

RACT/BACT/LAER CLEARINGHOUSE
CLEAN AIR TECHNOLOGY CENTER
ANNUAL REPORT FOR 1998

A COMPILATION OF CONTROL
TECHNOLOGY DETERMINATIONS
EIGHTH SUPPLEMENT TO 1990 EDITION

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CONTENTS

Figures	iv
RBLC On-Line Addresses	v
Acknowledgment	vi
INTRODUCTION	1
BACKGROUND	1
REPORT FORMAT	10
IMPROVEMENTS TO THE SYSTEM	14
PROCEDURES FOR FUTURE SUBMISSIONS TO THE CLEARINGHOUSE	16
PROCEDURES FOR ACCESSING THE CLEARINGHOUSE ON THE INTERNET AND OAQPS TTN BBS	18
Appendices	
A. Abbreviations for Processes, Emission Limits, and Pollutants	A-1
B. Detailed Listing of Process Type Codes	B-1
C. Suggested Process Names	C-1
D. Suggested Emission Units by Process Type Code	D-1
E. Format for RACT/BACT/LAER Clearinghouse Submittals and Instructions for Completing RACT/BACT/LAER Input Form	E-1
F. Index of Control Technology Determinations	F-1
G. Control Technology Determinations for Processes	G-1
H. Detailed Source Listings for New Determinations	H-1

FIGURES

Number		Page
1	Control Technology Determinations Received Since June 1997	4

RBLC ON-LINE ADDRESSES

The RACT/BACT/LAER Clearinghouse (RBLC) maintains an on-line data base of all of the control technology determinations that have been submitted to it. This electronic version of the RBLC and other related information are available at the Internet addresses and telephone numbers listed below. Detailed instructions about how to access the RBLC are contained in this document. Please refer to the Table of Contents.

World Wide Web (WWW)	www.epa.gov/ttn/catc/
Telnet	ttnbbs.rtpnc.epa.gov
FTP	ttnftp.rtpnc.epa.gov
Bulletin Board System (BBS)	919-541-5742

The RBLC can be reached by clicking the appropriate icon on the CATC home page.

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INTRODUCTION

BACKGROUND

The Clean Air Act prescribes several technology-based limitations affecting new or modified air pollution sources: 1) new source performance standards (NSPS); 2) best available control technology (BACT); and 3) lowest achievable emission rate (LAER). New Source Performance Standards are uniform national emission standards set by EPA for specific categories of new or modified stationary sources. In addition to meeting NSPS when applicable, major new or modified sources must also install either BACT or LAER, both of which are determined on a case-by-case basis. In all cases, BACT or LAER must be at least as stringent as any applicable NSPS. The BACT requirement, which is a part of the Prevention of Significant Deterioration program (Sections 165 and 169 of the Clean Air Act), applies to emissions in areas that are in attainment with National Ambient Air Quality Standards (NAAQS). The LAER requirement, which is a part of the Nonattainment Program (Sections 171 and 172 of the Clean Air Act), applies to emissions that affect areas that are not in attainment with the NAAQS. While the specific criteria governing a BACT, LAER, or NSPS emission limit vary, the general underlying approach for all such determinations is to require "best control" on all major new or modified sources. Since 1977, state and local air pollution control agencies have gradually assumed primary responsibility for implementing BACT and LAER. As this authority was decentralized from the Federal government, it became important that information be made available to control agencies to assist them in making control technology determinations in a nationally consistent manner.

The 1990 Clean Air Act Amendments (CAAA) mandated several minor changes to the BACT/LAER Clearinghouse. Although the changes were minor, state and local agencies should note them for future consideration. The first change involved the name and an addition to the type of data contained in the Clearinghouse. The name has been changed to the RACT/BACT/LAER Clearinghouse (RBLC) and now includes reasonably available control technology (RACT) determinations. RACT is defined as the lowest emission limitation that a particular source is capable of meeting by application of control technology that is reasonably

available considering technological and economic feasibility. RACT is the minimum EPA can accept in non-attainment state plans. Control Technique Guideline (CTG) documents are assembled by the EPA to assist state and local air pollution control agencies in determining the level of control that should be required within each area. The RBLC accepts case-by-case RACT decisions, as well as general RACT requirements, to assist state and local agencies in determining what level of control other areas of the country are requiring and, in turn, what level of control should be required within their jurisdiction.

The second change mandated by the 1990 CAAA involves LAER determinations. Prior to the 1990 CAAA, all submittals to the Clearinghouse were voluntary. However, Section 173(d) of the 1990 CAAA now mandates that state and local agencies submit any and all LAER determinations that they issue.

The basic purposes of the RBLC are to: 1) provide state and local air pollution control agencies, industry, and the public with current information on case-by-case control technology determinations that are made nationwide, and 2) promote communication, cooperation, and sharing of control technology information among the permitting agencies. The information presented in this compilation was abstracted from preconstruction permits and submitted by the state and local air pollution control agencies and EPA regional offices. The Clearinghouse is intended as a reference for state and local agencies in making RACT/BACT/LAER decisions.

The RBLC's primary vehicle for sharing control technology information is a data base of all determinations submitted to the RBLC. This RACT/BACT/LAER Clearinghouse information system permits on-line querying of the data base and makes the results available for viewing on-screen or downloading to a PC. This information system also supports direct submittals of control technology determinations by permitting agencies. Routine access to the data base is available to anyone who has a personal computer with Internet access or a modem and communication software.

Until 1995, the RBLC also published comprehensive compilations of new and revised control technology determinations every five years. The 1985 RBLC compilation contains all determinations submitted to the Clearinghouse prior to June 1985. The 1990 RBLC compilation contains all determinations submitted to the Clearinghouse from June 1985 to June 1990. In

between the years for the comprehensive compilations and each year since 1990, the Clearinghouse published annual supplements to the preceding compilation. Because the RBLC data base contains complete and current information on all determinations submitted to the Clearinghouse since it began operation and is easy to access and use, RBLC clients have made the on-line data base their preferred method of accessing determinations. As a result of this development and the desire to avoid the expense of printing a large report of questionable value to clients, the RBLC decided to print an annual supplement in 1995 instead of a five year compilation. This 1998 edition, the eighth supplement to the 1990 compilation, contains determinations submitted to the Clearinghouse from June 1997 to May 1998.

All RBLC supplements contain detailed information only for those permits entered into the Clearinghouse since the last published compilation or supplement. The 1998 edition adds _____ new determinations entered into the system from June 1997 to May 1998. The data base now contains several thousand determinations from 50 States and three territories. This edition also includes a comprehensive index of all permits entered into the system since June 1993. The comprehensive index serves as an aid to locating all determinations added to the Clearinghouse since the last published compilation. When the publication schedule included a comprehensive compilation every five years, the index was of a manageable size. As explained above, the 1995 compilation was superseded by an annual supplement, and it is expected that annual supplements will continue to be published instead of full compilations. Rather than expanding the comprehensive index to include all years since the last compilation (1990), the index now includes the most recent five years of determinations. Future supplements will contain an index for only the determinations entered into the Clearinghouse in the five years prior to publication.

Figure 1 summarizes the control technology determinations received since the publication of the June 1997 report. This listing contains the process type code, the name of the company, and the identification number. The listing is provided to aid state and local agency personnel and other users in quickly identifying new information available since the 1997 published edition of the Clearinghouse.

PROCESS CODE	COMPANY NAME	ID NUMBER
11.002	GENERAL MOTORS	MO-0034
11.002	SOUTHEAST MISSOURI STATE UNIVERSITY	MO-0028
11.002	TOLEDO EDISON CO. - BAYSHORE PLANT	OH-0231
11.002	UNIVERSITY OF MISSOURI-COLUMBIA	MO-0029
11.004	AMERICAN IRON REDUCTION - GULF COAST DRI FACILITY	LA-0101
11.004	CHAMPION INTERNATIONAL	AL-0112
11.004	COS-MAR COMPANY - CARVILLE PLANT	LA-0109
11.004	LOUISIANA IRON WORKS (TONDU) - DRI PLANT	LA-0107
11.004	MULTITRADE GROUP, INC.	VA-0239
11.004	STAR ENTERPRISE	DE-0015
11.004	UNION TEXAS PRODUCTS CORP. - GEISMAR ETHYLENE PLT	LA-0103
11.004	WESTLAKE PETROCHEMICALS CORPORATION	LA-0100
11.005	AIR LIQUIDE AMERICA CORPORATION	LA-0112
11.005	BASF CORPORATION	LA-0113
11.005	BOISE CASCADE CORPORATION - YAKIMA COMPLEX	WA-0279
11.005	BUCKNELL UNIVERSITY	PA-0149
11.005	CA DEPT. OF CORRECTIONS, CORCORAN II FACILITY	CA-0787
11.005	CALIFORNIA STATE PRISON, CORCORAN	CA-0775
11.005	CHEVRON CHEMICAL COMPANY	LA-0114
11.005	CITY OF TURLOCK WATER CONTROL FACILITY	CA-0751
11.005	DARLING INTERNATIONAL	CA-0790
11.005	DEGUSSA CORPORATION	AL-0104
11.005	GRAIN PROCESSING CORP.	IN-0075
11.005	IMC-AGRICO COMPANY - FAUSTINA PLANT	LA-0105
11.005	J.R. SIMPLOT	CA-0741
11.005	KERN MEDICAL CENTER	CA-0802
11.005	LAMAR TOOL AND DIE CASTING	CA-0749
11.005	O.H. KRUSE GRAIN AND MILLING	CA-0736
11.005	PACIFIC OFFSHORE PIPELINE COMPANY (POPCO)	CA-0735
11.005	SHELL CHEMICAL COMPANY	LA-0115
11.005	STAR ENTERPRISE - LOUISIANA PLANT REFINERY	LA-0102
11.005	UNION TEXAS PRODUCTS CORP. - GEISMAR ETHYLENE PLT	LA-0106
11.005	WESTLAKE PETROCHEMICALS CORPORATION	LA-0100
11.005	WESTLAKE PETROCHEMICALS CORPORATION	LA-0104
11.006	A.E. STANLEY MANUFACTURING	MO-0031
11.007	UNIVERSITY OF MISSOURI-COLUMBIA	MO-0012
11.008	GULF STATES PAPER CORPORATION	AL-0116
11.008	HUEBERT FIBERBOARD	MO-0046
11.008	PLUM CREEK MFG - EVERGREEN FACILITY	MT-0007
11.008	WELLBORN CABINET INC	AL-0107
15.002	CITY OF JACKSON MUNICIPAL UTILITIES	MO-0032

Figure 1. Control technology determinations received since June 1997.

