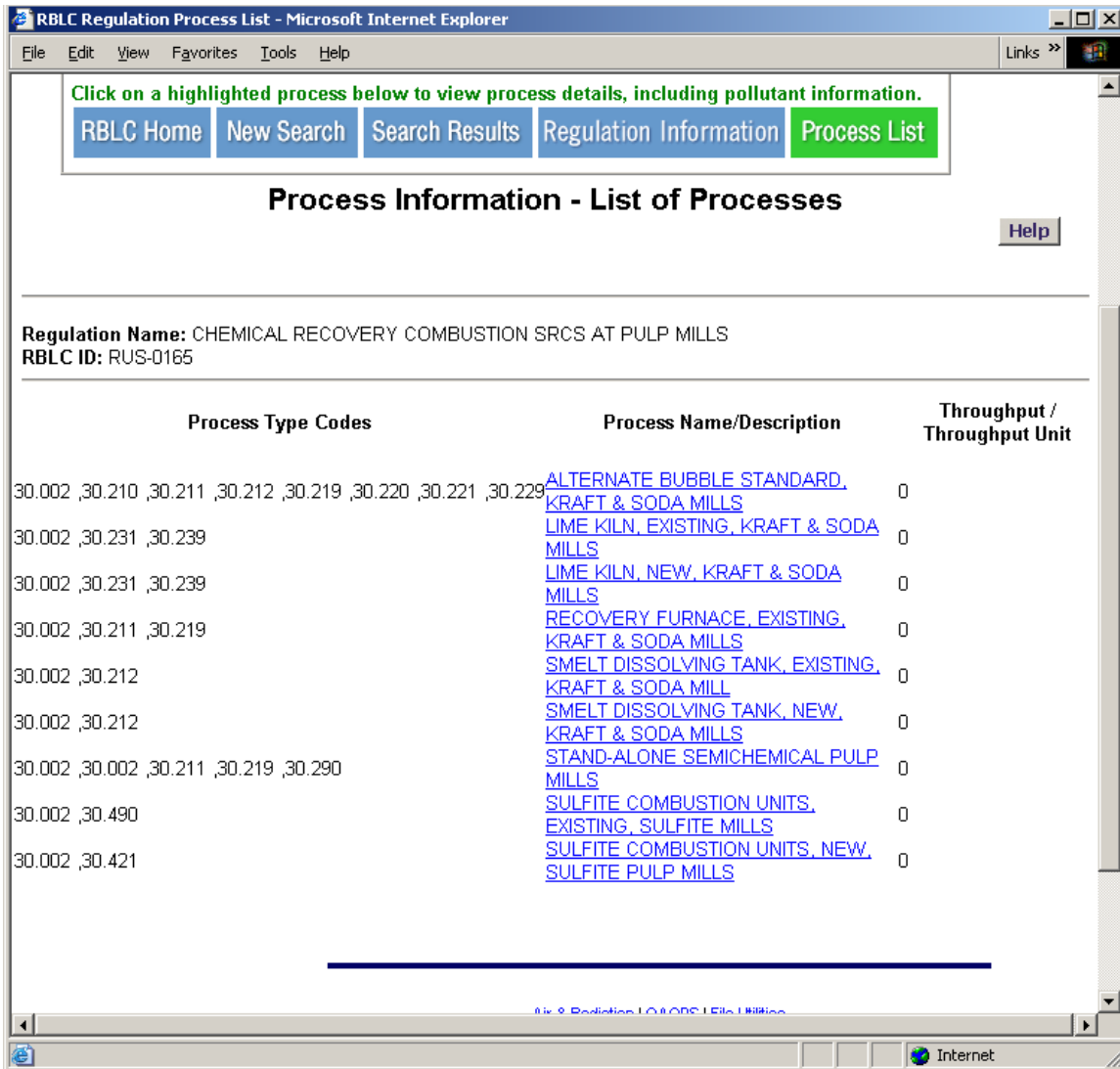


Figure 3-5: Process Details Page

The pollutants for a process are displayed on the process details page. Each pollutant name in the list is a link to a pollutant detail page that displays additional information about that pollutant (see Figure 3-6).

