

EPA

**NORTHEAST CORRIDOR  
REGIONAL MODELING  
PROJECT  
ANNUAL EMISSION  
INVENTORY COMPILATION  
AND  
FORMATTING**

**Volume XIII:  
Vermont Emission Inventory**

LAWC

**NORTHEAST CORRIDOR REGIONAL  
MODELING PROJECT  
ANNUAL EMISSION INVENTORY  
COMPILATION AND FORMATTING**

**Volume XIII:  
Vermont Emission Inventory**

by  
GCA Corporation  
Bedford, MA

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## CONTENTS

Figures . . . . .	iv
Tables . . . . .	iv
1. Introduction . . . . .	1
Background . . . . .	1
Objectives . . . . .	1
Report organization . . . . .	3
2. Project History . . . . .	5
Agency contacts . . . . .	5
Summary of events . . . . .	5
3. Point Source Inventory . . . . .	7
Data procurement . . . . .	7
Data review and update . . . . .	8
Results . . . . .	16
4. Area Source Inventory Development . . . . .	20
Objectives . . . . .	20
Methodologies . . . . .	20
Deviations from the Volume I methodologies . . . . .	23
Results . . . . .	30
5. References . . . . .	34

### Appendices

A. Point Source Emissions by Category for the Vermont Counties . . .	36
B. Area Source Emissions by Category for the Vermont Counties . . .	63

## FIGURES

<u>Number</u>		<u>Page</u>
1	Boundaries of regional model grid system . . . . .	2

## TABLES

1	Directory of the NECRMP Annual Regional Emission Inventory Reports. . . . .	4
2	Summary of Sources Included in Previous Update Effort by Pollutant and Size . . . . .	7
3	Summary of Vermont Sources Listed in the RACT Directory, But Not in the Vermont Point Source Inventory. . . . .	8
4	Summary of Vermont Sources Listed in the Organic Chemical Producers Data Base, But Not in the Vermont Point Source Inventory. . . . .	8
5	Updates Made to Vermont Point Source Inventory . . . . .	10
6	County-Specific Growth Factors (1979 to 1980) for Vermont Point Sources. . . . .	13
7	Vermont Statewide Growth Factors (1979 to 1980) for Point Sources. . . . .	14
8	Vermont Point Source Emissions (1979) by Category--Statewide . .	17
9	Vermont Sources (1979) Emitting More Than 100 Tons/Year of VOC or NO <sub>X</sub> . . . . .	19
10	Area Source Categories Inventoried for Vermont . . . . .	21
11	Vermont 1980 Area Source Inventory Data Sources. . . . .	24
12	Annual Emissions (1980) of VOC and NO <sub>X</sub> from Area Sources in Vermont. . . . .	31

## SECTION 1

### INTRODUCTION

#### BACKGROUND

On a nationwide basis, nonattainment of the National Ambient Air Quality Standard (NAAQS) for ozone is one of the most serious and widespread air pollution problems facing the air quality management community. The Northeast Corridor, a megalopolis of urban and suburban areas extending from Washington to Boston, bears a large extent of the ozone problem. The United States Environmental Protection Agency (USEPA), in cooperation with the northeastern states, local agencies and Metropolitan Planning Organizations (MPOs), has undertaken the Northeast Corridor Regional Modeling Project (NECRMP) to develop regional and urban ozone control strategies through the use of photochemical air quality simulation models.

To employ a regional model, an inventory of point and area source emissions covering the entire NECRMP study area had to be assembled and placed into a common format. Unfortunately, existing data bases were inadequate to either properly test or validate a regional model. To this end, USEPA's Office of Air Quality Planning and Standards retained GCA Corporation, GCA/Technology Division to complete an annual inventory of point and area source emissions for use in NECRMP. The study area, shown in Figure 1, includes the entire northeast quadrant of the United States from longitude 69 degrees to 84 degrees West, and latitude 38 degrees to 45 degrees North.

#### OBJECTIVES

The objective of the effort reported in this volume was to assemble the most current, comprehensive and accurate emission inventory possible for the State of Vermont. This was achieved through the cooperation of the Vermont Agency of Environmental Protection (VAEP) and U.S. EPA/Region I. The intent was to avoid direct contact between GCA and individual facilities in Vermont. Rather, GCA worked directly with the VAEP who in turn contacted sources when necessary. GCA reviewed the State and EPA provided data and submitted a list of potential errors back to the VAEP, who was responsible for confirming the data or supplying corrections, as necessary. The major pollutants of interest were VOC and NO<sub>x</sub>, although TSP, SO<sub>x</sub> and CO were also compiled for point sources. Because of this emphasis, quality assurance checks mainly focused on sources of VOC and NO<sub>x</sub>.

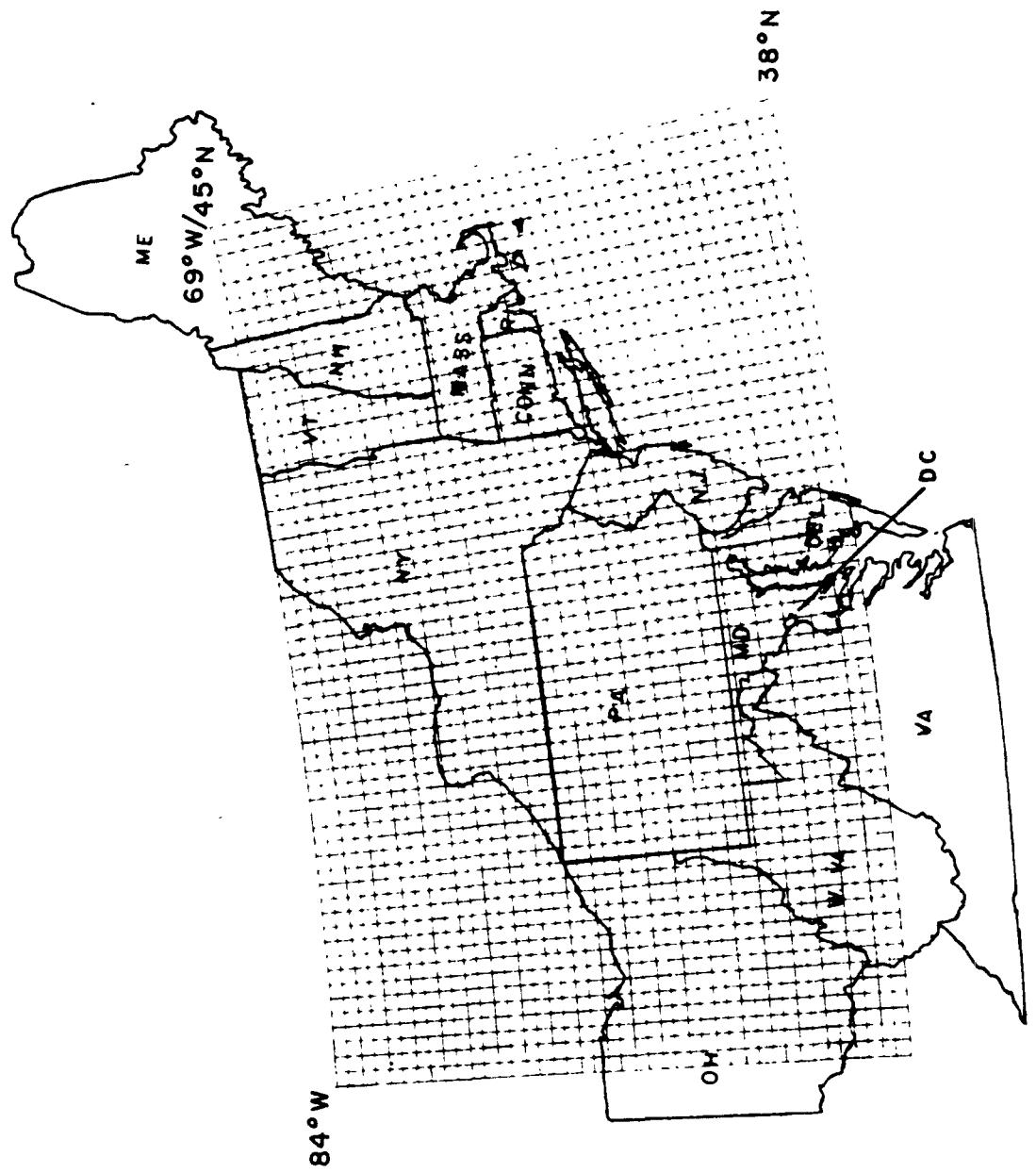


Figure 1. Boundaries of regional model grid system.

The completed inventories were computerized for further use in the NECRMP study. Point source data were computerized in the format specified in the Emission Inventory System/Point Source (EIS/PS) User's Guide<sup>1</sup> and area source data were coded into EIS/AS<sup>2</sup> format.

#### REPORT ORGANIZATION

The results of the NECRMP annual emission inventory are reported in an 18 volume set of documents. Volume I in this series describes the background of the program and discusses the methods used to compile and verify the annual emission inventory. Volumes II through XVI present a more detailed discussion of each state's inventory effort. Volume XVII describes the spatial, temporal, and species allocation factors developed to allow for the creation of modeler's tapes from the completed inventory. Volume XVIII presents a summary of the point and area source inventories for the entire study area. Also included in Volume XVIII is a detailed analysis of the overall quality of the data base and an assessment of the data's suitability for use in photochemical modeling. A directory of the NECRMP annual emission inventory reports is presented in Table 1.

This volume, which presents a discussion of the annual emission inventory for Vermont, consists of five sections. Section 2 describes the project history and includes a summary of the major events that relate to the Vermont inventory development. Section 3 discusses in greater detail the point source inventory task while the area source inventory development is covered in Section 4. All references cited in the volume are identified in Section 5. Appendices A and B present county emissions for point and area sources, respectively.

TABLE 1. DIRECTORY OF THE NECRMP ANNUAL REGIONAL EMISSION INVENTORY REPORTS

Volume	Contents
I	Project Approach
II	Connecticut Emission Inventory
III	Delaware Emission Inventory
IV	Maine Emission Inventory
V	Maryland Emission Inventory
VI	Massachusetts Emission Inventory
VII	New Hampshire Emission Inventory
VIII	New Jersey Emission Inventory
IX	New York Emission Inventory
X	Ohio Emission Inventory
XI	Pennsylvania Emission Inventory
XII	Rhode Island Emission Inventory
XIII	Vermont Emission Inventory
XIV	Virginia Emission Inventory
XV	Washington, DC Emission Inventory
XVI	West Virginia Emission Inventory
XVII	Development of Allocation Factors
XVIII	Inventory Review and Evaluation

## SECTION 2

### PROJECT HISTORY

#### AGENCY CONTACTS

The EPA Project Officer provided agency contacts in the Vermont Agency of Environmental Protection (VAEP) and the Environmental Protection Agency's Region I Office (EPA/Region I). The VAEP contact was responsible for confirming data, supplying required corrections or additional data, interfacing with individual sources as necessary, and concurring on the comprehensiveness and accuracy of the final data base. The Agency also provided information, as needed, to assist in a detailed review of the point source data for errors, inconsistencies and missing data elements.

Since Vermont did not maintain a current area source inventory of the quality required for the NECRMP, it was necessary to develop this inventory. The Agency contact played a key role in this process by directly supplying some input data necessary for the area source calculations, and identifying other state agencies that could provide the remaining information. The Vermont AEP contact was Mr. Harold Garabedian, (802) 828-3395.

#### SUMMARY OF EVENTS

Summaries of the major milestones pertaining to the Vermont portion of the NECRMP inventory are provided separately for the point source and area source data, as follows:

##### Point Sources

Work on the Vermont point source inventory occurred between May and July, 1981; the completed data were provided to EPA in September 1981. Major milestones are identified below.