PROCESS CODE	COMPANY NAME	ID NUMBER
15.002	GRAIN PROCESSING CORP.	IN-0075
15.002	ROSS ISLAND SAND AND GRAVEL	CA-0733
15.002	SHELL CHEMICAL COMPANY	LA-0115
15.002	TRACY MATERIAL RECOVERY	CA-0756
15.002	WILLIAM BOLTHOUSE FARMS	CA-0753
15.004	AIR LIQUIDE AMERICA CORPORATION	LA-0112
15.004	ALABAMA POWER COMPANY	AL-0115
15.004	ANDROSCOGGIN ENERGY LIMITED	ME-0015
15.004	BASF CORPORATION	LA-0113
15.004	BUCKNELL UNIVERSITY	PA-0149
15.004	CALRESOURCES LLC	CA-0794
15.004	CITY OF CLOVIS	CA-0791
15.004	COLO. POWER PARTNERS- BRUSH COGEN FAC	CO-0027
15.004	COLORADO SPRINGS UTILITIES-NIXON POWER PLANT	CO-0025
15.004	COMMONWEALTH CHESAPEAKE CORPORATION	VA-0238
15.004	ECOELECTRICA, L.P.	PR-0004
15.004	KAISER PERMANENTE MEDICAL CENTER	CA-0766
15.004	LORDSBURG L.P.	NM-0031
15.004	MARSHALL MUNICIPAL UTILITIES (BOARD OF PUBLIC WORK)	MO-0019
15.004	MOBIL EXPLORATION & PRODUCING U.S., INC.	CA-0754
15.004	NORTHERN CALIFORNIA POWER AGENCY	CA-0768
15.004	PUBLIC SERVICE OF COLO.-FORT ST VRAIN	CO-0024
15.004	RUMFORD POWER ASSOCIATES	ME-0014
15.004	SOUTHERN CALIFORNIA GAS COMPANY	CA-0774
15.004	SOUTHERN NATURAL GAS	AL-0109
15.004	SOUTHERN NATURAL GAS	AL-0110
15.004	TEMPO PLASTICS	CA-0793
15.004	TIVERTON POWER ASSOCIATES	RI-0018
15.004	TOYS "R" US	CA-0792
15.004	VINTAGE PETROLEUM COMPANY	CA-0788
15.004	WESTPLAINS ENERGY	CO-0026
15.004	WILLIAMS FIELD SERVICES CO.	NM-0032
15.004	WILLIAMS FIELD SERVICES CO.	NM-0033
15.004	WILLIAMS FIELD SERVICES CO.	NM-0035
15.004	WILLIAMS FIELD SERVICES CO.	NM-0036
15.005	MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT	CA-0789
15.006	PUERTO RICO ELECTRIC POWER AUTHORITY (PREPA)	PR-0002
15.006	UNION ELECTRIC CO	MO-0043
15.007	CITY OF STOCKTON MUNICIPAL UTILITIES DEPT.	CA-0755
15.007	CITY UTILITIES OF SPRINGFIELD	MO-0020
15.007	CITY UTILITIES OF SPRINGFIELD	MO-0021
15.007	EMPIRE DISTRICT ELECTRIC CO.	MO-0016

Figure 1. Control technology determinations received since June 1997.

PROCESS CODE	COMPANY NAME	ID NUMBER
15.007	EMPIRE DISTRICT ELECTRIC CO.	MO-0017
15.007	HIGGINSVILLE MUNICIPAL POWER FACILITY	MO-0013
15.007	STAR ENTERPRISE	DE-0014
21.001	MERCER & ATLANTIC CO. RESOURCE RECOVERY FACILITY	NJ-0020
21.003	CITY OF STOCKTON MUNICIPAL UTILITIES DEPT	CA-0752
30.001	SPRINGVALLEY CHARCOAL CO.	MO-0033
30.001	THE KINGSFORD PRODUCTS CO.	MO-0015
30.002	GULF STATES PAPER CORPORATION	AL-0116
30.002	INTERNATIONAL PAPER CO. RIVERDALE MILL	AL-0101
30.003	BOISE CASCADE CORPORATION - YAKIMA COMPLEX	WA-0279
30.005	TEMPLE-INLAND FOREST PRODUCTS CORPORATION	AL-0111
30.999	BAKERSFIELD CITY WOOD SITE	CA-0767
41.001	CALIFORNIA AIR NATIONAL GUARD, FRESNO	CA-0771
41.002	FORD MOTOR CO-BODY & ASSEMBLY OPERATIONS	MO-0023
41.002	FORD MOTOR CO-KANSAS CITY	MO-0024
41.002	FORD MOTOR CO.	MO-0030
41.002	FORD MOTOR CO. (BODY & ASSEMBLY DIVISION)	MO-0018
41.002	GENERAL MOTORS	MO-0034
41.002	PRESTIGIOUS AUTO BODY	CA-0784
41.004	METAL CONTAINER CORPORATION	MO-0027
41.004	METAL CONTAINER CORPORATION	MO-0041
41.004	SILGAN CONTAINERS CORP - SAVAGE PLANT	MN-0028
41.006	ENVIROPLEX	CA-0772
41.011	TOASTMASTER INC.	MO-0044
41.013	COLONIAL VAN AND STORAGE	CA-0803
41.013	ENVIRONMENTAL SERVICE PRODUCTS	CA-0757
41.013	RAY'S TRUCK & TRAILER PAINTING	CA-0796
41.013	RDW CONCEPTS	CA-0797
41.016	CARPENTER CO.	CA-0785
41.016	HOLZ RUBBER COMPANY, INC.	CA-0765
41.021	GENERAL CABLE CORPORATION	CA-0799

Figure 1. Control technology determinations received since June 1997.

PROCESS CODE	COMPANY NAME	ID NUMBER
41.021	PACIFIC SOUTHWEST CONTAINER	CA-0806
41.023	HARBOR SIGNS	CA-0776
41.023	MERCED COLOR PRESS	CA-0779
41.024	CARUTHERSVILLE SHIPYARD, INC.	MO-0042
41.025	AMERICAN DOOR MANUFACTURING	CA-0804
41.025	CREATIONS IN WOOD, INC.	CA-0726
41.025	ENVIROPLEX	CA-0772
41.025	GUY CHADDOCK & COMPANY	CA-0769
41.999	TOTE-A-SHED, INC.	CA-0731
42.002	AMERICAN GAS & AUTOMOTIVE	CA-0778
42.003	HUNTINGTON LAKE RESORT	CA-0798
42.005	76 PRODUCTS COMPANY	CA-0748
42.005	R&R RESOURCES	CA-0734
42.009	CHEVRON CHEMICAL COMPANY	LA-0114
42.009	CITY OF COALINGA	CA-0795
42.009	MILLER RENTALAND	CA-0762
42.009	STOCKTON TRANSMODAL, INC.	CA-0759
42.009	WILLAMETTE INDUSTRIES-MARLBORO MILL	SC-0046
49.004	TRACKER MARINE CORPORATION	MO-0045
49.005	AQUA GLASS WEST, INC.	OR-0023
49.005	FLORESTONE PRODUCTS CO.	CA-0743
49.005	FLORESTONE PRODUCTS CO.	CA-0807
49.008	CHEVRON GAVIOTA OIL AND GAS PLANT	CA-0725
50.001	BEARD BROTHERS OIL & GAS	CA-0737
50.002	PACIFIC OFFSHORE PIPELINE COMPANY (POPCO)	CA-0735
50.002	WILLIAMS FIELD SERVICES CO.	NM-0032
50.002	WILLIAMS FIELD SERVICES CO.	NM-0033
50.002	WILLIAMS FIELD SERVICES CO.	NM-0034
50.002	WILLIAMS FIELD SERVICES CO.	NM-0035
50.002	WILLIAMS FIELD SERVICES CO.	NM-0036
50.006	TORCH OPERATING CO. - LOMPOC OIL AND GAS PLANT	CA-0746
50.007	APPLIED VAPOR TECHNOLOGY, INC.	CA-0773

Figure 1. Control technology determinations received since June 1997.

PROCESS CODE	COMPANY NAME	ID NUMBER
50.007	EXXON - PLATFORM HARMONY	CA-0744
50.007	EXXON - PLATFORM HERITAGE	CA-0745
50.007	LONE STAR GAS LIQUIDS PROCESSING, INC.	CA-0732
50.007	PACIFIC OFFSHORE PIPELINE COMPANY (POPCO)	CA-0735
50.008	TORCH OPERATING CO. - LOMPOC OIL AND GAS PLANT	CA-0747
61.009	IMC-AGRICO	FL-0114
62.006	CABOT CORP.	MI-0242
62.014	ARCADIAN FERTILIZER LP - GEISMAR FACILITY	LA-0108
62.999	GRACE DAVISON, W.R. GRACE & CO.-CONN.	LA-0111
63.026	ANDREA ZEE CORP. DBA MARBLE PALACE	CA-0782
63.026	CUSTOM MARBLE & ONYX	CA-0781
63.999	CARPENTER CO.	CA-0785
63.999	PARKER HANNIFIN CORPORATION, RACOR DIVISION	CA-0760
63.999	TOTER, INCORPORATED	CA-0805
63.999	WESTLAKE PETROCHEMICALS CORPORATION	LA-0110
64.003	SHELL CHEMICAL COMPANY	LA-0115
64.003	WESTLAKE PETROCHEMICALS CORPORATION	LA-0110
64.999	SHELL CHEMICAL COMPANY	LA-0115
69.015	CABOT CORPORATION - CANAL FACILITY	LA-0099
69.999	ELF ATOCHEM NORTH AMERICA, INC.	AL-0100
70.006	ANDERSON CLAYTON CORP.	CA-0800
70.007	BERNARD A. WEVER TRUCKING	CA-0764
70.007	FRESNO COGENERATION PARTNERS, L.P.	CA-0750
70.007	GRAIN PROCESSING CORP.	IN-0075
70.010	J.G. BOSWELL	CA-0786
70.010	SEQUOIA PACKING CO.	CA-0727
70.012	CORNNUTS, INC.	CA-0728
70.012	QUALITY ASSURED PACKING, INC.	CA-0783
70.012	SECURITY TRUST/SAFEWAY	CA-0763
70.013	GRAIN PROCESSING CORP.	IN-0075

Figure 1. Control technology determinations received since June 1997.