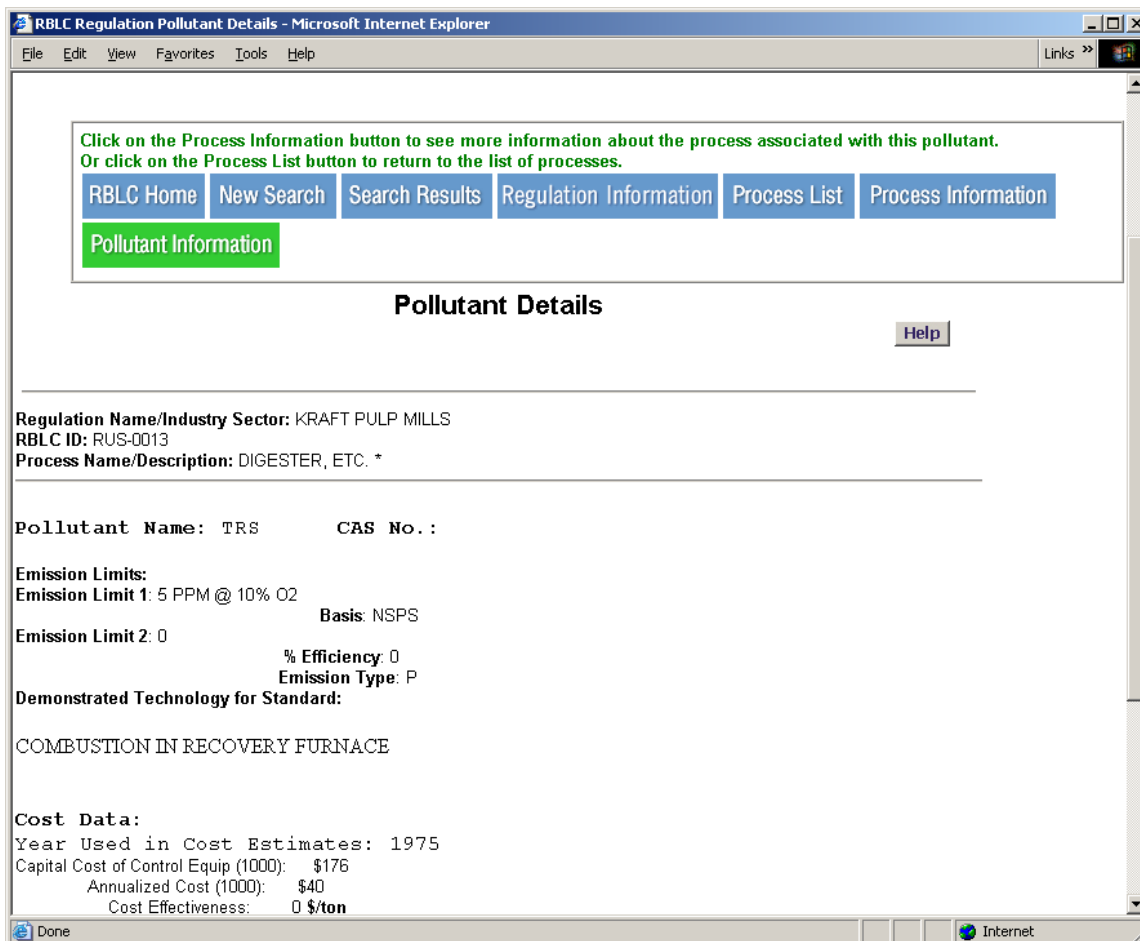


Figure 3-6: Pollutant Details Page

3.3.3 Generating Data Base Reports

There are four pre-defined report formats available for the RBLC Regulation data base searches. These reports can be viewed on-line or downloaded to a PC. The report formats are listed in a pick list at the bottom of the results page (see Figure 3-7). Choose a report format from the list, and click the create button to generate the report. Formatting a report may take some time, especially for a large number of regulations. All reports are created as ASCII text.

Formatting time for reports can be reduced by selecting specific facilities using the check box in the first column next to each Regulation ID in the results table. Initially all regulation records are checked and will be included in the detail reports. Use the check box next to a regulation to de-select the record. Also, you may click the "Check" or "Uncheck" all regulations buttons to select or de-select all records.