- NEDS data (1979) procured from EPA/NADB 5/12/81
- QA audit completed, lists of missing and/or questionable data sent to Project Officer, Agency contact 6/10/81
- Errors resolved during state agency visit 6/17/81
- Corrections reflected in completed EIS/PS master file 7/30/81

- 1979 data adjusted to 1980 7/31/81
- Completed inventories (1979, 1980) sent to EPA 9/21/81

#### Area Sources

The Vermont area source inventory was developed by GCA during the period between January and June 1981. While most of the effort was concentrated between January and March, the area source inventory had to be "balanced" with the point source data, which were not available until May. Major events are identified below:

- Begin procurement of input data 1/5/81
- Emissions calculated by category 2/27/81
- Balance with point source data (i.e., adjust area source totals to avoid double accounting of overlapping point source totals) 6/1/81
- Provide completed inventory to State Agency for concurrence 6/17/81
- Completed master file sent to EPA 2/8/82

### SECTION 3

#### POINT SOURCE INVENTORY

##### DATA PROCUREMENT

A computer tape containing the National Emission Data System (NEDS) point source inventory for Vermont was procured from the Environmental Protection Agency, National Air Data Branch (EPA/NADB) on May 12, 1981. The NEDS tape contained 1979 data on 331 individual emission points at 162 facilities. In an earlier step<sup>3</sup>, data on certain facilities were updated from 1977 to 1979. The criteria for including individual facilities in that update are presented in Table 2. As a result of this effort, the data were in relatively good shape as received, particularly with respect to the major VOC and NO<sub>x</sub> emitters. Since Vermont is in attainment of the National Ambient Air Quality Standard for ozone (O<sub>3</sub>), the State was not required to develop an emission inventory for State Implementation Plan (SIP) purposes. This update, then, was undertaken specifically for NECRMP.

TABLE 2. SUMMARY OF SOURCES INCLUDED IN PREVIOUS UPDATE  
EFFORT BY POLLUTANT AND SIZE<sup>3</sup>

Pollutant(s) emitted	Minimum source size included in update (tons/yr)
VOC and NO <sub>x</sub> <sup>a</sup>	100
VOC <sup>a</sup> only	500
NO <sub>x</sub> only	750
RACT Sources	50
CO	500
SO <sub>2</sub> and PART.	1000
Data Gaps and Inconsistencies	All

<sup>a</sup>May include RACT sources.

## DATA REVIEW AND UPDATE

The 1979 NEDS file was converted into EIS/PS format using the GCA-modified version of the EIS/PS Conversion Editor<sup>1</sup> described previously in Volume I.<sup>4</sup> The data were then subjected to the quality assurance (QA) measures presented in Volume I.<sup>4</sup>

One QA measure involved cross-checking the VOC sources listed in the RACT Directory<sup>5</sup> against those facilities included in the NEDS inventory to identify possible omissions. Table 3 lists sources identified as being listed in the RACT Directory, but not in the NEDS inventory, and the VAEP's resolution of these potential omissions.

TABLE 3. SUMMARY OF VERMONT SOURCES LISTED IN THE RACT DIRECTORY,<sup>5</sup> BUT NOT IN THE VERMONT POINT SOURCE INVENTORY

RACT category	County	Facility name	Resolution
Polymer and Resin Manufacturing	Chittenden	Johnson Filaments	Insignificant source
Fabric Surface Coating	Lamoille	Pleasant Valley Printers	VAEP unaware of this source
Magnet Wire Coating	Grand Isle	Phoenix Wire	Very small (10-19 employees)
	Rutland	Caddel Coil Corp.	Very small (0-9 employees)

Similarly, two sources listed in the Organic Chemical Producers Data Base<sup>6</sup> were not included in the Vermont inventory. These sources were brought to the attention of the VAEP and resolution of their possible omissions are summarized in Table 4.

TABLE 4. SUMMARY OF VERMONT SOURCES LISTED IN THE ORGANIC CHEMICAL PRODUCERS DATA BASE,<sup>6</sup> BUT NOT IN THE VERMONT POINT SOURCE INVENTORY

Source	Location	Principal product	Resolution
Johnson Filaments	Williston	Nylon monofilament	See Table 3
E.B. & A.C. Whiting	Burlington	Nylon monofilament	No emissions

A manual review was undertaken of all sources emitting more than 100 tons/yr of VOC or NO<sub>x</sub> or 500 tons/yr of any other criteria pollutant. In addition, all "error," "conditional," or "warning" messages resulting from the conversion of data from NEDS format to EIS/PS format were examined. Since an extensive update of the inventory had previously been completed,<sup>3</sup> relatively few additional problems were detected. Problems that were encountered were often with sources that did not meet the Table 2 criteria and, thus, had not been included in the earlier update. The majority of these problems involved missing SIC codes, stack exhaust flow rates, and missing or incorrect UTM coordinates.

A list of questions and/or problems related to the Vermont inventory was forwarded to the VAEP and a visit to that Agency was made to resolve those questions on June 17, 1981. All corrections, additions, and deletions resulting from that visit were entered on NEDS coding forms in compliance with the instructions given in AEROS, Volume II.<sup>7</sup>

The NEDS update transactions were converted into EIS/PS update transactions using the NEDS to EIS/PS conversion editor and the EIS/PS Master File was updated using the EIS/PS Master File maintenance program. A detailed list of all changes, additions, and deletions performed is provided in Table 5.

#### Growth Factors

The Vermont point source inventory reflected 1979 data and had to be adjusted to 1980 for NECRMP. GCA developed growth factors on a 2-digit SIC basis. County-specific factors were developed for the seven SIC categories which accounted for 90 percent of the VOC and NO<sub>x</sub> emissions in the 1979 inventory, and statewide growth factors were developed for the remaining SIC's.

Growth factors were calculated based on employment data from County Business Patterns,<sup>8,9</sup> using the following equation:

$$GF_{79-80} = \frac{\text{Employment 1979}}{\text{Employment 1978}}$$

As shown in the above equation, employment change from 1978 to 1979 was assumed to approximate 1979 to 1980 change. This approach was used owing to the unavailability of 1980 employment information. Table 6 presents the county-specific growth factors used for the seven most significant SIC's, while Table 7 presents the statewide growth factors used for the remaining SIC's in Vermont.

The calculated Vermont growth factors were reviewed and found to be somewhat suspicious. As shown in Tables 6 and 7, calculated growth factors ranged from 0.610 to 1.883 for SICs from which emissions occurred. One factor was as high as 17.50, but no point source emissions were associated with that SIC in Vermont. Examination of previous years' data revealed similar fluctuations. It was determined that such fluctuations were not likely to occur in actual emissions, and the reported 1979 emissions were probably a more accurate indication of the 1980 emissions than the "adjusted" inventories were. More accurate adjustment techniques would have required significant additional resources and were not explored.

TABLE 5. UPDATES MADE TO THE VERMONT POINT SOURCE INVENTORY

Facility	ID	NEDS	Comments
		Facility	
<u>Addison County (0020)</u>			
Kraft Food	0002	Change UTM-Y coordinate Add ash content	
Middlebury College	0004	Add % annual thruput Add common stack data	
Polymers, Inc.	0005	Add plume height Add temperature	
Weyerhauser	0007	Add process description	
<u>Caledonia County (0160)</u>			
NE VT Regional Hospital	0006	Add annual operating rate Add flow rate Add source description	
St. Johnsbury Academy	0008	Change UTM-Y coordinate	
<u>Chittenden County (0180)</u>			
Vermont Morgan	0002	Add plume height Add temperature	
Beld Moran	0003	Change UTM-X coordinate	
Elias Lymar	0004	Add temperature	
Green Mountain Petroleum	0012	Add temperature	
Astroline Petroleum	0013	Change UTM-Y coordinate Add temperature	
IBM	0016	Add process description	
Cray Energy	0026	Add plume height Add temperature Add process description	

(continued)

TABLE 5 (continued)

Facility	ID	NEDS		
		Update	action taken	Comments
Underhill Firing Range	0027	Add SIC Add plume height Add year of record		
Vermont Furniture Co.	0034	Change estimation method	Source closed	
<u>Essex County (0200)</u>				
Ethan Allen, Inc. (Beechers Falls)	0002	Change process rate Add stack temperature, flow rate Add plume height	Point 4 Point 6	
<u>Lamoille County (0280)</u>				
Pratt, Read	0004	Add flow rate Add stack height, flow, temperature	Point 1 Point 2	
<u>Orange County (0360)</u>				
Ethan Allen, Inc. (Randolph)	0004	Add temperature, flow rate		
<u>Orleans County (0380)</u>				
Ethan Allen, Inc. (Orleans)	0002	Add plume height		
Indian Head Plywood	0004	Add flow rate Add SIC Delete boiler design capacity Add all estimation methods Change VOC estimation method Add year of record	Is a veneer dryer Point 2 Point 3	
<u>Rutland County (0420)</u>				
Rutland Plywood	0013	Add flow rate		

(continued)

TABLE 5 (continued)

Facility	NEDS Facility ID	Update action taken		Comments
<u>Windham County (0580)</u>				
American Optical	0002	Add SIC Add flow rate Add estimation methods Add % space heat Add plume height		
<u>Windsor County (0620)</u>				
Goodyear Tire & Rubber	0007	Add SIC Add estimation methods Add % space heat Add plume height Add VOC emission estimate Add stack parameters		

TABLE 6. COUNTY-SPECIFIC GROWTH FACTORS (1979 TO 1980) FOR VERMONT POINT SOURCES

SIC (0020)	Auditoria (0100)	Bennington (0160)	Caledonia (0160)	Chittenden (0180)	Essex (0200)	Franklin (0240)	Lamolielle (0280)	Orange (0360)	Orleans (0380)	Rutland (0420)	Washington (0500)	Windham (0580)	Windsor (0620)	Statewide default
24	1.091	1.289	1.164	0.971	0.610	1.192	0.954	1.119	0.948	1.149	0.968	1.036	1.036	1.054
25	1.000	1.096	-	-	1.000	1.000	-	1.000	1.000	-	-	0.991	-	1.047
26	-	0.982	1.000	-	1.000	1.000	-	-	-	1.000	-	1.101	-	0.974
36	-	1.081	-	1.000	-	1.000	-	-	-	1.000	1.000	-	-	1.153
38	-	-	0.896	-	-	-	-	-	-	1.000	-	1.000	-	1.231
49	-	-	1.000	-	-	-	1.000	-	-	1.000	1.000	0.886	0.991	1.186
51	-	1.646	1.000	1.000	-	1.054	-	0.981	0.777	-	1.000	1.130	1.067	1.000

Dashed line indicates insufficient data, statewide default used.

Source: GCA calculations, 1981.

TABLE 7. VERMONT STATEWIDE GROWTH FACTORS (1979 TO 1980)  
FOR POINT SOURCES

2-digit SIC	Adjustment factor	Comments
07	0.695	
08	0.769	No emissions in this SIC
10	1.000	No emissions in this SIC
14	1.000	No emissions in this SIC
15	1.045	
16	1.100	
17	1.137	
20	1.067	
22	0.918	
23	0.910	
27	1.140	
28	2.171	No VOC or NO <sub>x</sub> emissions in this SIC
30	1.007	
31	0.836	
32	1.147	
33	1.014	
34	1.054	
35	1.139	
37	1.000	
39	1.150	
41	1.207	
42	1.158	
44	1.000	No emissions in this SIC
45	1.194	
47	1.371	
48	1.027	
50	1.883	
52	1.014	
53	1.016	
54	1.030	
55	1.018	
56	1.054	
57	0.984	
58	1.131	
59	1.097	
60	1.052	
61	1.072	
62	0.978	
63	1.191	

(continued)

TABLE 7 (continued)

2-digit SIC	Adjustment factor	Comments
64	1.027	
65	1.136	
66	0.938	
67	17.500	No emissions in this SIC
70	0.956	
72	1.135	
73	1.239	
75	1.162	
76	0.804	
78	0.982	
79	1.097	
80	1.000	
81	1.077	
82	0.980	
83	0.866	
84	0.978	
86	0.939	
89	<u>1.146</u>	
Statewide default	1.065	

Source: GCA calculations, 1981.