PROCESS CODE	COMPANY NAME	ID NUMBER
70.015	ARCHER DANIELS MIDLAND COMPANY PROCESSING	MO-0047
70.999	GOLD HILLS NUT COMPANY	CA-0801
81.004	PEA RIDGE IRON ORE CO.	MO-0011
81.004	WAUPACA FOUNDRY, INC.	IN-0078
81.006	STEEL DYNAMICS, INC.	IN-0077
82.005	NORANDA ALUMINUM, INC.	MO-0036
82.013	DOE RUN CO.	MO-0025
90.001	NORANDA ALUMINUM, INC.	MO-0036
90.003	SANTA FE AGGREGATES, INC.	CA-0740
90.004	MID-CONTINENT ASPHALT & PAVING	MO-0039
90.004	NEW ERA CONSTRUCTION CO.	MO-0037
90.004	SOUTHERN ASPHALT CONSTRUCTION CO., INC.	MO-0040
90.004	SULLY-MILLER CONTRACTING COMPANY	CA-0777
90.006	BASALITE BLOCK	CA-0729
90.011	CONSOLIDATED PENNSYLVANIA COAL CO., BAILY MINES	PA-0151
90.012	BLOCKLITE	CA-0770
90.012	CONCRETE, INC.	CA-0730
90.016	LIBBEY OWENS FORD	CA-0739
90.016	LIBBEY OWENS FORD CO.	OH-0232
90.016	OWENS-BROCKWAY GLASS CONTAINER INC.	IN-0076
90.017	CELITE CORPORATION	CA-0808
90.019	CHEMICAL LIME CO	MO-0038
90.019	CONTINENTAL LIME INC.	MT-0008
90.019	DRAVO LIME COMPANY-LONGVIEW DIVISION	AL-0102
90.019	MISSISSIPPI LIME CO.	MO-0022
90.019	MISSISSIPPI LIME CO.	MO-0035
90.022	ARMSTRONG WORLD INDUSTRIES	OR-0017
90.024	BASALITE BLOCK	CA-0729
90.024	LAFARGE CORPORATION	MO-0048
90.024	NATIONAL GYPSUM COMPANY	PA-0150

Figure 1. Control technology determinations received since June 1997.

PROCESS CODE	COMPANY NAME	ID NUMBER
90.028	ASH GROVE CEMENT COMPANY	OR-0022
90.028	LAFARGE CORPORATION	MO-0048
90.028	PUERTO RICAN CEMENT COMPANY, INC.	PR-0003
90.034	GOLDEN BEAR OIL SPECIALITIES	CA-0738
99.006	SIGMA CIRCUITS	CA-0780
99.011	AT&T TECHNOLOGY SYSTEMS	MO-0026
99.014	FORMPAC DIV, W R GRACE & CO.	IN-0074
99.014	KNAUF USA POLYSTYRENE, INC.	OH-0234
99.014	PACTUCO	CA-0724
99.014	STYROTEK, INC.	CA-0742
99.015	CUMMING-HENDERSON, INC TIRE RETREADING OPERATION	CA-0758
99.015	PIRRELI ARMSTRONG TIRE CORPORATION	CA-0761
99.999	U.S. ARMY ENGINEER CENTER & FORT LEONARD WOOD	MO-0014

Figure 1. Control technology determinations received since June 1997.

REPORT FORMAT

This RBLC report was prepared to provide basic control technology information as well as to facilitate quick scans of company/facility name and process type information. It consists of three major parts presented in Appendices F, G, and H:

- Appendix F - a summary listing of processes for all determinations entered since June 1993, sorted by facility name. Information includes the name of the company, permit date, process type code, process description, and an RBLC ID number as a reference for additional information.
- Appendix G - a summary listing of permitting agency contacts for all determinations entered since June 1993, sorted by process type code. Information includes the name of the company, permit date, basic Agency contact information, and an RBLC ID number as a reference for additional information.
- Appendix H - a detailed listing, sorted by RBLC ID number, of all new individual facility information submitted to the Clearinghouse since the June 1997 publication.

A brief description of each table follows:

Appendix F - Index of Control Technology Determinations

Appendix F summarizes all RACT/BACT/LAER determinations in the Clearinghouse by facility name. Use Appendix F for scanning the control technology determinations entered for a particular company and the processes covered by the determination. Appendix F includes the date the permit was issued (estimated or actual), process type code and description, and a RBLC ID number (which indicates the state where each facility is located) for locating the more detailed facility information contained in Appendix H. Appendix F includes a notation to indicate whether a particular determination is listed in the 1994, 1995, 1996, or 1997 supplement. If the notation "94", "95", "96", or "97" appears in front of the company name, then a detailed listing of that determination will not appear in this document; it may be found in the 1994, 1995, 1996, or 1997 supplement documents. If the notation is blank, detailed information on the facility can be found in this supplement.

Appendix G - Control Technology Determinations by Process Type

Appendix G summarizes the RACT/BACT/LAER determinations by process type. A complete listing of all process type codes is contained in Appendix B. The user should familiarize himself/herself with this listing in order to use Appendix G effectively. Appendix G includes the name of the company, the state where the source is located, the agency issuing the permit, name of person to contact within the agency for additional information, and a telephone number. Again, each entry in Appendix G has a RBLC ID number for locating the more detailed facility information contained in Appendix H. Appendix G includes a notation to indicate whether a particular determination is listed in the 1994, 1995, 1996, or 1997 supplement. If the notation is blank, detailed information on the facility can be found in this supplement.

Appendix H - Detailed Source Listings

In addition to Appendices F and G, a detailed listing of all new source data is provided in Appendix H. New determinations are initially entered into the Transient data base and, when approved by the RBLC staff, later promoted to the Current data base. If new determinations contain incomplete or erroneous data, and the RBLC staff cannot resolve these problems, the determinations may be deleted. This assures that all data promoted to the Current data base is accurate. However, there is the potential that some determinations listed in this supplement will be removed from the RBLC data base at a future date.

Appendix H has two parts: Part A and Part B. Only Part A is included in this supplement. Part A lists details about control technologies and emission limits for processes and pollutants. Part B details scheduling information related to permitting, as well as costs associated with control technology used for pollutants. Appendix H is intended to provide the maximum manageable amount of technical and administrative information without duplicating a completed permit application.

Part A consists of:

- A RBLC ID number assigned by the Clearinghouse (consists of state abbreviation and a sequence number)
- the date the determination was inserted into the Clearinghouse

- the company name, plus street address, city, county, state, ZIP Code
- the date the permit was issued (estimated or actual)
- the state permit number (or EPA Regional Office file number)
- the date operation started (estimated or actual)
- the agency issuing the permit
- the contact person within the agency who is familiar with the control technology information
- agency telephone number for the contact person
- Aerometric Information Retrieval System identifier (AIRS ID)
- Standard Industrial Classification (SIC) code
- description of the process or processes being permitted, throughput capacity and corresponding units
- process type code
- Standard Source Classification (SCC) code
- pollutant name and emission limitations applicable to each permitted process
- standardized limits for pollutants
- basis for pollutant limit (RACT, BACT, LAER, etc.)
- Chemical Abstract Service (CAS) number
- pollution reduction method indicator that identifies whether the facility uses pollution prevention, add-on equipment, or both methods to meet the permitted emission limits; or whether no controls are feasible
- pollution reduction method description that provides details about the specific pollution prevention techniques and add-on equipment used
- percent efficiency for the control devices
- selected control option ranking
- notes on the determination

In some cases, a second emission limit is applicable to a given process/pollutant. In those cases, this second emission limitation is referred to in the RBLC as the alternate limit. Because the space available in Appendix H is limited, alternate limits are not included in the Appendix.

Abbreviations for processes and emission limitations have been developed. A complete list of these abbreviations is contained in Appendix A. Some comments have been received regarding the use of these abbreviations. Every effort has been made to use a standard set of abbreviations. In some cases, however, this was not possible. The control agencies are encouraged to review the abbreviations in Appendix A and submit any suggested revisions. The abbreviations are periodically reviewed and updated accordingly.

Part B has not been included in Appendix H because space is limited and minimal data has been entered in the date and cost fields. However, Part B is available in the RBLC BBS data base. Part B includes some basic information about the determination (RBLC ID, date inserted in the Clearinghouse, company name and address, permit number, permitting agency, and contact information) that also appears in Part A plus the following additional data:

- the date the application for permit was received (estimated or actual)
- the date the permit was issued (estimated or actual)
- the date operation started (estimated or actual)
- the date compliance was verified (estimated or actual)
- process name, throughput capacity and corresponding units
- whether or not compliance was verified and the compliance method used (stack test, inspection, calculation, other method)
- pollutant and associated costs of control system (capital costs, annual operation and maintenance costs, annualized costs)
- cost effectiveness of control system in dollars per ton
- year in which dollar values are expressed
- whether or not costs were verified by the permitting agency

IMPROVEMENTS TO THE SYSTEM

The RBLC has operated on the Office of Air Quality Planning and Standards Technology Transfer Network (OAQPS TTN) bulletin board system (BBS) since October 1992. As the OAQPS TTN began migrating to the World Wide Web (WWW), the RBLC staff focused its efforts on allowing data base searches directly from the WWW. Today, users of the web version of the Clearinghouse can search on any of 23 different components, and users can perform word searches on most of the searchable components. Searchable components have been designated as "required" fields for new determinations. This information must be provided on new information from submitting agencies in order to ensure that searches produce valid results.