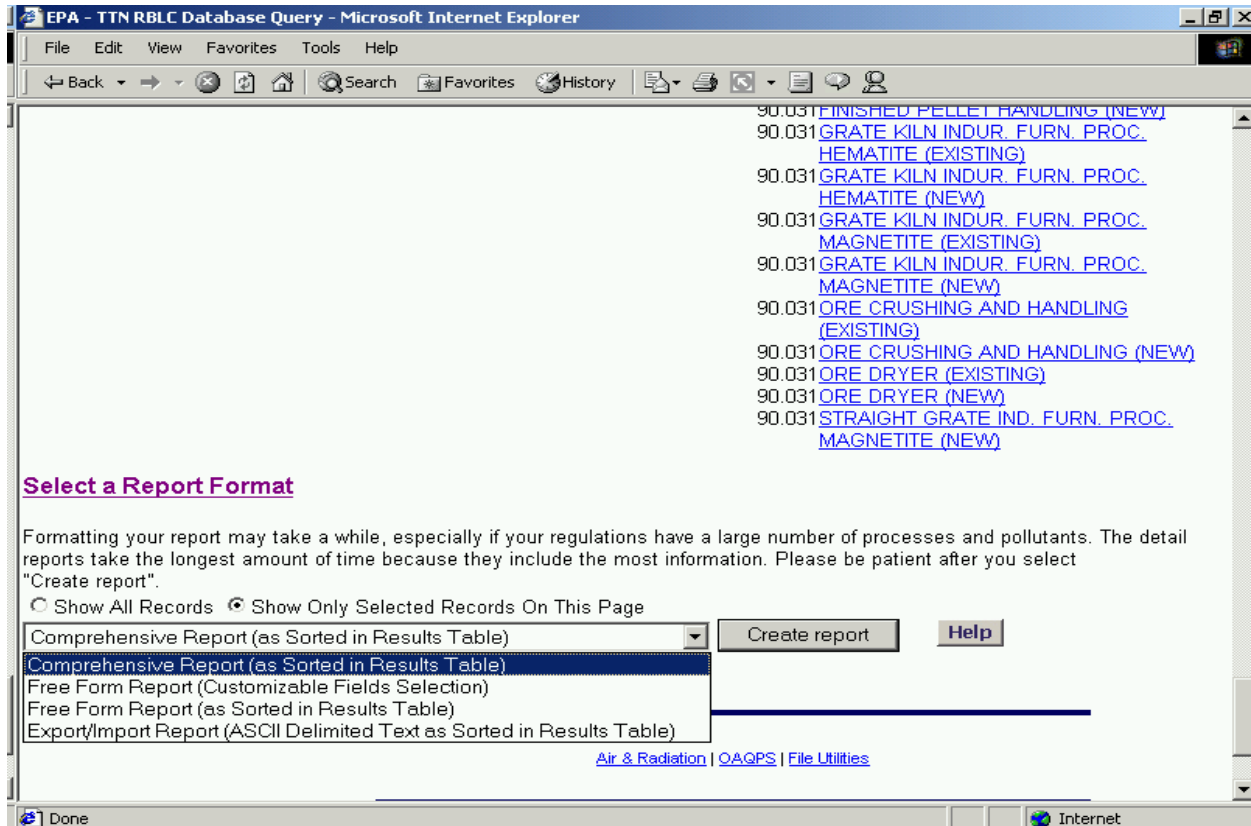


Figure 3-7: Report Format Options

The following report formats are available:

- X **Comprehensive Report (as Sorted in Results Table):** This option includes most of the information in the regulation data base. Because it includes details about all processes and pollutants for selected affected facilities, this is a very lengthy report.
- X **Freeform Reports (as Sorted in Results Table):** There are two options for this report. The “customizable fields” selection allows the user to select the fields to display in the report. The other freeform report option displays literally all information in the regulation data base for the selected regulation. Each data field displays as one line in the report. Depending on the fields selected and the number of regulations in the search results table, this may be a very lengthy report.
- X **Export/Import Report (as Sorted in Results Table):** This report saves selected data fields in a quoted, comma-delimited format that is suitable for importing into desktop data bases or spreadsheets.

If you did not uncheck any of the records on the results page, all records displayed in the

results table will be included in the report. If you did uncheck records, only the checked records are included in the report.

When the RBLC Web has finished creating the report, either a **Save** dialog box or the report itself will be displayed. The exact action depends upon the browser configuration. If the report appears on the browser, choose the *ASave As@* command from the browser File menu to save the report file. Then, use the back button to return to the results table. Netscape8 users must specify a ".txt" file extension when saving a report. The default extension is ".cfm" which could cause problems when the file is re-opened. When using other browsers, using a *A.txt@* file extension is also recommended if the file will be used with word processing or spreadsheet software.

The report can also be printed directly from the RBLC Web using the browser print function.