As a result, only 1979 data are reported here, although both 1979 and 1980 data were supplied to EPA on computer tape.

## RESULTS

For reporting purposes, point source emissions for 1979 were aggregated into 70 categories based on specific SCC-SIC combinations. A complete description of the codes used to aggregate emissions is presented in Volume I.<sup>4</sup> For points with multiple SCCs, no attempt was made to split emissions into more than one category. In these instances, the primary SCC was used to account for all emissions at that point.

Statewide point source emissions for 1979 are presented, by category, in Table 8. County-specific point source emissions are presented, by category, in Appendix A.

A list of "major" facilities was developed by totaling emissions at each facility using a criteria of 100 tons/yr of VOC or NO<sub>x</sub> to define a major source. These facilities, and their reported 1979 emissions for all five criteria pollutants, are presented in Table 9.

### Final Data Tape

The completed Vermont point source inventory was written onto computer tape for delivery to EPA. Included on the tape, which was forwarded on September 21, 1981, were the following files:

- Original NEDS file, as received (1979)
- Updated 1979 NEDS file (after manual updates)
- EIS/PS Master file (1979)
- EIS/PS Master file (1980)
- NEDS (1980) translated from EIS/PS 1980 file
- Growth factors
- NEDS update transactions (1979)
- NEDS (1979) translated from final 1979 EIS/PS file

Further evaluation of this inventory and improvements made can be found in Volume XVIII.

TABLE 8. VERMONT POINT SOURCE EMISSIONS (1979) BY CATEGORY--STATEWIDE  
 SCC / TECHNOLOGY DIVISION  
 VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1977

STATE OR REGION TOTALS

CATEGORY	POINT COUNT	PRIMARY TSP	SCC	EMISSIONS (TONS/YEAR)		
		TSP	SC2	NX	HC	CO
1 CIL AND GAS PRODUCTION & PROCESSING	0	0	0	0	0	0
2 SYNTHETIC CRU. STORAGE & TRANSFER	0	0	0	0	0	0
3 G SOLVENT AND CRUDE OIL STORAGF	6	0	0	0	0	31
4 SPILL AND BARGE TRANSFER OF VOC	0	0	0	0	0	0
5 PRICE VOLATILES CLEANING	0	0	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0	0	0
7 SPECIALTY BULK PLANTS	0	0	0	0	0	0
8 TANKER CARGO LOADINGS	0	0	0	0	0	0
9 SERVICE STATION LOADINGS (STAGE I)	0	0	0	0	0	0
10 SERVICE STATION LOADINGS (STAGE II)	0	0	0	0	0	0
11 CIL & CSTR. INTR. S+O MKT OF VOC	59	0	0	0	0	0
12 LIQUEFIED OIL VEHICLES	0	0	0	0	0	0
13 FERTILIZER MANUFACTURE	0	0	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0	0	0
15 TEXTILE POLYESTER FIBER MANUFACTURE	1	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	1	0	0	0	0	15
17 ACETIC ACID MANUFACTURE	0	0	0	0	0	0
18 POLYACRYLIC CHEMICAL MANUFACTURE	0	0	0	0	0	0
19 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0	0
20 FERTILIZER MANUFACTURE	0	0	0	0	0	0
21 ACETIC ACID PRODUCTION	0	0	0	0	0	0
22 PAPER, TISSUE MANUFACTURE	0	0	0	0	0	0
23 STAR RULER MANUFACTURE	0	0	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0	0
25 IRON AND STEEL MANUFACTURE	25	0	0	0	0	0
26 ELECTRONIC PRODUCTS	0	0	0	0	0	0
27 FCCC PRODUCTS	17	934	0	0	0	0
28 TEXTILE MILL PRODUCTS	0	0	0	0	0	0
29 LOWER END CONSUMABLES	17	180	0	0	0	0
30 PETROLEUM AND ALLIED PRODUCTS	0	281	0	0	26	0
31 STONE, GLASS, CONCRETE	0	0	0	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	59	125	3	0	0	0
33 FINISHED NYLON PRODUCTS	11	1	0	0	0	0
34 FINISHED NYLON FIBERS	1	0	47	0	0	0
35 FINISHED NYLON FULL USE	24	11	0	0	0	0
36 FINISHED NYLON - INDUSTRIAL PROCESSES	12	14	0	0	0	0
37 FINISHED NYLON - HOUSEHOLD APPLIANCES	0	0	0	0	0	0
38 FINISHED NYLON - AUTOMOTIVE	0	0	0	0	0	0
39 FINISHED NYLON - AUTOMOBILE	0	0	0	0	0	0
40 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
41 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
42 FINISHED NYLON - SCATTERED-CRUCIAL COILS	0	0	0	0	0	0
43 FINISHED NYLON - SCATTERED-CRUCIAL COILS	0	0	0	0	0	0
44 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
45 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
46 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
47 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
48 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
49 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
50 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
51 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
52 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
53 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
54 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
55 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
56 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
57 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
58 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
59 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
60 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
61 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
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177 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
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180 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
181 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
182 FINISHED NYLON - SCATTERED-CRUCIAL	0	0	0	0	0	0
183 FINISHED NYLON - SCATTERED-CRUCIAL	0					

TABLE 8 (continued)

SCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

STATE CP REGION TOTALS

CATEGORY	POINT COUNTR	PRIMARY			SECONDARY			EMISSIONS (TONS/YEAR)
		TSP	SCC NOX	HC	SCC NOX	HC	CO	
51 DRAWDRAWS	8	0	0	0	0	0	0	235
52 DRY CLEANING	1	0	0	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0	0	0	0
54 CIRLES - TEMPORAL USE	0	0	0	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0	0	0	0
56 AUTO REPAIRING	0	0	0	0	0	0	0	0
57 CHIEF-CHAN-INDUSTRIAL SURFACE CORR INC	0	0	0	0	0	0	0	0
58 CHIEF-CHEM-ELEC-REFINERATION	3	74	69	69	614	68	95	95
59 CHIEF-CHIEF-INDUSTRIAL	116	1234	1757	670	74	74	153	153
60 CHIEF-CHIEF-CHEM-CHEM/VI ST	64	14	579	106	1	1	11	11
61 CHIEF-CHIEF-SPACE HEATING-INDUST.	0	0	0	0	0	0	0	0
62 CHIEF-CHEM-SPACE HEATERS-COMM.	0	0	0	0	0	0	0	0
63 CHIEF-CHIEF-CONSTRUCTION	0	0	0	0	0	0	0	0
64 CHIEF-CHIEF-PUBLIC SECT.	1	3	3	3	0	0	0	0
65 CHIEF-CHIEF-SUPPLY L-C-INDUST	14	5	1	0	0	0	13	13
66 CHIEF-CHIEF-WATER-INDUSTRIAL	1	1	0	0	0	0	0	0
67 CHIEF-CHIEF-WEAR-INDUSTRIAL	0	0	0	0	0	0	0	0
68 CHIEF-CHIEF-WEAR-INDUSTRIAL	0	0	0	0	0	0	0	0
69 CHIEF-CHIEF-WEAR-INDUSTRIAL	0	0	0	0	0	0	0	0
70 CHIEF-CLASSIFIED	0	0	0	0	0	0	0	0
STATE CP REGION TOTALS	2987	2508	1595	4521	303			

TABLE 9. VERNONT SOURCES (1979) EMITTING MORE THAN 100 TONS/YEAR OF VOC OR NO<sub>x</sub>

NCERMF 1979 NEV'S STATE INVENTORY  
LARGE FACILITIES SELECTED  
FOR VENIGAT

STATE COUNTY AOCR PLANT	FACILITY	TSF	SC2	NOX	HC	CC
		(****)	(****)	( 100)	( 100)	(****)
47 23 159 0005	SIM. CHS. FRSN PROD-PANTON RD VERGENNES	0	19	5	476	0
47 20 159 0007	MEYERHAUSER CO. HANCOCK 05746	0	0	0	394	0
47 143 221 0001	REN-VO IT PAPER,ÉEN-MENT AV-C5201	2	4	6	152	0
47 160 159 0003	SELD-MCRAN PLANT,120 LAME ST, BURLINGTON	74	66	621	108	87
47 143 159 0013	ASTROLINE PETROLEUM, LAKE ST., 25461	0	0	0	113	0
47 186 155 0016	IR. & COX A FISSEX JCT.C5452	6	0	44	171	4
47 162 159 0021	WCBIIL OIL CHP,FLYIN AVE, PNE 565-05431	0	0	0	331	0
47 143 155 0026	CAY ENGLY, LN ST,FCB & DURKIN, TN 35431	0	0	0	464	0
47 142 159 0034	VIT FURN. CO-TALLITTS PAY LIV. AIN'OSK 254404	3	0	0	117	0
47 223 221 0002	ETHAN ALLEN INC-BELCHERS FARLS DIV. 05902	257	87	60	233	14
47 240 159 0019	SAXON INDUST. INC,FOUNA COUNTY, LK NEWTCN	0	0	2	600	0
47 340 221 0004	ETHAN ALLEN INC-RANDOLPH CIV.RNDLPH0560	150	6	42	166	8
47 340 221 0002	ETHAN ALLEN INC-ORLEANS DIV. ORLEANS05863	2	59	10	591	1
47 569 221 0002	AE OPTICAL CORP,PUTNEY RD,BRATTLEBORO	1	31	6	164	0
	TOTALS	474	263	915	3997	114

## SECTION 4

### AREA SOURCE INVENTORY DEVELOPMENT

#### OBJECTIVES

The area source emission inventory task entailed reviewing area source inventories prepared by the states for technical accuracy and consistency with EPA-prescribed procedures and developing these area source inventories where state-developed inventories were unavailable. The major objective of this effort was to ensure that all emissions of VOC and NO<sub>x</sub> were accounted for and that the procedures used to develop the inventories were consistent from state to state. It was also important that the inventories be disaggregated into sufficient categories to allow for application of temporal and pollutant allocation factors and the evaluation of control scenarios in subsequent modeling efforts.

#### METHODOLOGIES

Since Vermont is in attainment of the National Ambient Air Quality Standard (NAAQS) for ozone, the VAEP is not required to maintain an area source inventory of the quality required for the NECRMP. Therefore, GCA developed a 1980 area source inventory of VOC and NO<sub>x</sub> emissions using state-supplied and published activity data, AP-42<sup>10</sup> and other EPA-approved emission factors, and methodologies generally consistent with the Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds--Volume I, Second Edition.<sup>11</sup>

Procedures<sup>11</sup> lists multiple methodologies for a number of the area source categories inventoried. To maintain consistency from state to state, GCA selected methods, from Procedures,<sup>11</sup> to be used to compile and verify all NECRMP area source emission inventories. These recommended methods are documented in Volume I of this series.<sup>4</sup>

Area source emissions of VOC and NO<sub>x</sub> were calculated for each county for 54 individual categories. While the intention was to estimate total VOC, for maximum compatibility with the regional model to be used in the NECRMP, this was not always possible. For several area source categories, only reactive (nonmethane) VOC emission factors were available. Table 10 presents the 54 area source categories inventoried and designates whether the VOC emissions inventoried in each category represent total or reactive VOC.