Our objective as we moved from the text-based searching on the BBS to the more user-friendly environment of dynamic web pages was to maintain the search and reporting functionality of the RBLC BBS. The graphical environment of the WWW supports a simplified search procedure. Users select a data base of interest (see below) and one or more searchable properties from drop-down lists displayed in their web browser. They fill in text boxes with the value they are trying to match, and then click a submit button to execute the query. The query finds all determinations in the RBLC data base that match the specified criteria and displays the results for viewing in the browser. The familiar selection of one or more output formats is provided.

Permit data in the Clearinghouse has been segmented into three separate data bases. The current data base (also known as the permanent data base) contains completed RBLC determinations entered since June 1991. These determinations have been reviewed by RBLC staff to ensure that the information is complete and correct. The second data base is the transient data base, which provides a work space on the BBS for users to enter and update determinations. RBLC staff regularly reviews the transient data base and promotes accurate and complete determinations into the permanent data base. (The transient data base is not yet available on the web). The third data base, the historical data base, contains completed RBLC determinations entered before June 1991. The historical data base is further segmented into multiple data bases based on when the information was submitted. Refer to the on-line screens for the exact submittal dates contained in each portion of the historical data base. This organization of the

data bases was designed to ensure the integrity of the RBLC data and to maintain a reasonable response time for users accessing the system.

The RBLC also maintains a data base of federal, state, and local regulations, which includes summaries of federal regulations enacted in response to the CAAA. These rules include Maximum Achievable Control Technology (MACT) standards, National Emission Standards for Hazardous Air Pollutants (NESHAP), New Source Performance Standards (NSPS), and Control Techniques Guideline (CTG) documents that specify requirements for Reasonably Available Control Technology (RACT). The regulation data base is available on the WWW and offers options that allow you to scan or query the rules data. The query option brings the power of user-defined queries to the complex details of air pollutant emissions regulations. Using the same user-friendly browser interface as the RBLC's permit data base, users can build a query to locate pertinent regulations for a particular pollutant or process or for a broad array of other criteria. You can also bypass the query step and go directly to viewing a list of all the federal and state regulations. This data base also offers a data entry module on the BBS for on-line inputting and editing of regulations by responsible agencies.

The RBLC has an on-going effort to improve the functionality of the permit and regulation data bases and to make this information easier to retrieve. The web query capabilities are the most recent improvement. Another such feature in the Clearinghouse is the Statistical Ranking download report format that presents emission limits sorted from most to least stringent. This ordering is useful for comparing emissions for a single pollutant from a single process. The emission limits must be expressed in the same units. Standard units for emission limits have been established in the data base to allow meaningful comparisons among many diverse control technology determinations. The Statistical Ranking report is based on these values. Sample reports are available on the web for viewing on-line or for downloading to your local PC. You may also use the BBS query module to generate these reports.

For users who prefer to have the RBLC at their fingertips, the Desktop RBLC is an option. This stand-alone, PC-based program gives users access to the data base without requiring an Internet or dial-up connection to the TTN. It can be downloaded from the RBLC Software section of the CATC Product Information on the web and installed to run on a user's PC. The

Desktop RBLC includes the same search and browse capabilities that are in the BBS versions. Data bases for the Desktop RBLC are updated every quarter, and users can download them to view recent submittals to the Clearinghouse.

Other improvements and revisions to the system will continue to be considered as a result of contacts with various state and local agencies. Soon, we expect to allow authorized users to enter and update determinations via the web. These improvements and revisions will be evaluated and made based on the recommendations of the state and local agencies that are entering or submitting determinations to the Clearinghouse. Watch the RBLC web page for more details on new capabilities of the RBLC Web.

All inquiries concerning RBLC and information contained in the data base should be directed to:

RACT/BACT/LAER Clearinghouse (MD-12)
Information Transfer & Program Integration Division
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711
Phone: (919) 541-2736

OR

The Clean Air Technology Center Information Line
(formerly The Control Technology Center HOTLINE)
(919) 541-0800, FAX (919) 541-0242
catcmail@epamail.epa.gov

PROCEDURES FOR FUTURE SUBMISSIONS TO THE CLEARINGHOUSE

The RBLC is intended to be a dynamic program. Periodic updates and new listings are welcomed. Submissions by state and local control agencies are entirely voluntary except for LAER determinations, which must be submitted to the Clearinghouse. Without submittals, however, the viability and usefulness of the program are jeopardized. Agencies are encouraged to make formal submittals at any time by using the on-line submittal procedures.

The Clearinghouse supports a variety of data submittal procedures. The BBS version of the RBLC allows designated users in regional, state, and local air pollution control agencies

direct update capability. A stand-alone version is available so that designated users can enter **NEW** determinations on their local PCs, without an Internet connection or a modem/direct dial and its associated cost. After completing data entry, users forward their determinations to the RBLC for inclusion in the on-line data base. With either on-line or stand-alone input, data entered by designated users is placed into a searchable transient data base on the BBS where quality assurance procedures will be performed. Once the data is checked, it will be promoted into the web and BBS versions of the current RBLC data base. Designated users can access the BBS to make changes to current entries in the Clearinghouse. (The stand-alone editor can not be used to edit determinations previously entered into the on-line RBLC data base). For those who wish to make hardcopy (paper) submittals, the submittal form and instructions for data submittal are in Appendix E.

Submittals can be made as soon as the permit application is received. It is not necessary to wait until the final permit is issued. The initial on-line submittal must, however, list all processes. (Note, also, that each process must include at least one pollutant.) The RBLC allows dates to be flagged as either estimated or actual; so that it is not necessary to know the exact schedule for the permitting and operation of the facility. Subsequent to the initial submittal, agencies may use the RBLC to update the status of the application. As with any automated information system, the RBLC data base offers flexible, user-defined queries and a variety of report formats. Needed information can be quickly accessed in whatever level of detail is appropriate.

The preferred submittal methods are on-line input via the BBS or electronic submittal of stand-alone input. In order to facilitate the input or submission of determinations and corrections, a full page copy of the input form and a set of instructions for completing the form are provided in Appendix E of this report. The form in Appendix E can be reproduced and used to prepare or submit new determinations and/or to update existing information. All questions should be directed as indicated above.

PROCEDURES FOR ACCESSING THE CLEARINGHOUSE ON THE INTERNET AND OAQPS TTN BBS

The RBLC is accessible to anyone with a personal computer that can communicate with outside networks. For access via the Internet, you will need an Internet connection and a web browser. If you wish to dial in to the RBLC BBS, you will need a modem, phone line, and communications software. You will also need to register for the TTN BBS.

For WWW access to the RBLC, point your browser to the following address:

www.epa.gov/ttn/catc/

Then click on the RBLC icon to get to the data base.

The following Internet addresses are also available:

Telnet	ttnbbs.rtpnc.epa.gov
FTP	ttnftp.rtpnc.epa.gov

The World Wide Web site lets you access most of the information on the TTN with your browser. However, to edit determinations in the RBLC, you still need to access the TTN BBS via the Telnet site. Our web page includes a hyperlink to simplify this process. The Telnet site allows users to utilize traditional BBS functions, such as editing the RBLC data base. Remember, you must be a registered user of the TTN, and you will also need Telnet client software. The FTP site allows users of FTP clients and most web browsers to transfer BBS files, including search results from RBLC BBS query and browse functions, easily over the Internet.

Dial in access to the TTN BBS is available at (919) 541-5742 for modems up to 14,400 bps. Set your communications parameters as follows:

- 8 data bits
- 1 stop bit
- No parity
- VT100, VT102, or ANSI terminal emulation

Once connected to the OAQPS TTN BBS, enter your logon name and password. (A new user must complete an on-line registration questionnaire before being allowed to fully access the BBS). From the TTN BBS top menu, choose the Technical Areas menu option, and then select RBLC from the option list to access the RBLC Main menu. You can select any menu item

by pressing the appropriate letter. Choose 'B' to access the RBLC data base; choose 'T' for the regulations data base.

If you have any problems accessing the OAQPS TTN, call the voice help line at (919) 541-5384.

APPENDIX A
ABBREVIATIONS FOR PROCESSES,
EMISSION LIMITS, AND POLLUTANTS

ABBREVIATIONS FOR PROCESSES AND DESCRIPTORS

<u>ABBREVIATION</u>	<u>PROCESS OR DESCRIPTOR</u>
ADD	additive
AL	aluminum
AM	American
ASSOC	association
ATMOS	atmospheric
CALC	catalytic
CEM	continuous emission monitoring
CO	company
COLL	collection
COOP	cooperative
CORP	corporation
DECARB	decarbonization
DESULF	desulfurization
DISTIL	distillation
DISTN	distribution
DIV	division
E	eastern
EA	each
EFF	efficiency
ELECT	electric
EMISS	emissions
ENVIRON OR ENV	environmental
ESP	electrostatic precipitator
FAC	facility
FCC	fluid catalytic cracking
FCCU	fluid catalytic cracking unit
FGR	flue gas recirculation
FURN	furnace
GEN	generator
HAND	handling
HVLP	high-volume, low pressure (spray guns)

ABBREVIATION

PROCESS OR DESCRIPTOR

I.C.	internal combustion
INCIN	incinerator
INDEP	independent
INTERNAT	international
LAB	laboratory
LDOUT	loadout
LIQ	liquid
LT	light
MATL	material
MFG	manufacturing
MISC	miscellaneous
MODIF	modification
NAT	natural
NATL	national
POLL	pollutant/pollution
PREP	preparation
PROD	production
PWR	power
REC	recovery
RECIP	reciprocating
RECLAM	reclamation
REFIG	refrigeration
REFIN	refinery
REG	regular
REGEN	regenerator
RESID	residual
ROT	rotary
SCR	selective catalytic reduction
SCRUB	scrubber
SECOND	secondary
SHIP	shipping
SNCR	selective non-catalytic reduction
SOLN	solution

ABBREVIATION

PROCESS OR DESCRIPTOR

STOR	storage
SUP	supplementary
SYS	system
TRANS	transmission
UNIV	university
VAC	vacuum
VERT	vertical

ABBREVIATIONS FOR EMISSION LIMIT UNITS

<u>ABBREVIATION</u>	<u>EMISSION LIMIT UNIT</u>
ACF	actual cubic feet
ACFM	actual cubic feet per minute
ACS	applied coating solids
ADP	air dried pulp
AV	average
BBL	barrels
BHP	brake horsepower
BLS	black liquor solids
BPSD	barrels per stream day
BTU	British thermal units
CF	cubic feet
CFM	cubic feet per minute
CU YD	cubic yard
D	day
D FEED	dry feed
DACF	dry actual cubic feet
DIST	distillate
DSCF	dry standard cubic feet
F	feet
G	gram
G/B-HP-H	grams per brake horsepower-hour
G/O	gas/oil
GAL/M	gallons per minute
GR	grains
H	hour
HP	horsepower
J	joule
KG	kilogram
KW	kilowatt
LB	pound
LT	long ton

ABBREVIATION

EMISSION LIMIT UNIT

M	thousand (10 ³)
MG/L	milligram per liter
MM	million (10 ⁶)
MO	month
MW	megawatt
N	natural
NG	nanogram
OPAC	opacity
PPM	parts per million
PPH	parts per hundred
RDF	refuse derived fuel
RESID	residual
SB	subbituminous
SCF	standard cubic feet
SCFD	standard cubic feet per day
SCFM	standard cubic feet per minute
SEC	second
SQF	square feet
T	ton
TPY	tons per year (found in notes of determinations)
VOL	volume
WKS	weeks
YR	year

ABBREVIATIONS FOR POLLUTANTS

<u>ABBREVIATION</u>	<u>POLLUTANT</u>
AG	silver
AN	acrylonitrile
AR	argon
AS	arsenic
BA	barium
BAP	benzo(a)pyrene
BE	beryllium
CA	calcium
CD	cadmium
CDD	chlorodibenzodioxins
CDF	chlorodibenzofurans
CL	chlorine
CL2	chlorine (gas)
CL2/OCL	chlorine and oxychlorine
CLO2	chlorine dioxide
CO	carbon monoxide
CO2	carbon dioxide
COS	carbonyl sulfide
CR	chromium
CRVI	hexavalent chrome
CS	cesium
CU	copper
DCB	1,4-dichloro-2-butene
ETH	ethylene
ETO	ethylene oxide
F	fluorine
FSP	fine suspended particulates
HBR	hydrogen bromide
HC	hydrocarbons
HCL	hydrochloric acid
HCN	hydrogen cyanide

ABBREVIATION

POLLUTANT

HDM	hexamethylene diisocyanate monomer
HF	hydrogen fluoride
HG	mercury
HHD	homopolymer of HDM (see above)
H ₂ O	water
H ₂ S	hydrogen sulfide
H ₂ SO ₄	sulfuric acid
MA	maleic anhydride
MC ACETATE	methyl cellulose acetate
MEK	methyl ethyl ketone
MG	magnesium
MI KETONE	methyl isobutyl ketone
MMH	methyl hydrazine
MN	manganese
MO	molybdenum
NAOH	sodium hydroxide
NA ₂ SO ₄	salt cake
NH ₃	ammonia
NH ₄	ammonium
NH ₄ CL	ammonium chloride
NI	nickel
NMHC	nonmethane hydrocarbons
NMOC	nonmethane organic carbon
NOX	nitrogen oxide
NO ₂	nitrogen dioxide
N ₂ O	nitrous oxide
PAH	polynuclear aromatic hydrocarbons
PB	lead
PCB	polychlorinated biphenyls
PCDF	polychlorinated dibenzo furans
PCNB	pentachloronitrobenzene herbicide
PM, PM ₁₀	particulate matter
POCL ₃	phosphorous oxychloride

ABBREVIATION

POLLUTANT

POHC	principle organic hazardous constituents
RHC	reactive hydrocarbons
ROC	reactive organic compounds
ROG	reactive organic gases
RSC	reduced sulfur compounds
S	sulfur
SB	antimony
SE	selenium
SN	tin
SO ₂	sulfur dioxide
SO ₃	sulfur trioxide
TCDD	2,3,7,8-tetrachlorodibenzo-P-dioxin
TCDF	tetrachlorodibenzo furan
TCE	trichloroethylene
TC-ETHANE	1,1,1-trichloroethane
TICL ₄	titanium tetrachloride
TMT	tetramethyl tin
TRS	total reduced sulfur
U	uranium
UF ₄	uranium tetrafluoride
V	vanadium
VC	vinyl chloride
VCM	vinyl chloride monomer
VE	visible emissions
VOC	volatile organic compounds
ZN	zinc
ZRSO ₄	zirconium sulfate

APPENDIX B
DETAILED LISTING OF PROCESS TYPE CODES

PROCESS TYPE CODE LIST

No. CATEGORY

10.000 COMBUSTION

11.000 EXTERNAL COMBUSTION

- 11.001 Bagasses Combustion
- 11.002 Coal Combustion
- 11.006 Fuel Oil Combustion
- 11.003 Lignite Combustion
- 11.004 Multiple Fuels Combustion
- 11.005 Natural Gas Combustion
- 11.007 Waste Oil Combustion
- 11.008 Wood/Wood Waste Combustion
- 11.999 Other External Combustion Sources

15.000 INTERNAL COMBUSTION

- 15.001 Aviation Fuels
- 15.002 Diesel Fuel
- 15.006 Fuel Oil
- 15.003 Gasoline
- 15.007 Multiple Fuels
- 15.004 Natural Gas
- 15.005 Process Gas
- 15.999 Other Internal Combustion Sources

20.000 WASTE DISPOSAL

21.000 MUNICIPAL WASTE

- 21.001 Municipal Waste Combustors/Incinerators
- 21.002 Municipal Waste Landfills
- 21.003 Publicly Owned Treatment Works (POTW) Emissions (except 21.004)
- 21.004 Sewage Sludge Incineration
- 21.999 Other Municipal Waste Processing/Disposal Facilities

22.000 HAZARDOUS WASTE

- 22.007 Asbestos Demolition, Renovation, and Disposal
- 22.001 Benzene Waste Treatment
- 22.006 Contaminated Soil Treatment
- 22.002 Hazardous Waste Incineration
- 22.003 Hazardous Waste Landfills
- 22.004 Site Remediation
- 22.005 Treatment, Storage and Disposal Facilities (TSDf) (except 22.002, 22.003 & 22.006)
- 22.999 Other Hazardous Waste Processing/Disposal Facilities

29.000 OTHER WASTE DISPOSAL (except 21 & 22)

- 29.001 Automobile Body Shredding/Incineration
- 29.002 Industrial Wastewater/Contaminated Water Treatment
- 29.003 Industrial Landfills
- 29.004 Medical/Infectious Waste Incineration
- 29.999 Other Waste Disposal Sources

30.000 WOOD PRODUCTS INDUSTRY

- 30.001 Charcoal
- 30.002 Kraft Pulp Mills
- 30.003 Plywood and Veneer Operations
- 30.004 Pulp and Paper Production other than Kraft
- 30.005 Reconstituted Panelboard Plants (waferboard, particleboard, etc.)
- 30.006 Wood Treatment
- 30.007 Woodworking
- 30.999 Other Wood Products Industry Sources

40.000 ORGANIC EVAPORATIVE LOSSES

41.000 SURFACE COATING/PRINTING/GRAPHIC ARTS

- 41.001 Aerospace Surface Coating
- 41.002 Automobiles and Trucks Surface Coating (OEM)
- 41.003 Automotive Refinishing
- 41.004 Can Surface Coating

41.005 Fabric Coating/Printing/Dyeing (except 41.017)
41.006 Flatwood Paneling Surface Coating
41.007 Flexible Vinyl & Urethane Coating/Printing
41.008 Large Appliance Surface Coating
41.026 Leather Surface Coating
41.009 Magnetic Tape Surface Coating
41.010 Magnetic Wire Surface Coating
41.011 Metal Coil Surface Coating
41.012 Metal Furniture Surface Coating
41.013 Miscellaneous Metal Parts and Products Surface Coating
41.014 Paper, Plastic & Foil Web Surface Coating (except 41.007 & 41.018)
41.015 Plastic Parts for Business Machines Surface Coating
41.016 Plastic Parts & Products Surface Coating (except 41.015)
41.017 Polymeric Coating of Fabrics
41.018 Pressure Sensitive Tapes and Labels Coating
41.019 Printing - Forms
41.020 Printing - News Print
41.021 Printing - Packaging
41.022 Printing - Publication
41.023 Printing/Publication (except 41.007 & 41.019-022)
41.024 Ship Building & Repair Surface Coating
41.025 Wood Products/Furniture Surface Coating (except 41.006)
41.999 Other Surface Coating/Printing/Graphic Arts Sources

42.000 LIQUID MARKETING (PETROLEUM PRODUCTS, GASOLINE, VOL)

42.001 Gasoline Bulk Plants
42.002 Gasoline Bulk Terminals
42.003 Gasoline Marketing (except 42.001 & 42.002)
42.004 Petroleum Liquid Marketing (except 42.001-003 & 42.005-006)
42.005 Petroleum Liquid Storage in Fixed Roof Tanks
42.006 Petroleum Liquid Storage in Floating Roof Tanks
42.009 Volatile Organic Liquid Storage
42.010 Volatile Organic Liquid Marketing (except 42.009)
42.999 Other Liquid Marketing Sources

49.000 ORGANIC EVAPORATIVE LOSSES (except 41 & 42)

49.001 Aerosol Can Filling
49.012 Architectural & Industrial Maintenance (AIM) Coatings
49.013 Automobile Refinish Coatings
49.011 Consumer Products