TABLE 10. AREA SOURCE CATEGORIES INVENTORIED FOR VERMONT

EIS/AS Category No.	Category description	Pollutants inventoried
001	Stage I Gasoline Evaporation	TVOC
002	Stage II Gasoline Evaporation	TVOC
003	Storage Tank Breathing	TVOC
004	Gasoline Loading/Transit	TVOC
005	Small Industrial/Commercial Degreasing	RVOC
006	Dry Cleaning	RVOC
007	Architectural Surface Coating	RVOC
008	Auto Body Refinishing	RVOC
009	Small Industrial Surface Coating	TVOC
010	Graphic Arts	RVOC
011	Commercial/Consumer Solvent Use	RVOC
012	Cutback Asphalt	RVOC
013	Pesticides	RVOC
014	On-Highway Light Duty Vehicles	RVOC NO <sub>x</sub>
015	On-Highway Light Duty Trucks--Class I	RVOC NO <sub>x</sub>
016	On-Highway Light Duty Trucks--Class II	RVOC NO <sub>x</sub>
017	On-Highway Heavy Duty Gas Trucks	RVOC NO <sub>x</sub>
018	On-Highway Heavy Duty Diesel Trucks	RVOC NO <sub>x</sub>
019	On-Highway Motorcycles	RVOC NO <sub>x</sub>
020	Residential Anthracite Coal	TVOC NO <sub>x</sub>
021	Residential Bituminous Coal	TVOC NO <sub>x</sub>
022	Residential Residual Oil	TVOC NO <sub>x</sub>
023	Residential Distillate Oil	TVOC NO <sub>x</sub>
024	Residential Natural Gas	TVOC NO <sub>x</sub>
025	Residential LPG	TVOC NO <sub>x</sub>
026	Residential Wood	RVOC NO <sub>x</sub>
027	Commercial/Institutional Anthracite	TVOC NO <sub>x</sub>
028	Commercial/Institutional Bituminous	TVOC NO <sub>x</sub>

(continued)

TABLE 10 (continued)

EIS/AS Category No.	Category description	Pollutants inventoried
029	Commercial/Institutional Residual Oil	TVOC NO <sub>x</sub>
030	Commercial/Institutional Distillate Oil	TVOC NO <sub>x</sub>
031	Commercial/Institutional Natural Gas	TVOC NO <sub>x</sub>
032	Commercial/Institutional LPG	TVOC NO <sub>x</sub>
033	Commercial/Institutional Wood/other	TVOC NO <sub>x</sub>
034	Industrial Anthracite	TVOC NO <sub>x</sub>
035	Industrial Bituminous	TVOC NO <sub>x</sub>
036	Industrial Residual Oil	TVOC NO <sub>x</sub>
037	Industrial Distillate Oil	TVOC NO <sub>x</sub>
038	Industrial Natural Gas	TVOC NO <sub>x</sub>
039	Industrial LPG	TVOC NO <sub>x</sub>
040	Industrial Wood/other	TVOC NO <sub>x</sub>
041	Military Aircraft	TVOC NO <sub>x</sub>
042	Civil Aircraft	TVOC NO <sub>x</sub>
043	Commercial Aircraft	TVOC NO <sub>x</sub>
044	Railroad Locomotives	TVOC NO <sub>x</sub>
045	Gasoline Powered Vessels	TVOC NO <sub>x</sub>
046	Distillate Oil Powered Vessels	TVOC NO <sub>x</sub>
047	Residual Oil Powered Vessels	TVOC NO <sub>x</sub>
048	Off-Highway Vehicles--Gas	TVOC NO <sub>x</sub>
049	Off-Highway Vehicles--Diesel	TVOC NO <sub>x</sub>
050	Onsite Incineration	TVOC NO <sub>x</sub>
051	Open Burning	TVOC NO <sub>x</sub>
052	Structural Fires	TVOC NO <sub>x</sub>
053	Field/Slash Burning	TVOC NO <sub>x</sub>
054	Forest Fires	TVOC NO <sub>x</sub>

Area source activity data and emission factors used to develop the Vermont emission inventory originated from a number of sources. Table 11 presents a matrix of:

- The 54 area source categories inventoried
- The source activity or surrogate indicator on which emissions estimates were based
- The source of these activity rate estimates
- The emission factors used
- The source of these emission factors

#### DEVIATIONS FROM THE VOLUME I<sup>4</sup> METHODOLOGIES

For some area source categories, the methodologies reported in Volume I<sup>4</sup> of this series had to be modified to accommodate the source activity data available for Vermont. Additionally, the quality of existing activity data sometimes necessitated making certain assumptions or adjusting older data to 1980. The assumptions, adjustments, and deviations from the Volume I<sup>4</sup> methodologies are discussed below. The information supplied here is supplemental to the general methodology description presented in Volume I.<sup>4</sup>

#### Gasoline Marketing Operations

Statewide 1979 gasoline sales for Vermont were obtained from Highway Statistics.<sup>12</sup> Statewide estimates of 1980 sales were developed based on actual 1979 sales and the FHWA predicted change for 1980.<sup>13</sup> County-specific estimates were derived by apportioning statewide sales to counties on the basis of the number of gasoline service stations in each county.<sup>9</sup>

Composite emission factors were calculated for two gasoline marketing categories, service station loading (Stage I evaporation) and tank truck loading and transit. These factors were developed based on AP-42<sup>10</sup> factors and the assumption that both service stations and tanker trucks are comprised of 25 percent splash loading tanks and 75 percent submerged fill tanks.<sup>11</sup> Derivations of these composite emission factors are further explained in Volume I.<sup>4</sup>

#### Cutback Asphalt Paving

The Vermont Agency of Transportation<sup>14</sup> provided data on the quantity and type of asphalt applied statewide in Vermont during 1980. Statewide usage was apportioned to counties on the basis of vehicle miles traveled, as reported in a recent Vermont mobile source emission inventory for lead (Pb).<sup>15</sup>

TABLE 11. VERMONT 1980 AREA SOURCE INVENTORY DATA SOURCES

EIS/AS Category No.	Category Description	Activity Rate Basis	Activity Rate Source	Emission Factors		
				Volatile Organic Compounds	Nitrogen Oxides	Emission Factor Source <sup>a</sup>
001	Stage I Gasoline Evaporation	Gasoline Delivered	Highway Statistics	8.35 #/10 <sup>3</sup> gal	-	AP-42; Table 4.4-4
002	Stage II Gasoline Evaporation	Gasoline Taxed	Highway Statistics	9.7 #/10 <sup>3</sup> gal	-	AP-42; Table 4.4-4
003	Gasoline Storage Tank Breathing	Gasoline Delivered	Highway Statistics	1.0 #/10 <sup>3</sup> gal	-	AP-42; Table 4.4-4
004	Gasoline Loading/Transit	Gasoline Delivered	Highway Statistics	6.87 #/10 <sup>3</sup> gal	-	AP-42; Table 4.4-3
005	Small Ind./Comm. Degreasing	Population	1980 Census of Population	7.59 #/capita	-	GCA, based on EPA-450/2-78-045(a)
006	Dry Cleaning	Population	1980 Census of Population	1.5 #/capita	-	EPA-450/2-77-028
007	Architectural Surface Coating	Population	1980 Census of Population	4.6 #/capita	-	EPA-450/2-77-028
008	Autobody Refinishing	Population	1980 Census of Population	1.9 #/capita	-	EPA-450/2-77-028
009	Small Industrial Surface Coating	Coating applied	National Paint and Coating Assoc.	1175 #/ton	-	AP-42; Table 4.2-1
010	Graphic Arts	Population	1980 Census of Population	0.8 #/capita	-	EPA-450/2-77-028
011	Commercial/Consumer Solvent Use	Population	1980 Census of Population	6.3 #/capita	-	EPA-450/2-77-028
012	Curbback Asphalt	Asphalt applied	VT-AOT	577 #/ton	-	GCA calc. based on AP-42; Table 4.5-1
013	Pesticide Application	Pesticide applied	VT - Department of Agriculture	0.9 #/# applied	-	EPA-450/2-77-028
014	On-Highway - Light Duty Vehicles	Vehicle Miles Traveled	VT-AOT	County-specific	County-specific	MOBILE2. GCA calc.
015	On-Highway - Light Duty Truck - 1	Vehicle Miles Traveled	VT-AOT	County-specific	County-specific	MOBILE2, GCA calc.

(continued)

TABLE 11 (continued)

EIS/AS Category No.	Category Description	Activity Rate Basis	Activity Rate Source	Emission Factors			
				Volatile Organic Compounds	Nitrogen Compounds	Nitrogen Oxides	Emission Factor Source <sup>a</sup>
016	On-Highway - Light Duty Truck - 2	Vehicle Miles Traveled	VT-AOT	County-specific	County-specific	County-specific	MOBILE2, GCA calc.
017	On-Highway - Heavy Duty - Gasoline	Vehicle Miles Traveled	VT-AOT	County-specific	County-specific	County-specific	MOBILE2, GCA calc.
018	On-Highway - Heavy Duty - Diesel	Vehicle Miles Traveled	VT-AOT	County-specific	County-specific	County-specific	MOBILE2, GCA calc.
019	On-Highway - Motorcycles	Vehicle Miles Traveled	VT-AOT	County-specific	County-specific	County-specific	MOBILE2, GCA calc. *
020	Residential - Anthracite Coal	Anthracite burned	GCA (based on EPA-450/2-77-028)	2.5 #/ton	3 #/ton	3 #/ton	AP-42; Table 1.2-1
021	Residential - Bituminous Coal	Bituminous burned	GCA (based on EPA-450/2-77-028)	3 #/ton	6 #/ton	6 #/ton	AP-42; Table 1.1-2
022	Residential Residual Oil	N/A	N/A	N/A	N/A	N/A	N/A
023	Residential Distillate Oil	Distillate burned	GCA (based on EPA-450/2-77-028)	1 #/10 <sup>3</sup> gal	18 #/10 <sup>3</sup> gal	18 #/10 <sup>3</sup> gal	AP-42; Table 1.3-1
024	Residential Natural Gas	Natural Gas burned	GCA (based on EPA-450/2-77-028)	8 #/10 <sup>6</sup> ft <sup>3</sup>	80 #/10 <sup>6</sup> ft <sup>3</sup>	80 #/10 <sup>6</sup> ft <sup>3</sup>	AP-42; Table 1.4-1
025	Residential LPG	LPG burned	GCA (based on EPA-450/2-77-028)	0.75 #/10 <sup>3</sup> gal	7.5 #/10 <sup>3</sup> gal	7.5 #/10 <sup>3</sup> gal	AP-42; Table 1.5-1
026	Residential Wood	Wood burned	GCA (based on EPA-450/4-80-028)	5 #/ton	1 #/ton	1 #/ton	AP-42; Table 1.9-1
027	Comm./Instit. Anthracite Coal	Anthracite burned	EPA-450/4-80-028)	0 #/ton	10 #/ton	10 #/ton	AP-42; Table 1.2-1
028	Comm./Instit. Bituminous Coal	Bituminous burned	DOE - Bituminous and Subbituminous Coal and Lignite Distribution	3 #/ton	6 #/ton	6 #/ton	AP-42; Table 1.1-2
029	Comm./Instit. Residual Oil	Residual oil burned	DOE - Sales of fuel oil and kerosene	1 #/10 <sup>3</sup> gal	60 #/10 <sup>3</sup> gal	60 #/10 <sup>3</sup> gal	AP-42; Table 1.3-1

(continued)

TABLE 11 (continued)