- 49.002 Dry Cleaning - PERC/Chlorinated Solvents
- 49.003 Dry Cleaning - Petroleum Solvents
- 49.004 Fiberglass Boat Manufacturing
- 49.005 Fiberglass/Reinforced Polymer Products Manufacturing (except 49.004)
- 49.006 Halogenated Solvent Cleaners
- 49.007 Ink Manufacturing
- 49.008 Organic Solvent Cleaning & Degreasing (except 49.006)
- 49.009 Paint/Coating/Adhesives Manufacturing
- 49.010 Paint Stripping
- 49.999 Other Organic Evaporative Loss Sources

50.000 PETROLEUM/NATURAL GAS PRODUCTION AND REFINING

- 50.001 Oil and Gas Field Services
- 50.002 Natural Gas/Gasoline Processing Plants
- 50.003 Petroleum Refining Conversion Processes (cracking, CO boilers, reforming, alkylation, polymerization, isomerization, coking)
- 50.007 Petroleum Refining Equipment Leaks/Fugitive Emissions
- 50.004 Petroleum Refining Feedstock (blending, loading and unloading)
- 50.008 Petroleum Refining Flares and Incinerators (except acid gas/sulfur recovery unit incinerators - 50.006)
- 50.005 Petroleum Refining Separation Processes (distillation and light ends recovery)
- 50.006 Petroleum Refining Treating Processes (hydrodesulfurization, hydrotreating, chemical sweetening, acid gas removal, deasphalting, sulfur recovery units, acid gas/sulfur recovery unit incinerators)
- 50.009 Petroleum Refining Wastewater and Wastewater Treatment
- 50.010 Shale Processing
- 50.999 Other Petroleum/Natural Gas Production & Refining Sources (except 50.001-010 and 42.000 - Liquid Marketing)

60.000 CHEMICALS MANUFACTURING

61.000 AGRICULTURAL CHEMICALS MANUFACTURING

- 61.001 2,4-D Salts and Esters Production
- 61.002 4-Chloro-2-Methylphenoxyacetic Acid Production
- 61.003 4,6-Dinitro-o-Cresol Production
- 61.004 Captafol (tm) Production
- 61.005 Captan (tm) Production
- 61.006 Chloroneb (tm) Production
- 61.007 Chlorthalonil (tm) Production

61.008 Dacthal (tm) Production
61.012 Fertilizer Production (except 61.009)
61.009 Phosphate Fertilizers Production
61.010 Sodium Pentachlorophenate Production
61.011 Tordon Acid Production
61.999 Other Agricultural Chemical Manufacturing Sources

62.000 INORGANIC CHEMICALS MANUFACTURING

62.001 Ammonium Sulfate Production - Caprolactam By-Product Plants
62.002 Antimony Oxides Manufacturing
62.003 Chlorine Production
62.016 Chloroalkali Production
62.004 Chromium Chemicals Manufacturing
62.005 Cyanuric Chemicals Manufacturing
62.006 Fume Silica Production
62.007 Hydrochloric Acid Production
62.017 Hydrofluoric Acid Production
62.008 Hydrogen Cyanide Production
62.009 Hydrogen Fluoride Production
62.020 Inorganic Liquid/Gas Storage & Handling
62.014 Nitric Acid Plants
62.010 Phosphoric Acid Manufacturing
62.011 Quaternary Ammonium Compounds Production
62.018 Sodium Carbonate Production
62.012 Sodium Cyanide Production
62.015 Sulfuric Acid Plants
62.019 Sulfur Recovery (except 50.006)
62.013 Uranium Hexafluoride Production
62.999 Other Inorganic Chemical Manufacturing Sources

63.000 POLYMER AND RESIN PRODUCTION

63.001 Acetal Resins Production
63.002 Acrylonitrile-Butadiene-Styrene Production
63.003 Alkyd Resins Production
63.004 Amino Resins Production
63.005 Butadiene-Furfural Cotrimer (R-11)
63.006 Butyl Rubber Production
63.007 Carboxymethylcellulose Production
63.008 Cellophane Production
63.009 Cellulose Ethers Production

63.010 Epichlorohydrin Elastomers Production
63.011 Epoxy Resins Production
63.012 Ethylene-propylene Rubber Production
63.013 Flexible Polyurethane Foam Production
63.014 Hypalon (tm) Production
63.015 Maleic Copolymers Production
63.016 Methylcellulose Production
63.017 Methyl Methacrylate-Acrylonitrile-Butadiene-Styrene Production
63.018 Methyl Methacrylate-Butadiene-Styrene Terpolymers Production
63.019 Neoprene Production
63.020 Nitrile Butadiene Rubber Production
63.021 Non-Nylon Polyamides Production
63.022 Nylon 6 Production
63.023 Phenolic Resins Production
63.024 Polybutadiene Rubber Production
63.025 Polycarbonates Production
63.026 Polyester Resins Production
63.027 Polyether Polyols Production
63.028 Polyethylene Terephthalate Production
63.029 Polymerized Vinylidene Production
63.030 Polymethyl Methacrylate Resins Production
63.031 Polystyrene Production
63.032 Polysulfide Rubber Production
63.033 Polyvinyl Acetate Emulsions Production
63.034 Polyvinyl Alcohol Production
63.035 Polyvinyl Butyral Production
63.036 Polyvinyl Chloride and Copolymers Production
63.037 Reinforced Plastic Composites Production
63.038 Styrene-Acrylonitrile Production
63.039 Styrene Butadiene Rubber and Latex Production
63.999 Other Polymer and Resin Manufacturing Sources

64.000 SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY
 (SOCMI)

64.001 Batch Reaction Vessels (except 69.011)
64.002 Equipment Leaks (valves, compressors, pumps, etc.)
64.003 Processes Vents (emissions from air oxidation, distillation, and other reaction vessels)
64.004 Storage Tanks (SOCMI Chemicals (loading/unloading, filling, etc.)
64.005 Transfer of SOCMI Chemicals (loading/unloading, filling, etc.)
64.006 Wastewater Collection & Treatment
64.999 Other SOCMI Industry Sources

65.000 SYNTHETIC FIBERS PRODUCTION

- 65.001 Acrylic Fibers/Modacrylic Fibers Production
- 65.002 Rayon Production
- 65.003 Spandex Production
- 65.999 Other Synthetic Fibers Production Sources

69.000 CHEMICAL MANUFACTURING (except 61, 62, 63, 64 & 65)

- 69.001 Benzyltrimethylammonium Chloride Facilities
- 69.002 Butadiene Dimers Production
- 69.015 Carbon Black Manufacturing
- 69.003 Carbonyl Sulfide Production
- 69.004 Chelating Agents Production
- 69.005 Chlorinated Paraffins Production
- 69.006 Dodecanedioic Acid Production
- 69.007 Ethylidene Norbornene Production
- 69.008 Explosives Production
- 69.009 Hydrazine Production
- 69.010 OBPA/1,3-Diisocyanate Production
- 69.011 Pharmaceuticals Production
- 69.012 Photographic Chemicals Production
- 69.013 Phthalate Plasticizers Production
- 69.017 Propellant Manufacturing & Production
- 69.014 Rubber Chemicals Manufacturing
- 69.016 Soap & Detergent Manufacturing
- 69.999 Other Chemical Manufacturing Sources

70.000 FOOD AND AGRICULTURAL PRODUCTS (also see 61 - AGRICULTURAL CHEMICALS)

- 70.016 Alcohol Fuel Production
- 70.008 Alcoholic Beverages Production
- 70.001 Alfalfa Dehydrating
- 70.002 Baker's Yeast Manufacturing
- 70.003 Bread Bakeries
- 70.004 Cellulose Food Casing Manufacturing
- 70.005 Coffee Roasting
- 70.006 Cotton Ginning
- 70.007 Feed and Grain Handling, Storage & Processing (including Mills and Elevators)
- 70.009 Fish Processing
- 70.010 Fruit and Vegetable Processing

70.011 Meat Smokehouses
70.012 Roasting (except 70.005)
70.013 Starch Manufacturing
70.014 Sugar Cane Processing
70.015 Vegetable Oil Production
70.999 Other Food and Agricultural Products Sources

80.000 METALLURGICAL INDUSTRY

81.000 FERROUS METALS INDUSTRY

81.001 Coke By-product Plants
81.002 Coke Production (except 81.001)
81.003 Ferroalloy Production
81.004 Iron Foundries
81.005 Stainless Steel/Specialty Steel Manufacturing
81.006 Steel Foundries
81.007 Steel Manufacturing (except 81.005 & 81.006)
81.008 Steel Pickling - HCL Process
81.999 Other Ferrous Metals Industry Sources

82.000 NONFERROUS METALS INDUSTRY

82.016 Beryllium Processing and Manufacturing
82.001 Lead Acid Battery Manufacturing
82.002 Lead Acid Battery Reclamation
82.003 Lead Oxide and Pigment Production
82.004 Lead Products (except 82.001-002, 82.006 & 82.012)
82.005 Primary Aluminum Production
82.006 Primary Copper Smelting
82.007 Primary Lead Smelting
82.008 Primary Magnesium Refining
82.009 Primary Zinc Smelting
82.010 Secondary Aluminum Production
82.011 Secondary Brass & Brass Ingot Production
82.012 Secondary Copper Smelting & Alloying
82.013 Secondary Lead Smelting
82.014 Secondary Magnesium Smelting
82.015 Secondary Zinc Processing
82.999 Other Non-Ferrous Metals Industry Sources

90.000 MINERAL PRODUCTS

- 90.001 Alumina Processing
- 90.035 Asbestos Manufacturing
- 90.002 Asphalt/Coal Tar Application - Metal Pipes
- 90.003 Asphalt Concrete Manufacturing
- 90.004 Asphalt Processing (except 90.002, 90.003 & 90.034)
- 90.034 Asphalt Roofing Products Manufacturing
- 90.017 Calciners & Dryers and Mineral Processing Facilities
- 90.005 Calcium Carbide Manufacturing
- 90.006 Cement Manufacturing (except 90.028)
- 90.007 Chromium Refractories Production
- 90.008 Clay and Fly Ash Sintering
- 90.009 Clay Products (including Bricks & Ceramics)
- 90.010 Coal Conversion/Gasification
- 90.011 Coal Handling/Processing/Preparation/Cleaning
- 90.012 Concrete Batch Plants
- 90.013 Elemental Phosphorous Plants
- 90.014 Frit Manufacturing
- 90.015 Glass Fiber Manufacturing (except 90.033)
- 90.016 Glass Manufacturing
- 90.018 Lead Ore Crushing and Grinding
- 90.019 Lime/Limestone Handling/Kilns/Storage/Manufacturing
- 90.020 Mercury Ore Processing
- 90.021 Metallic Mineral/Ore Processing (except 90.018, 90.020 & 90.031)
- 90.022 Mineral Wool Manufacturing
- 90.023 Mining Operations (except 90.032)
- 90.024 Non-metallic Mineral Processing (except 90.011, 90.019, 90.017, 90.026) (NOTE: This category includes stone quarrying, sand and gravel processing, gypsum processing, perlite processing and all other non-metallic mineral/ore processing.)
- 90.026 Phosphate Rock Processing
- 90.027 Phosphogypsum Stacks
- 90.028 Portland Cement Manufacturing
- 90.029 Refractories
- 90.031 Taconite Iron Ore Processing
- 90.032 Underground Uranium Mines
- 90.033 Wool Fiberglass Manufacturing
- 90.999 Other Mineral Processing Sources

99.000 MISCELLANEOUS SOURCES

- 99.001 Abrasive Blasting
- 99.002 Chromic Acid Anodizing
- 99.003 Comfort Cooling Towers
- 99.004 Commercial Sterilization Facilities
- 99.005 Decorative Chromium Electroplating
- 99.006 Electronics Manufacturing (except 99.011)
- 99.013 Electroplating/Plating (except Chrome - 99.002, 99.005 & 99.007)
- 99.019 Geothermal Power
- 99.007 Hard Chromium Electroplating
- 99.008 Hospital Sterilization Facilities
- 99.009 Industrial Process Cooling Towers
- 99.017 Leather Tanning
- 99.014 Polystyrene Foam Products Manufacturing
- 99.016 Polyurethane Foam Products Manufacturing
- 99.020 Rocket Demilitarization
- 99.010 Rocket Engine Test Firing
- 99.015 Rubber Tire Manufacturing and Retreading
- 99.011 Semiconductor Manufacturing
- 99.018 Synthetic Fuels Production (except 70.016 & 90.010)
- 99.012 Welding & Grinding
- 99.999 Other Miscellaneous Sources

APPENDIX C

SUGGESTED PROCESS NAMES

SUGGESTED PROCESS NAMES

ABSORBER/ADSORPTION
AERATOR

BLASTING
BLOWER
BOILER (coal, oil, etc.)
BURNER

CARBON REGENERATION (activated)
CASTING MACHINE/PROCESS
CATALYST REGENERATION
CHEMICAL PRODUCTION/MANUFACTURING
CLEANER/CLEANING PROCESS
COATER/COATING APPLICATION (includes painting)
COGENERATION
COMBUSTOR/COMBUSTION UNIT
COMPRESSOR
CONDENSER/CONDENSATION UNIT
COOLER
COOLING TOWER
CRUSHER/CRUSHING PROCESS

DEGREASER/DEGREASING PROCESS
DEHYDRATOR/DEHYDRATION PROCESS
DIGESTER
DISTILLATION UNIT
DRYER/DRYING

ELECTROPLATING/PLATING PROCESS
ENGINE, DIESEL
ENGINE, GAS-FIRED
ENGINE, I.C.

ENGINE, MISC.
ENTIRE FACILITY (plant)
EQUIPMENT LEAKS
EVAPORATOR/EVAPORATION PROCESS

FLARE/FLARING
FUGITIVES/FUGITIVE EMISSIONS
FURNACE

GENERATOR/GENERATING UNIT
GRINDER/GRINDING PROCESS

HEATER
HYDRATOR

INCINERATOR/INCINERATION

KILN

LAMINATOR/LAMINATION PROCESS
MATERIAL APPLICATION
MATERIAL BLENDING
MATERIAL TRANSFER/HANDLING
MATERIAL STORAGE (active)
MATERIAL STORAGE (inactive)
MILL/MILLING PROCESS
MIXER/MIXING PROCESS

OVEN

PRINTING PRESS/PRINTING PROCESS
PUMP

REACTOR
REBOILER
RECOVERY UNIT
REGENERATOR
ROADS

SCREEN/SCREENING PROCESS
SCRUBBER/SCRUBBING PROCESS
SEPARATOR
SHREDDER/SHREDDING PROCESS
SPRAY BOOTH
STRIPPER/STRIPPING PROCESS
SYNTHETIC ORGANIC CHEMICAL MFG. PROCESS - MISC.

TURBINE, GAS-FIRED
TURBINE, OTHER

WASHER/WASHING PROCESS

APPENDIX D

**SUGGESTED EMISSION UNITS BY
PROCESS TYPE CODE**

**SUGGESTED EMISSION UNITS BY
PROCESS TYPE CODE**

Attached is a list of suggested emission units to be used when submitting information to the RBLC. In general, the emission units of processes not listed here should be in units related to the production output. Standardization of emission units would facilitate ranking of emission control requirements on a pollutant specific basis.

Clearinghouse			Suggested
<u>Process Code</u>	<u>Name or Description</u>	<u>Pollutant</u>	<u>Emission Units</u>
11.001 -	Electric Utility Steam Generators	Particulate	Lb/MMBTU (see Note #1)
11.999	Fossil Fuel-fired Steam Generators	Particulate	Lb/MMBTU (see Note #1)
15.001 -	I. C. Engines	Particulate	G/B-HP-H (see Note #1)
15.999	Stationary Gas Turbines	Particulate	ppm @ 15% O ₂ (see Note #1)
21.001	Municipal Waste Incinerators	All	gr/dscf corr to 12% CO ₂ (see Note #1)
21.004	Sewage Sludge Incineration		Lb/Ton of dry sludge input
30.002	Kraft Pulp Mills - Recovery Furnace	Particulate	gr/dscf corr to 8% O ₂ (see Note #1)
	Kraft Pulp Mills - Lime Kiln	Particulate	gr/dscf corr to 10% O ₂ (see Note #1)
	Kraft Pulp Mills - Smelt Dissolving Tanks Kraft Pulp Mills - Digesters, Brown Stock Washers, Evaporators, Oxidation, Stripping System	Particulate	Lb/Ton BLS (see Note #1) ppm (by volume) corr to 10% O ₂
41.002	Auto & Light Truck Surface Coating		Kg/1 (lb/Gal) applied coating solids

Clearinghouse Process Code / Name or Description	Pollutant	Suggested Emission Units
41.004 Can Surface Coating		Kg/1 (Lb/Gal) applied coating solids
41.007 Flexible Vinyl & Urethane Coating and Printing		Kg/Kg/ (Lb/Lb) ink solids
41.008 Large Appliance Surface Coating		Kg/1 (Lb/Gal) of applied coating solids
41.011 Metal Coil Surface Coating		Kg/1 (Lb/Gal) applied coating solids
41.012 Metal Furniture Surface Coating		Kg/1 (Lb/Gal) applied coating solids
41.015 Plastic Parts for Business Machines Surface Coating		Kg/1 (Lb/Gal) applied coating solids
41.018 Pressure Sensitive Tape & Label Surface Coating		Kg/Kg (Lb/Lb) applied coating solids
41.019 - 41.023 Printing		% of total mass of VOC solvents & H ₂ O used
42.002 Gasoline Bulk Terminals		See Note #2
42.005/6 Vessels for Petroleum Liquid Storage		See Note #2
49.003 Dry Cleaning - Petroleum Solvents		See Note #2
50.003 Petroleum Refining - Cracking		Lb/1000 Lb or Lb/MMBTU or % by volume
50.006 Petroleum Refining - Claus Sulfur Recovery Units		% by volume
50.007 Petroleum Refining - Flue Gas Petroleum Refining - Equip. Leaks		gr/dscf (H ₂ S) See Note #2
61.009 Phosphate Fertilizers Pdtn.	Total Fluoride	Lb/Ton (see Note #1)
62.001 Ammonium Sulfate Pdtn.		Lb/Ton ammonium sulfate pdtn.

Clearinghouse			Suggested
<u>Process Code</u>	<u>Name or Description</u>	<u>Pollutant</u>	<u>Emission Units</u>
62.014	Nitric Acid Plants	NOX	Lb/Ton (see Note #1)
62.015	Sulfuric Acid Plants	SO ₂ & Acid Mist	Lb/Ton (see Note #1)
64.002	Equip. Leaks - Synthetic Organic Chemical Mfg. Industry		See Note #2
65.001 - 65.999	Synthetic Fibers Production		Kg/Mega-gram (Lb/1000 Lb) solvent feed
70.007	Grain Elevators	Particulate	gr/dscf (see Note #1)
81.003	Ferroalloy Production		Lb/MW-H or % (volume basis)
81.004 81.006	Iron Foundries Steel Plants - Electric Arc	Particulate	gr/dscf gr/dscf (see Note #1)
82.001	Lead Acid Battery Mfg.		gr/dscf or Lb/Ton lead feed
82.005 82.006	Primary Aluminum Pdtn. Primary Copper Smelting	Particulate	Lb/Ton gr/dscf (see Note #1)
82.007	Primary Lead Smelting	Particulate	gr/dscf (see Note #1)
82.009	Primary Zinc Smelting	Particulate	gr/dscf (see Note #1)
82.011	Sec. Brass & Brass Ingot Pdtn.	Particulate	gr/dscf (see Note #1)
82.013	Secondary Lead Smelting	Particulate	gr/dscf (see Note #1)
90.004 90.011	Hot-Mix Asphalt Processing Coal Hand./Proc./Prep./Cleaning	Particulate	gr/dscf gr/dscf (see Note #1)
90.016	Glass Mfg.	Particulate	Lb/Ton (see Note #1)
90.019	Lime/Limestone Handling/Kilns/Storage/Mfg.		Lb/Ton

Clearinghouse			Suggested
<u>Process Code</u>	<u>Name or Description</u>	<u>Pollutant</u>	<u>Emission Units</u>
90.021	Metallic Mineral/Ore Processing		grams/dscm (gr/dscf)
90.024	Non-metallic Mineral Processing		grams/dscm (gr/dscf)
90.026	Phosphate Rock Processing		Lb/Ton
90.028	Portland Cement Plants	Particulate	Lb/Ton (see Note #1)
90.033	Wool Fiberglass Mfg.		Lb/Ton glass pulled
90.034	Asphalt Roofing Products Mfg.		Kg/Mega-gram (Lb/1000 Lb)
99.015	Rubber Tire Mfg. Industry		% of VOC used

Note #1:

Standard emission units have been established for these processes. These units are required for reporting standardized emission limits in the control technology data base for these processes.