EIS/AS Category No.	Category Description	Activity Rate Basis	Activity Rate Source	Emission Factors			Emission Factor Source <sup>a</sup>
				Volatile Organic Compounds	Nitrogen Oxides	Emissions	
030 Comm./Instit. Distillate Oil	Distillate Oil burned	DOT - Sales of fuel oil and kerosene	1 #/10 <sup>3</sup> gal	22 #/10 <sup>3</sup> gal		AP-42; Table 1.3-1	
031 Comm./Instit. Natural Gas	Natural Gas burned	AGA - Gas Facts	8 #/10 <sup>6</sup> ft <sup>3</sup>	120 #/10 <sup>6</sup> ft <sup>3</sup>		AP-42; Table 1.4-1	
032 Comm./Instit. LPG	LPG burned	DOE - Sales of LPG and Ethane	0.75 #/10 <sup>3</sup> gal	11 #/10 <sup>3</sup> gal		AP-42; Table 1.5-1	
033 Comm./Instit. Wood/Other	Wood burned	EPA-450/4-80-028	36 #/ton	10 #/ton		AP-42; Table 1.6-1	
034 Industrial Anthracite	Anthracite burned	EPA-450/4-80-028	0 #/ton	18 #/ton		AP-42; Table 1.2-1	
035 Industrial Bituminous	Bituminous burned	DOE - Bituminous and Subbituminous Coal and Lignite distribution	1 #/ton	15 #/ton		AP-42; Table 1.1-2	
036 Industrial Residual Oil	Residual Oil burned	DOE - Sales of fuel oil and kerosene	1 #/10 <sup>3</sup> gal	60 #/10 <sup>3</sup> gal		AP-42; Table 1.3-1	
037 Industrial Distillate Oil	Distillate Oil burned	DOT - Sales of fuel oil and kerosene	1 #/10 <sup>3</sup> gal	22 #/10 <sup>3</sup> gal		AP-42; Table 1.3-1	
038 Industrial Natural Gas	Natural Gas burned	AGA - Gas Facts	3 #/10 <sup>6</sup> ft <sup>3</sup>	175 #/10 <sup>6</sup> ft <sup>3</sup>		AP-42; Table 1.4-1	
039 Industrial LPG	LPG burned	DOE - Sales of LPG and Ethane	0.3 #/10 <sup>3</sup> gal	11.65 #/10 <sup>3</sup> gal		AP-42; Table 1.5-1	
040 Industrial Wood	Wood burned	EPA-450/4-80-028	36 #/ton	10 #/ton		AP-42; Table 1.6-1	
041 Military Aircraft	LTO Cycles	FAA	27.1 #/LTO	9.16 #/LTO		EPA/NADB	
042 Civil Aircraft	LTO Cycles	FAA	0.41 #/LTO	0.028 #/LTO		EPA/NADB	
043 Commercial Aircraft	LTO Cycles	FAA	30.66 #/LTO	26.93 #/LTO		EPA/NADB	

(continued)

TABLE 11 (continued)

EIS/AS Category No.	Category Description	Activity Rate Basis	Activity Rate Source	Emission Factors			Emission Factor Source <sup>a</sup>
				Volatile Organic Compounds	Nitrogen Oxides	Emissions	
044	Railroad Locomotives	Oil sales to railroads	DOE - Sales of fuel oil and kerosene	94 #/10 <sup>3</sup> gal	370 #/10 <sup>3</sup> gal	AP-42; Table 3.2.2-1	
045	Vessels - Gasoline	Gasoline used	VI-RHV and GCA (based on EPA-450/2-77-028)	887.06 #/10 <sup>3</sup> gal	32.72 #/10 <sup>3</sup> gal	GCA - based on AP-42; Tables 3.2.3-5 and 3.2.4-1	
046	Vessels - Distillate Oil	Oil used	DOE - Sales of fuel oil and kerosene	50 #/10 <sup>3</sup> gal	270 #/10 <sup>3</sup> gal	AP-42; Table 3.2.3-1	
047	Vessels - Residual Oil	Oil used	DOE - Sales of fuel oil and kerosene	1.72 #/10 <sup>3</sup> gal	63.6 #/10 <sup>3</sup> gal	AP-42; Table 3.2.3-2	
048	Off-Highway Gasoline Vehicles	Gasoline used	EPA-450/4-80-028	267 #/10 <sup>3</sup> gal	105 #/10 <sup>3</sup> gal	Composite from AP-42	
049	Off-Highway - Diesel Vehicles	Diesel fuel used	EPA-450/4-80-028	39 #/10 <sup>3</sup> gal	421 #/10 <sup>3</sup> gal	Composite from AP-42	
050	Onsite Incineration	Tons of waste	EPA-450/2-77-028	29 #/ton	5.5 #/ton	Composite from AP-42	
051	Open Burning	Tons burned	EPA-450/2-77-028	37 #/ton	2.5 #/ton	Composite from AP-42	
052	Structural Fires	Number of fires	VT State Fire Marshall	107 #/fire	17 #/fire	EPA/NADB	
053	Field/Slash Burning	Acres burned	VT Department of Agriculture	23.5 #/acre	4 #/acre	Composite from AP-42	
054	Forest Fires	Acres burned	VT Conservation Agency - Forestry Division	261 #/acre	43.2 #/acre	AP-42; Table 11.1.2	

<sup>a</sup>When AP-42 is designated, the latest factors through supplement 12 were used.

The state-supplied asphalt usage was broken down into rapid cure, medium cure, and MCRC (a 50/50 mix of medium cure and rapid cure).

Emissions were calculated independently for each asphalt type using the following equation:

$$\text{Emissions}_i \text{ (t/yr)} = \frac{[(\text{gallons of asphalt}_i)(\text{solvent content \%}_i) \\ (\text{solvent density #/gal}_i)(\% \text{ of solvent evaporated}_i)]}{2000}$$

where: gallons of asphalt<sub>i</sub> = State supplied usage of asphalt<sub>i</sub>

solvent content %<sub>i</sub> = 35% for medium cure, 45% for rapid cure,  
40% for 50/50 mix

solvent density = 6.1 #/gal for rapid cure; 6.8 #/gal for  
medium cure, 6.45 #/gal for 50/50 mix

% solvent evaporated = 70% for medium cure, 95% for rapid cure,  
82.5% for 50/50 mix.

#### Pesticide Application

Data on the quantity of pesticide, including biologically inert solvent, applied statewide in 1979 were available from the Vermont Department of Agriculture--Plant Industry Department.<sup>16</sup> No significant change between usage in 1979 and 1980 was assumed. Statewide figures were apportioned to counties assuming pesticide application was inversely proportional to population.

#### On-Highway Motor Vehicles

Statewide vehicle miles traveled (VMT) data for 1979 were available from the Vermont AOT.<sup>17,18</sup> At the suggestion of the VAOT,<sup>18</sup> no change in VMT through 1980 was assumed. County-specific VMT estimates were derived by apportioning statewide 1979 VMT to counties based on county-specific VMT estimates reported in an earlier mobile source inventory.<sup>51</sup>

Emission factors were developed using the MOBILE2 emissions model, and the VMT distribution, speed, temperature and cold/hot start assumptions presented in Volume I.<sup>4</sup>

#### Residential Fuel Combustion

Fuel used in the residential sector was estimated using the equations presented in Reference 11. The number of housing units using each individual fuel type were determined using the following equation:

$$H_i \text{ 80} = H_i \text{ 70} \left( \frac{H_T \text{ 80}}{H_T \text{ 70}} \right)$$

where  $H_i \text{ 80}$  = Number of housing units using fuel type i in 1980

$H_i \text{ 70}$  = Number of housing units using fuel type i in 1970 (from the 1970 Census of Housing)

$H_T \text{ 80}$  = Number of total housing units in 1980 (from the 1980 Census)

$H_T \text{ 70}$  = Number of total housing units in 1970 (from the 1970 Census)

This method, used in lieu of fuel-specific data for 1980, assumes an insignificant change in fuel mix from 1970 to 1980. The emission factor for LPG was derived assuming a 1:1 ratio of propane to butane. Emission factors for the remaining fuels were obtained directly from AP-42.

#### Commercial/Institutional and Industrial Fuel Combustion

To determine area source fuel use in the commercial/institutional and industrial sectors, the following approach was used. Total statewide fuel use was available for 1978 or 1979 from the sources listed in Table 10. Historical data back to 1970 were obtained from earlier versions of the same references. Total 1980 fuel use was estimated through linear regression of the 1970 to 1978/79 data. For each fuel, area source use in the commercial/institutional and industrial sectors was calculated using the following equation:

$$C/I \& I_{80-x} = (T_{80-x}) - (R_{80-x}) - (P_{80-x})$$

where  $C/I \& I_{80-x}$  = Commercial/Institutional and Industrial area source use of fuel x in 1980

$T_{80-x}$  = Total use of fuel-x in 1980 (estimated previously through linear regression)

$R_{80-x}$  = Residential use of fuel-x in 1980 (calculated previously)

$P_{80-x}$  = Point source use of fuel-x in 1980 (determined from point source inventory)

Fuel use calculated using the above equation was split between the commercial and industrial sectors using the distribution of area source fuel use for the two sectors reported in NEDS Fuel Use Report.<sup>19</sup>

#### Aircraft Operations

Aircraft landing and takeoff (LTO) data were available for 1979 from the Federal Aviation Administration (FAA).<sup>20,21</sup> Based on historical FAA

data, it was determined that changes in the quantity of LTO operations between 1979 and 1980 in Vermont were probably insignificant. Therefore, 1979 data were used as approximations of 1980 activity. Composite emission factors for civil, commercial, and military aircraft LTOs were obtained from EPA/NADB.<sup>22</sup>

#### Railroad Locomotives

Historical data on sales of fuel oil to railroads from 1970 to 1978 were available from the sources listed in Table 11. The 1980 statewide use was determined through linear regression. County-specific use was determined by apportioning statewide use to counties on the basis of railroad right-of-way, measured from state rail line maps.

#### Structural Fires

The Vermont Fire Prevention Division provided the actual number of structural fires, by county, for 1979.<sup>23</sup> No change was assumed between 1979 and 1980. Emissions were calculated using a composite emission factor obtained from EPA/NADB.<sup>24</sup>

#### DEVELOPMENT OF EIS/AS MASTER FILE

After emissions were calculated for all area source categories on a countywide basis, the completed inventory was coded and keypunched in EIS/AS format and subjected to the series of computerized QA checks included in the EIS/AS System.<sup>2</sup> The completed Master File was then manually verified for accuracy before the finalized data were written onto computer tape for delivery to EPA.

#### RESULTS

Statewide totals of 1980 VOC and NO<sub>x</sub> emissions from area sources in Vermont are provided in Table 12. County summaries of area source emissions are provided in Appendix B.