Also, for these processes, percent (%) has been established as the unit for reporting standardized emission limits for opacity.

Note #2:

Applicable regulations involve process controls and/or modifications. No emission units stated.

APPENDIX E

FORMAT FOR RACT/BACT/LAER CLEARINGHOUSE SUBMITTALS

AND INSTRUCTIONS FOR COMPLETING

RACT/BACT/LAER CLEARINGHOUSE INPUT FORM

FORMAT FOR RACT/BACT/LAER CLEARINGHOUSE SUBMITTALS

Information can be submitted to the RBLC in the following formats:

- Direct on-line submittal using RBLC BBS.
- Direct input using the stand-alone editor.
- Paper input using Clearinghouse submittal forms.

The on-line and stand-alone submittal procedures are the preferred formats. Designated users can obtain a password that allows them to access the RBLC data base Edit module on the BBS. Users can add new determinations and make changes to current entries in the Clearinghouse. Designated users can also obtain a copy of the stand-alone version of the Edit module to enter NEW determinations on their local PCS, without a modem/direct dial or Internet connection and its associated cost. After completing data entry, users forward their determinations to the RBLC for inclusion on the on-line data base. (The stand-alone editor cannot be used to edit determinations previously entered into the on-line RBLC data base). All inquiries concerning RBLC submittals should be directed to:

RACT/BACT/LAER Clearinghouse (MD-12)
Information Transfer & Program Integration Division
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711

OR

The Clean Air Technology Center Information Line
(919) 541-0800, FAX (919) 541-0242

The RBLC Input Form is available for downloading from the Product Information section of the CATC home page. Designed to facilitate the input of determinations and corrections, the form can be used to prepare new determinations and/or to update existing information. For those who wish, the hardcopy (paper) submittal form can be mailed to the RBLC at the above address.

INSTRUCTIONS FOR COMPLETING RACT/BACT/LAER CLEARINGHOUSE INPUT FORM

1. **Company Name/Site Location:** Insert name and address of the proposed facility. The address should be the location of the proposed facility not the address of the parent company unless they are the same.
2. **Determination Made by:** Designate the permitting agency and the person to whom telephone requests should be directed. This should be the person most capable of responding to factual questions about the permit decision. Please include the area code with the phone number.
3. **Permit/File Number:** This should be the identification number assigned by the agency that issued the permit.
4. **ID Numbers and Codes:** Fill-in the requested AIRS identification number, if available, and the SIC code.
5. **Scheduling Information:** Permitting scheduling dates stored include:
 - receipt of application (estimated or actual)
 - final permit issued (estimated or actual)
 - start-up operation (estimated or actual)
 - compliance verification (estimated or actual)

Please enter all of the scheduling information available.

6. **Facility Notes:** This section is for the completion or elaboration of any of the above items where space was a problem. Also, any information that you feel other agencies should know about this determination should appear here. Notes are typically used for the following:
 - More than one permit number
 - More detail on a particular process
 - More than one contact person
 - Further explanation regarding the designation of a source as new or modified
 - Further explanation of the emission limit or the support documentation associated with setting the limit (i.e., limit based on design or stack test)
7. **Process Description:** List all processes subject to this permit by name (e.g., kiln, boiler) for which a throughput limit, operating limit, emission limit, control strategy, performance or equipment standard has been specified. Use additional pages as

necessary. Additional information on a process may be placed in the Process Notes section.

Process name or process equipment should be listed using one of the process categories listed in Appendix C (Detailed Listing of Proposed Process Categories). A descriptor may be added behind the generic category name. For example,

Boiler, coal-fired, 3 each
Kiln, 3 each
Conveyors, coal/limestone
Furnace, arc
Boiler, recovery
Boiler, power
Engines, gas-fired

8. **Process Type Code:** A code assigned to each process (see Appendix B) used to categorize determinations.
9. **SCC Code:** This code is the standard source classification for processes used throughout the Office of Air at EPA.
10. **Throughput Capacity:** Indicate the maximum design capacity of the unit. Use the same units of measure used in the NSPS to describe the size of a source. Wherever possible, use the list of standardized abbreviations for process and emission limit - Appendix D.
11. **Compliance Verification:** This series of fields allows you to enter a yes or no response to the following questions:

- Compliance verified?
- Method of confirmation:
 - Stack testing?
 - Other testing?
 - Inspection?
 - Calculations?

You may also enter a narrative description of other types of confirmation methods.

12. **Process Notes:** This field should contain any additional information on the process being permitted.
13. **Pollutant(s) Emitted:** Make an entry for each pollutant or parameter for which a control requirement or other restraint has been specified (PM, SO₂, CO₂, NO₂, opacity, or others).

Use a separate block for each entry, and identify the pollutant and provide its Chemical Abstracts (CAS) number. Use the following standard abbreviations for these common pollutants whenever possible:

PM	Particulate Matter
SO ₂	Sulfur Dioxide
NO ₂	Nitrogen Oxides
CO	Carbon Monoxide
VOC	Volatile Organic Compounds
VE	Visible Emissions
TRS	Total Reduced Sulfur
F	Fluoride
Be	Beryllium
H ₂ S	Hydrogen Sulfide
Hg	Mercury
VC	Vinyl Chloride

Abbreviations for other pollutants are listed in Appendix D, along with CAS numbers.

14. **Emission Limit(s)**: For consistency and ease of comparison, list the emission limit or rate in the units of measure listed in Appendix C or those used in AP-42. Wherever possible use the list of standard abbreviations (Appendix D).

There are multiple emission limits in the Clearinghouse, they are:

- Primary emission limit and units: The primary emission limit listed in the permit.
- Alternate emission limit and units: If provided on the permit, these numbers represent any alternate emission measurements which the facility may make.
- Standardized limit and units: This limit allows comparison with other similar determinations in the RBLC. Standard units are provided for certain process types (see Appendix D) so that users can compare the entries in this field to determine the most stringent limits.

The base-line limit is no longer used in the RBLC data base.

15. **Emission Type**: A one-character field indicating whether the emission is fugitive, point-source, or area-source.
16. **Pollution Reduction Ranking Information**: Two pieces of information are requested: The number of options examined and the rank of the option selected. The "rank" is the number of the option selected when the options are ordered according to the performance

of the system. Number 1 would be the best controlled system, number 2 would be the next best, etc.

17. **Regulatory Requirements Associated with Limit (Basis of Limit):** Indicate the regulatory requirement that precipitated establishing the limit presented, i.e., BACT-PSD, BACT-Other, LAER, MACT, RACT, GACT, NSPS, NESHAP, or Other. Do not list such items as stack test, design or others. These items generally represent the supporting information that may have been used to document or establish the given limit. Such items should be included in the notes section.

To facilitate the identification of limits use the following abbreviations:

- BACT-PSD (Prevention of Significant Deterioration)
- BACT-Other (regulated by state/local rules, not PSD)
- LAER (lowest Available Control Technology)
- MACT (Maximum Achievable Control Technology)
- RACT (Reasonably Available Control Technology)
- GACT (Generally Available Control Technology)
- NSPS (New source Performance Standards)
- NESHAP (National Emission Standards for Hazardous Air Pollutants)
- Other

18. **Pollution Reduction Method Description:** Describe the specific pollution prevention techniques and add-on equipment used to achieve the permitted emission limits. Specify "NONE" if no controls are feasible. Pollution prevention techniques include operational modifications, limits in the type and amount of raw materials used, limits on throughput or hours of operation, maintenance requirements, equipment specifications, or other limitations. Typical add-on equipment includes ESP, fabric filter, etc. Information in this section may be supplemented under the "Notes" section.

Please note that the RBLC no longer has separate fields for equipment manufacturer and model number. Place this information, if you have it, in the notes.

19. **Overall Efficiency %:** Enter the overall system pollution reduction efficiency, consisting of capture (hoods, ductwork, etc.) and collection (control device) efficiency. Any breakdown of efficiencies for capture or collection individually should be shown under "Notes." For P2, indicate the overall effectiveness of the P2 methods.

20. **Cost Data:** Pollution reduction costs include:

- Capital cost of control equipment
- Annual operation and maintenance cost for all control methods
- Annualized cost (amortized capital cost + annual operation & maintenance costs)

- Cost effectiveness in dollars per ton (annualized cost/tons of pollutant removed)
- Year of the dollar used in cost calculations
- Cost verified by the permitting agency (yes or no)

When you have completed the form, mail it to the following address:

RACT/BACT/LAER CLEARINGHOUSE
RBLC (MD-12)
US EPA
RTP, NC 27711

APPENDIX F

INDEX OF CONTROL TECHNOLOGY DETERMINATIONS

Note: Appendix F lists determinations entered into the RBLC since June 1993. Older determinations in the RBLC data base do not appear here.

APPENDIX G

CONTROL TECHNOLOGY DETERMINATIONS FOR PROCESSES

Note: Appendix G lists determinations entered into the RBLC since June 1993. Older determinations in the RBLC data base do not appear here.

APPENDIX H

DETAILED SOURCE LISTINGS FOR NEW DETERMINATIONS

Note: Appendix H is published for sources inserted since June 1997 with this supplement. Determinations which are incomplete may be deleted from the RBLC at a future date.

The information is organized by RBLC ID number. Due to space limitations, Part B is not included here. Refer to the data base for this information.