TABLE 12. ANNUAL EMISSIONS (1980) OF VOC AND NO<sub>X</sub> FROM AREA SOURCES  
IN VERMONT

STATE SUMMARY						
CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION FACTOR I.D.	EMISSIONS ESTIMATE	
001	STAGE I GASOLINE EVAP	244581 THOUS GAL	NOX VOC	2	1121	
002	STAGE II GASOLINE EVAP	244416 THOUS GAL	NOX VOC	0	1184	
003	STORAGE TANK BREATHING	244581 THOUS GAL	NOX VOC	0	1122	
004	GASOLINE LOADINGS/TRANSIT	244581 THOUS GAL	NOX VOC	0	635	
005	SM IND/COMM DEGREASING	511299 POPULATION	NOX VOC	0	1945	
006	DRY CLEANING	511299 POPULATION	NOX VOC	0	184	
007	ARCH SURFACE COATING	511299 POPULATION	NOX VOC	0	1176	
008	AUTO BODY REFINISHING	511299 POPULATION	NOX VOC	0	486	
009	SM IND SURFACE COATING	27 THOUS GAL	NOX VOC	0	54	
010	GRAPHIC ARTS	511299 POPULATION	NOX VOC	0	204	
011	COMM/COMM SOLVENT USE	511299 POPULATION	NOX VOC	0	1611	
012	CUTBACK ASPHALT	215 TON	NOX VOC	0	62	
013	PERFUMES	244671 LBS	NOX VOC	0	111	

TABLE 12 (continued)

**SCC / TECHNOLOGY DIVISION  
AP-6A SOURCE REGISTER FILE SUMMARY  
FOR VERMONT**

STATE SUMMARY		CATEGORY	CATEGORY NUMBER	DESCRIPTION	PROCESS RATE 2656474 THOUS. MMBTU	UNITS 1,000	POLLUTANT EMISSION FACTOR	EMISSIONS ESTIMATE
UNIT	MMBTU							
C15	ON-HIGHWAY LDTR	528692	THOUS. MMBTU	NOX VOC	2234 2059			
C16	ON-HIGHWAY LCT2	64574	THOUS. MMBTU	NOX VOC	223 193			
C17	ON-HIGHWAY HDD	81719	THOUS. MMBTU	NOX VOC	1137 855			
C18	ON-HIGHWAY HDD	33436	THOUS. MMBTU	NOX VOC	953 97			
C19	ON-HIGHWAY AC	169443	THOUS. MMBTU	NOX VOC	143 1314			
C20	RESIDENTIAL ANTHRAZITE	22991	TON	NOX VOC	31 27			
C23	RESIDENTIAL DISTILLATE	251612	THOUS. GAL	NOX VOC	2265 127			
C24	RESIDENTIAL NATURAL GAS	5309	MIL CU FT	NOX VOC	213 21			
C25	RESIDENTIAL LPG	32793	THOUS. GAL	NOX VOC	124 15			
C26	RESIDENTIAL WOOD	177055	TON	NOX VOC	88 443			
C29	COMPRESSED RESIDUAL OIL	11877	THOUS. GAL	NOX VOC	358 4			
C76	INDUSTRIAL RESIDUAL OIL	17362	THOUS. GAL	NOX VOC	517 5			

TABLE 12 (continued)

STATE SUMMARY							Emissions		
Category	Category	Process	Pollutant	Emission Factor	Nox	VOC	Estimate		
C41	MILITARY AIRCRAFT	FATIGUE 9222 LAND/TAKE OFF	NOX VOC	42 125					
C42	CIVIL AIRCRAFT	387630 LAND/TAKE OFF	NOX VOC	3 81					
C43	COMMERCIAL AIRCRAFT	6345 LAND/TAKE OFF	NOX VOC	43 79					
C44	RAILROAD LOCOMOTIVES	2731 THOUS GAL	NOX VOC	505 126					
C45	VESSELS - GASOLINE	2514 THOUS GAL	NOX VOC	32 895					
C46	OFF-HIGHWAY VEHICLES-GAS	9516 THOUS GAL	NOX VOC	506 1269					
C49	OFF-HIGHWAY VEH - DIESEL	10249 THOUS GAL	NOX VOC	3952 359					
C50	ON-SITE INCINERATION	66384 TON	NOX VOC	81 1303					
C51	OPEN FURNACES	246110 TON	NOX VOC	732 3863					
C52	STRUCTURAL FIRES	585 FIRES	NOX VOC	2 31					
C54	FOREST FIRES	780 ACRE	NOX VOC	16 103					
STATE OR REGION TOTALS							25791	33551	

## SECTION 5

### REFERENCES

1. McMaster, Larry M. Emission Inventory System/Point Source Users Guide. EPA-450/4-80-010. May 1980.
2. McMaster, Larry M. Emission Inventory System/Area Source Users Guide. EPA-450/4-80-009. May 1980.
3. Shah, Mahesh C., Sue Ellen Haupt, and John N. McHenry. New Hampshire and Vermont Point Source Emission Inventory Update for NECRMP. EPA-450/4-81-017. March 1981.
4. Sellars, F. M., M. J. Geraghty, A. M. Kiddie, B. J. Bosy. Northeast Corridor Regional Modeling Project--Annual Emission Inventory. Volume I: Project Approach. GCA/Technology Division, Bedford, MA for the U.S. Environmental Protection Agency. EPA-450/4-82-013a. August 1982.
5. Mehta, Dilip H. and John E. Spessard. Directory of Volatile Organic Compound (VOC) Sources Covered by Reasonably Available Control Technology Requirements. EPA-450/4-80-007. February 1981.
6. Radian Corp. "Organic Chemical Producers Data Base." Prepared for U.S. EPA/OAQPS. December 1979.
7. AEROS Manual Series, Volume II: AEROS USERS MANUAL. EPA-450/2-76-029. U.S. Environmental Protection Agency, Reserch Triangle Park, NC. December 1976.
8. County Business Patterns for Vermont, 1978. United States Department of Commerce, Bureau of the Census.
9. County Business Patterns for Vermont, 1979. United States Department of Commerce, Bureau of Census.
10. Compilation of Air Pollutant Emission Factors, AP-42, 3rd Edition and subsequent supplements, U.S. Environmental Protection Agency, Research Triangle Park, NC, August 1977.

11. Lamason, William H. II, and Thomas Lahre. Procedures for the Preparation of Emission Inventories for Volatile Organic Compounds: Volume I, Second Edition. EPA-450/2-77-028, U.S. Environmental Protection Agency, Research Triangle Park, NC, September 1980.
12. U.S. Department of Transportation, FHWA. Highway Statistics, 1979.
13. U.S. Department of Transportation, FHWA. Selected Highway Statistics and Charts, 1979.
14. Gillmore, Wayne. Vermont Agency of Transportation. Telephone conversation with Robert Green, GCA/Technology Division. March 22, 1981.
15. Wishinski, Paul. State of Vermont. Pb Emissions into Ambient Air - Mobile and Area Sources. Prepared for the Vermont Agency of Environmental Protection, Division of Environmental Engineering. Montpelier, VT. May 1979.
16. Vermont Department of Agriculture - Plant Industry Department. "Summary of Commercial Applicators' Annual Pesticide Reports." 1979.
17. MacArthur, Gordon B. Vermont Agency of Transportation. Written communication to Robert Green, GCA/Technology Division, October 27, 1980.
18. Gillman, Wayne. Vermont Agency of Transportation Telephone communication with Frederick Sellars, GCA/Technology Division, February 27, 1981.
19. NEDS Fuel Use Report - 1978. EPA-450/4-80-028. December 1980.
20. FAA Air Traffic Activity, Fiscal Year 1979. U.S. Department of Transportation, Federal Aviation Administration. Information and Statistics Division, Office of Management Systems. 1980.
21. Military Air Traffic Activity Report, Calendar Year 1977. U.S. Department of Transportation. Federal Aviation Administration.
22. Mann, Charles O. EPA/OAQPS--NADB. Personal communication with Frederick M. Sellars, GCA/Technology Division. March 10, 1981.
23. Vermont Fire Prevention Division. Telephone communication with John McHenry, GCA/Technology Division. January 12, 1980.
24. Mann, Charles O. EPA/OAQPS--NADB. Telephone conversation with Frederick Sellars, GCA/Technology Division. March 3, 1981.

## APPENDIX A

### POINT SOURCE EMISSIONS BY CATEGORY FOR THE VERMONT COUNTIES

Table A-1 presents point source emissions, by category, for each of the Vermont counties, which are identified below.

<u>County</u>	<u>NEDS/EIS County Code</u>
Addison	0020
Bennington	0100
Caledonia	0160
Chittenden	0180
Essex	0200
Franklin	0240
Grand Isle	0260
Lamoille	0280
Orange	0360
Orleans	0380
Rutland	0420
Washington	0500
Windham	0580
Windsor	0620

TABLE A-1. COUNTY SUMMARIES OF POINT SOURCE EMISSIONS (1979) FOR VERMONT

SCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: LEE

CATEGORY	POINT COUNT	PRIMARY SCA EMISSIONS (TONS/YEAR)			
		TSP	S02	NOX	HC
1 OIL & GAS PRODUCTION & PROCESSING	0	0	0	0	0
2 SYNT. ORGANIC CHEM. STOCKAGE & TRANSFER	0	0	0	0	0
3 GASCLINE AND CRUDE OIL STOCKAGE	0	0	0	0	0
4 SHIP & BARGE TRANSFER OF VOC	0	0	0	0	0
5 EAFFGE AND TANKER CLEANING	0	0	0	0	0
6 PULK GASCLINE TERMINALS	0	0	0	0	0
7 GASCLINE EULK PLANTS	0	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0	0
11 OTHERS-STORAGE, TRANS. & MKT OF VOC	0	0	0	0	0
12 LUB-CYL MANUFACTURE	0	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0	0
14 PETROCHEMICAL MANUFACTURE	0	0	0	0	0
15 TEXTILE PRODUCTS & RESIN MANUFACTURE	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
19 FERMENTATION PROCESSES	0	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0	0
23 SKIN SOOTHER MANUFACTURE	0	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0
25 IRON & STEEL MANUFACTURE	0	0	0	0	0
26 TCEPCLIC PRODUCTS	0	0	0	0	0
27 FOOD PRODUCTS	0	0	0	0	0
28 T-T-T TIRE HILL PRODUCTS	0	0	0	0	0
29 LITTER & WOOD PRODUCTS	0	0	0	0	0
30 PAPER AND PALLING PRODUCTS	0	0	0	0	0
31 STONE, C-G, GLASS CONCRETE	0	0	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	0	0	0	0	0
33 FABRICATED METAL PRODUCTS	0	0	0	0	0
34 IMPERFECT FUEL USE	0	0	0	0	0
35 OTHERS - INDUSTRIAL PROCESSES	0	0	0	0	0
36 AEROSOL	0	0	0	0	0
37 INC. SEC. COATINGS-LARGE APPLIANCES	0	0	0	0	0
38 INC. SEC. COATINGS-MACHINERY	0	0	0	0	0
39 INC. SEC. COATINGS-MOTOR VEHICLE	0	0	0	0	0
40 INC. SEC. COATINGS-CARS	0	0	0	0	0
41 INC. SEC. COATINGS-METAL CCLS	0	0	0	0	0
42 INC. SEC. COATING-PAPER	0	0	0	0	0
43 INC. SEC. COATING-FABRIC	0	0	0	0	0
44 INC. SEC. COATING-MISC. FURNITURE	0	0	0	0	0
45 INC. SEC. COATING-METAL/WOOD PRODUCTS	0	0	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0	0
47 LARGE SIZE	0	0	0	0	0
48 LARGE AREA	0	0	0	0	0
49 INC. SEC. COATING-MISC METAL PRODUCTS	0	0	0	0	0
50 OTHERS - INDUSTRIAL SURFACE COATING	0	0	0	0	0

TABLE A-1 (continued)

GCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: 0020

CATEGORY	POINT COUNT	EMISSIONS (TONS/YEAR)			
		TSP	SCC	NX	HC
51 DINGEASING	0	0	0	0	0
52 DRY CLEANING	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0
54 OTHER - (SLEVENT USE)	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0
56 AUTO. PAINT SHOPS	0	0	0	0	0
57 OTHER-S-FACT-INDUSTRIAL SURFACE COATINGS	0	0	0	0	0
58 EXT. CCM. BOILERS-ELEC. GENERATION	9	0	0	0	0
59 EXT. CCPH. BOILERS-INDUSTRIAL	13	15	139	32	2
60 EXT. LUBE. BOILERS-CHEM/INST	4	0	126	10	0
61 EXT. CCPH. SPACE HEATERS-INDUST.	0	0	0	0	0
62 EXT. CNG. SPACE HEATERS-CHEM.	0	0	0	0	0
63 OTHERS-(FUEL COMBUSTION)	9	0	0	0	0
64 SOLID WASTE DISPOSAL-GOV'T	0	0	0	0	0
65 SOLID WASTE DISPOSAL-CHEM/INST	0	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	1	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	2	0	0	0
68 WASTE SOLVENT RECOVERY PROCESSES	0	0	0	0	0
69 SINTERED INTERNAL COMBUSTION ENGINES	1	6	5	78	6
70 NOT CLASSIFIED	0	0	0	0	0
COUNTY TOTALS	25	281	120	939	23

TABLE A-1 (continued)

SCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY:D106

CATEGORY	POINT COUNT	EMISSIONS (TONS/YEAR)				
		TSP	SCC	HCX	PC	CO
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0	0	0
2 SYNTHETIC CHEM. STORAGE & TRANSFER	0	0	0	0	0	0
3 GASLINE AND CRUDE OIL STORAGE	0	0	0	0	0	0
4 SHIP AND AIRPORT TRANSFER OF VOC	0	0	0	0	0	0
5 BARGE AND TANKER CLEANING	0	0	0	0	0	0
6 BULK GASLINE TERMINALS	0	0	0	0	0	0
7 GASLINE FULK PLANTS	0	0	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0	0	0
11 OTHERS-CISTERS-• TRANSP. • Mkt. OF VOC	0	0	0	0	0	0
12 LIQUEFIED GAS MANUFACTURE	0	0	0	0	0	0
13 PETROLIUM REFINERIES	0	0	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0	0	0
15 TEXTILE POLYMERS & RESIN MANUFACTURE	1	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0	0
19 PETROCHEMICAL PROCESSES	0	0	0	0	0	0
20 VISIBLE OIL PROCESSING	0	0	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0	0	0
22 RUBBER TIPE MANUFACTURE	0	0	0	0	0	0
23 SUM. RUBBER MANUFACTURE	0	0	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0	0
25 IRON, ALD. STEEL MANUFACTURE	0	0	0	0	0	0
26 TOBACCO PRODUCTS	0	0	0	0	0	0
27 FOYED PRO-DUCTS	0	0	0	0	0	0
28 TEXTILE MILL PRODUCTS	0	0	0	0	0	0
29 LUMBER AND WOOD PRODUCTS	0	0	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	1	0	0	0	0	0
31 STONE, CRYSTAL, GLASS, CERAMIC	0	0	0	0	0	0
32 PETROLEUM'S SECONDARY METALS & ELECTRICAL	1	0	0	0	0	0
33 FABRICATED METAL PRODUCTS	2	0	0	0	0	0
34 IN PROCESS FUEL USE	0	0	0	0	0	0
35 OIL & GASES - INDUSTRIAL PROCESSES	5	0	0	0	0	0
36 ADHESIVES	0	0	0	0	0	0
37 INC. SFC. COATING-LARGE APPLIANCES	0	0	0	0	0	0
38 INC. SFC. COATING-SAGNET-WIRE	0	0	0	0	0	0
39 IND. SFC. COATING-AUTOMOBILE	0	0	0	0	0	0
40 IND. SFC. COATING-CANS	0	0	0	0	0	0
41 IND. SFC. COATING-METAL COILS	0	0	0	0	0	0
42 IND. SFC. COATING-PAPER	0	0	0	0	0	0
43 IND. SFC. COATING-FABRIC	0	0	0	0	0	0
44 IND. SFC. COATINGS-MISC. FURNITURE	0	0	0	0	0	0
45 IND. SFC. COATINGS-METAL/WOOD PRODUCTS	1	0	0	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0	0	0
47 LARGE SHIPS	0	0	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0	0	0
49 IND. SFC. COATINGS-METAL PRODUCTS	1	0	0	0	0	0
50 OTHERS - INDUSTRIAL SURFACE COATING	1	0	0	0	0	0
	152	0	0	0	0	0

TABLE A-1 (continued)

ECA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY:0100

CATEGORY	POINT COUNT	PRIMARY SCC EMISSIONS (TONS/YEAR)			
		TSP	SC2	NOX	CO
51 DEGREASING	1	0	0	0	1
52 DRY CLEANING	2	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0
54 OTHER - (SOLVENT USE)	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0
56 AUTO REFINISHING	0	0	0	0	0
57 OTHER-INDUSTRIAL SURFACE COATING	0	0	0	0	0
58 EXT. FURN. BOILERS-ELEC. GENERATION	0	0	0	0	0
59 EXT. JURB. BOILERS-INDUSTRIAL	11	0	0	0	0
60 EXT. COGE. BOILERS-COGENERATION	2	6	159	46	2
61 EXT. COGE. SPACE HEATING-INDUST.	0	0	0	0	0
62 EXT. COGE. SPACE HEATING-COMM.	0	0	0	0	0
63 OTHER-INDUSTRIAL COMBUSTION	0	0	0	0	0
64 SOLID WASTE DISPOSAL-GOVERN.	2	0	0	0	0
65 SOLID WASTE DISPOSAL-COMM/INST	0	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	0	0	0	0
68 WASTE SOLVENT RECOVERY PROCESSES	0	0	0	0	0
69 STATIONARY INTERNAL COMBUSTION ENGINES	0	0	0	0	0
70 NOT CLASSIFIED	0	0	0	0	0
<b>COUNTY TOTALS</b>	<b>36</b>	<b>297</b>	<b>79</b>	<b>193</b>	<b>9</b>

TABLE A-1 (continued)

ECA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTRY: 0160

CATEGORY	POINT COUNT	PRIMARY EMISSIONS (TONS/YEAR)			CO <sub>2</sub>
		TSP	SO <sub>2</sub>	NO <sub>x</sub>	
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0	0
2 SYN. ORGANIC CHEM. STORAGE & TRANSFER	0	0	0	0	0
3 GASOLINE & CRUDE OIL STORAGE & TRANSFER	0	0	0	0	0
4 SHIP & BARGE TRANSFER OF VOC	0	0	0	0	0
5 BARGE AND TANKER CLEANING	0	0	0	0	0
6 BULK-CASCLINE TERMINALS	0	0	0	0	0
7 GASCLINE RAIL PLANTS	0	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0	0
11 OTHER - CTPAGE, TRANSF. Mkt. OF VOC	0	0	0	0	0
12 LIQUEFIED GAS MANUFACTURE	0	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0	0
15 TEXTILE POLY. PS & RESIN MANUFACTURE	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
19 FERMENTATION PROCESSES	0	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0	0
23 SEA NUCLEAR MANUFACTURE	0	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0
25 IRON & STEEL MANUFACTURE	0	0	0	0	0
26 TCEACET PRODUCTS	0	0	0	0	0
27 FOOD PRODUCTS	0	0	0	0	0
28 TEXTILE MILL PRODUCTS	1	100	0	0	0
29 LYCER & WOOD PRODUCTS	0	0	0	0	0
30 PAPER & ALLIED PRODUCTS	0	0	0	0	0
31 STONE, CLAY, CLASSIC CONCRETE	0	0	0	0	0
32 PRIVATE SECONDARY METALS & ELECTRICAL	0	0	0	0	0
33 FABRICATED METAL PRODUCTS	0	0	0	0	0
34 IN-FACILITY INDUSTRIAL PROCESSES	0	0	0	0	0
35 O-PFFES - (INDUSTRIAL PROCESSES)	1	1	0	0	0
36 ADHESIVES	0	0	0	0	0
37 INU. SFC. COATING-LARGE APPLIANCES	0	0	0	0	0
38 INU. SFC. COATING-MAGNET WIRE	0	0	0	0	0
39 INC. SFC. COATING-AUTOMOTIVE	0	0	0	0	0
40 INC. SFC. COATING-CANS	0	0	0	0	0
41 INC. SFC. COATING-METAL COILS	0	0	0	0	0
42 INC. SFC. COATING-PAPER	0	0	0	0	0
43 INC. SFC. COATING-FABRIC	0	0	0	0	0
44 INC. SFC. COATING-MISC. FURNITURE	0	0	0	0	0
45 INC. SFC. COATING-METAL/WOOD PRODUCTS	0	0	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0	0
47 LARGE SHIPS	0	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0	0
49 INC. SFC. COATING-MISC. METAL PRODUCTS	15	15	0	0	0
50 OTHERS - INDUSTRIAL SURFACE COATING	0	0	0	0	0

TABLE A-1 (continued)

GCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY:0160

CATEGORY	POINT COUNT	EMISSIONS (TONS/YEAR)			
		TSP	SCC	NCX	HC
51 DEGREASING	1	0	0	0	23
52 DRY CLEANING	0	0	0	0	0
53 GRAFFIC ARTS	0	0	0	0	0
54 OTHER - (SOLVENT USE)	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0
56 AUTOMOTIVE FINISHING	0	0	0	0	0
57 OTHER-INDUSTRIAL SURFACE COATING	3	0	0	0	0
58 EXI. CTR. BOILERS-ELCT. GENERATION	0	0	0	0	0
59 EXI. CTR. BOILERS-INDUSTRIAL	4	60	313	46	3
60 EXI. CTR/B. BOILERS/COMPIXT	15	1	33	11	8
61 EXI. COVE. SPACE HEATING-INDUST.	0	0	0	0	0
62 EXI. COVE. SPACE HEATING-COMP.	0	0	0	0	0
63 OTHER-(FUEL COMBUSTION)	0	0	0	0	0
64 SOLID WASTE DISPOSAL-CVT.	0	0	0	0	0
65 SOLID WASTE DISPOSAL-CWV/INST	0	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	0	0	0	0
68 WASTE SOLVENT RECOVERY PROCESSES	0	0	0	0	0
69 STATIC:ARY INTERNAL COMBUSTION ENGINES	2	0	0	0	0
70 NOT CLASSIFIED	0	0	0	0	0
COUNTY TOTALS	63	346	57	41	8

TABLE A-1 (continued)

GCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY:0180

CATEGORY	POINT COUNT	PRIMARY SCC EMISSIONS (TONS/YEAR)		
		TSP	SC2	NOX
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0
2 SYN. ORGANIC OFF., STORAGE & TRANSFER	6	0	0	0
3 GASCLINE AND CRUDE OIL STORAGE	8	0	0	0
4 SHIP AND CARGO TRANSFER OF VOC	0	0	0	0
5 BARGE AND TANKER CLEANING	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0
7 GASCLINE BULK PLANTS	0	0	0	0
8 TRUCK TRUCK LOADING	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	3	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0
11 OTHERS-STORAGE, TRANSF., MKT OF VOC	55	0	0	0
12 LUBE OIL MANUFACTURE	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0
15 TEXTILE POLYMERS & RESIN MANUFACTURE	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0
17 DYNAMIC CHEMICAL MANUFACTURE	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0
19 FERTILIZATION PROCESSES	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0
23 STEEL RECYCLE MANUFACTUR.	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0
25 IRON AND STEEL MANUFACTURE	1	0	0	0
26 METALLIC PRODUCTS	0	0	0	0
27 FABRIC PRODUCTS	1	0	0	0
28 TEXTILE FIBER PRODUCTS	0	0	0	0
29 LUMEN AND LOGO PRODUCTS	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	0	0	0	0
31 STONE, CLAY, GLASS, CONCRETE	4	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	15	0	0	0
33 FURNICATED METAL PRODUCTS	0	0	0	0
34 IN-PROCESS FUEL USE	6	0	0	0
35 UTENS - INDUSTRIAL PROCESSES	0	0	0	0
36 AGROLIVES	0	0	0	0
37 INC. SFC. COATING-LARGE APPLIANCES	0	0	0	0
38 INC. SFC. COATING-PAGNT WIRE	0	0	0	0
39 INC. SFC. COATING-AUTOCBIL	0	0	0	0
40 INC. SFC. COATING-CARS	0	0	0	0
41 INC. SFC. COATING-METAL COILS	0	0	0	0
42 INC. SFC. COATING-PEPS	0	0	0	0
43 INC. SFC. COATING-SERIFIC	0	0	0	0
44 INC. SFC. COATING-MISC. FURNITURE	0	0	0	0
45 INC. SFC. COATING-METAL/WOOD PRODUCTS	1	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0
47 LARGE SHIPS	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0
49 INC. SFC. COATING-MISC-METAL PRODUCTS	7	0	0	0
50 OTHERS - (INDUSTRIAL SURFACE COATING)	3	0	0	0
	117	0	0	0
	188	0	0	0
	84	0	0	0

TABLE A-1 (continued)

SCA / TECHNOLOGY DIVISION  
VIRGINIA POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: CLAD

CATEGORY	POINT COUNT	EMISSIONS (TONS/YEAR)			
		TSP	SC2	SCC	NOX
51 DEGREASING	1	0	0	0	0
52 DRY CLEANING	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0
54 OTHER - (SOLVENT USE)	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0
56 AUTO REFINISHING	0	0	0	0	0
57 OTHER - (NON-INDUSTRIAL SURFACE COATING)	0	0	0	0	0
58 FAB. CNS. BOILERS-ELEC. GENERATION	3	74	60	0	0
59 EXT. BOILERS-INSTITUTIONAL	14	3	2	0	45
59 EXT. BOILERS-PUBLICS-COMM/INST	23	1	20	22	0
61 EXT. CNS. SURFACE HEATERS-INDUST.	0	0	0	0	0
62 EXT. CNS. SURFACE HEATERS-COMM.	0	0	0	0	0
63 CHLORS-IFUL COMUSTICIAN	0	0	0	0	0
64 SOLID WASTE DISPOSAL-SOVT.	0	0	0	0	0
65 SOLID WASTE DISPOSAL-CRM/INST	9	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	0	0	0	0
68 WASTE SOLVENT RECOVERY PROCESSES	0	0	0	0	0
69 STATIONARY INTERNAL COMBUSTION ENGINES	3	0	6	7	2
70 NOT CLASSIFIED	0	0	0	0	0
COUNTY TOTALS	106	123	693	1737	137

TABLE A-1 (continued)

## VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: 02250

CATEGORY	POINT COUNT	SCC EMISSIONS (TONS/YEAR)			
		TSP	HC	NOX	CO
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0	0
2 SV* - CRUDE OIL CHEM. STORAGE & TRANSFER	0	0	0	0	0
3 GASOLINE AND CRUDE OIL STORAGE	0	0	0	0	0
4 SHIP AND BARGE TRANSFER OF VOC	0	0	0	0	0
5 BARGE AND TANKER CLEANING	0	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0	0
7 GASOLINE BULK PLANTS	0	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0	0
11 OTHERS-STORAGE, TRANSF. & Mkt OF VOC	4	0	0	0	0
12 LIQUEFIED GAS MANUFACTURE	0	0	0	0	0
13 PERFL. UP API#1, LPG-S	0	0	0	0	0
14 PETROLEUM REFINERY	0	0	0	0	0
15 TEXTILE POLYMERS & RESIN MANUFACTURE	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
18 INORG. & IC CHEMICAL MANUFACTURE	0	0	0	0	0
19 FERMENTATL. PROCESSES	0	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0	0
23 SUR. RUBBER MANUFACTURE	0	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0
25 IRON AND STEEL MANUFACTURE	0	0	0	0	0
26 TURBOCC. FUEL PRODUCTS	0	0	0	0	0
27 FCCC FUEL PRODUCTS	0	0	0	0	0
28 TIRE/TILL - WLL PRODUCTS	0	0	0	0	0
29 LUXEP. & COUD. PRODUCTS	0	0	0	0	0
30 PAPER & ALLIED PRODUCTS	0	0	0	0	0
31 STONE, CLAY, GLASS, CONCRETE	0	0	0	0	0
32 FABR. & SECONDARY METALS & ELECTRICAL	0	0	0	0	0
33 FABRICATED METAL PRODUCTS	0	0	0	0	0
34 LIT-FRCESS FUEL USE	0	0	0	0	0
35 OTHERS - INDUSTRIAL PROCESSES	0	0	0	0	0
36 ADHESIVES	0	0	0	0	0
37 INC. SFC. COATING-LARGE APPLIANCES	0	0	0	0	0
38 INC. SFC. COATING-MAGNET WIRE	0	0	0	0	0
39 INC. SFC. COATING-AUTOCABLE	0	0	0	0	0
40 INC. SFC. COATING-CANS	0	0	0	0	0
41 INC. SFC. COATING-METAL COILS	0	0	0	0	0
42 INC. SFC. COATING-CARPC	0	0	0	0	0
43 INC. SFC. COATING-FABRIC	0	0	0	0	0
44 INC. SFC. COATING-PLAST. FURNITURE	0	0	0	0	0
45 INC. SFC. COATING-METAL/WOOD PRODUCTS	0	0	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0	0
47 LARGE SHIPS	0	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0	0
49 INC. SFC. COATING-MISC. METAL PRODUCTS	0	0	0	0	0
50 OTHERS - INDUSTRIAL SURFACE COATING	0	0	0	0	0

TABLE A-1 (continued)

SCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: CEDAR

CATEGORY	POINT COUNT	PRIMARY SCC EMISSIONS (TONS/YEAR)			
		TSP	SC2	HC	C0
51 DRY CLEANING	2	0	0	0	0
52 DRY CLEANING	2	0	0	0	0
53 GRAPHIC ARTS	2	0	0	0	0
54 OTHER (SOLVENT USE)	2	0	0	0	0
55 ARCHITECTURAL COATINGS	2	0	0	0	0
56 AUTO REFINISHING	0	0	0	0	0
57 OTHER-INDUSTRIAL SURFACE COATING	0	0	0	0	0
58 EXT. CNG. BOILERS-ELEC. GENERATION	0	0	0	0	0
59 EXT. CLPR. BOILERS-INDUSTRIAL	6	242	850	140	28
60 EXT. POILERS-COM/FINST	3	0	0	0	0
61 EXT. COGS. SPACE HEATERS-INDUSTRY	2	0	0	0	0
62 EXT. COGS. SPACE HEATERS-COM.	2	0	0	0	0
63 OTHER-FUEL COMBUSTION	1	0	0	0	0
64 SOLID WASTE DISPOSAL-SVT.	2	0	0	0	0
65 SOLID WASTE DISPOSAL-COM/INST	2	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	2	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	2	0	0	0	0
68 WASTE SOLVENT RECOVERY PROCESSES	2	0	0	0	0
69 STATIONARY INTERNAL COMBUSTION ENGINES	2	0	0	0	0
70 NOT CLASSIFIED	0	0	0	0	0
COUNTY TOTALS	254	860	140	236	28

TABLE A-1 (continued)

SCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY:0240

CATEGORY	POINT COUNT	PRIMARY SCC EMISSIONS (TONS/YEAR)			
		TSP	SC2	HC	CO
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0	0
2 SYN. ORGANIC CHEM. STORAG & TRANSFER	2	0	0	0	0
3 GASLINE A.D CRUDE OIL STORAGE	0	0	0	0	0
4 SHIP & D PREG. TRANSFER OF VOC	0	0	0	0	0
5 EXPGZ AND TANKER CLEANING	0	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0	0
7 GASCLINE BULK PLANTS	0	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0	0
11 OTHERS- STORAGE, TRANS., Mkt OF VOC	0	0	0	0	0
12 LUBE OIL MANUFACTURE	0	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0	0
15 TEXTILE POLYMERS & RESIN MANUFACTURE	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
19 FARMER FATTEN PIG FARMS	0	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0	0
22 RULEDF TIR- MANUFACTUR	0	0	0	0	0
23 SFC RUG-CAR MANUFACTUR	0	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0
25 IRON & STEEL MANUFACTURE	0	0	0	0	0
26 TUNFALL PRODUCTS	0	0	0	0	0
27 FUEL PRODUCTS	11	916	0	0	0
28 TEXTILE MILL PRODUCTS	0	0	0	0	0
29 LEATHER AND WOOD PRODUCTS	0	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	0	0	0	0	0
31 STONE, CLAY, GLASS, CONCRETE	0	0	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	23	19	0	0	0
33 FABRICATED METAL PRODUCTS	0	0	0	0	0
34 IN-PEDCES FULL USE	2	0	0	0	0
35 OTHERS - INDUSTRIAL PROCESSES	1	0	0	0	0
36 ACTIVES	0	0	0	0	0
37 INC. SFC. COATING-LARGE APPLIANCES	0	0	0	0	0
38 INC. SFC. COATING-PLAST. & WIRE	0	0	0	0	0
39 INC. SFC. COATING-PLASTIC MOBILE	0	0	0	0	0
40 INC. SFC. COATING-CAJS	0	0	0	0	0
41 INC. SFC. COATING-METAL CCILS	0	0	0	0	0
42 INC. SFC. COATING-PAPER	0	0	0	0	0
43 INC. SFC. COATING-FABRIC	0	0	0	0	0
44 INC. SFC. COATING-MISC. FURNITURE	0	0	0	0	0
45 INC. SFC. COATING-METAL/WOOD PRODUCTS	0	0	0	0	0
46 PLASTIC PAIS PAINTING	0	0	0	0	0
47 LARGE SHIPS	0	0	0	0	0
48 INC. SFC. COATING-MISC.	0	0	0	0	0
49 INC. SFC. COATING-MISC. METAL PRODUCTS	0	0	0	0	0
50 OTHERS - INDUSTRIAL SURFACE COATING	0	0	0	0	0

TABLE A-1 (continued)

ECA / TECHNOLOGY DIVISION,  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: C240

CATEGORY	POINT COUNT	PRIMARY SCC EMISSIONS (TONS/YEAR)				
		TSP	SO2	NOX	HC	CO
51 DYEING	1	0	0	0	16	0
52 DRY CLEANING	0	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0	0
54 OTHER - (SOLVENT USE)	0	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0	0
56 AUTOM. REFINISHING	0	0	0	0	0	0
57 OTHERS-IND-INDUSTRIAL SURFACE COATING	0	0	0	0	0	0
58 EXTR. LUMB. BOILERS-ELEC. GENERATION	0	0	0	0	0	0
59 EVT. COMB. BOILERS-INDUSTRIAL	11	2	1	5	53	1
60 EVT. COMB. BOILERS-CHEM/INST	2	0	0	0	0	0
61 EVT. COMB. SPACE HEATERS-INDUST.	0	0	0	0	0	0
62 EVT. COMB. SPACE HEATERS-CHEM.	0	0	0	0	0	0
63 COMB-FUEL COMBUSTION	0	0	0	0	0	0
64 SOLID WASTE DISPOSAL-GVT.	0	0	0	0	0	0
65 SOLID WASTE DISPOSAL-CHEM/INST	0	1	0	0	1	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	0	0	0	0	0
68 WASTE SOLVANT RECOVERY PROCESSES	0	0	0	0	0	0
7A STATIONARY INTERNAL COMBUSTION ENGINES	0	0	0	0	16	0
7C N.T. CLASSIFIED	0	0	0	0	0	0
COUNTY TOTALS	938	1	70	618	0	0

TABLE A-1 (continued)

ECA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

CLOUDY CLOUDS

CATEGORY	POINT COUNT	SCC EMISSIONS (TONS/YEAR)			CC
		TSP	SC2	HC	
1 CIL AND GAS PRODUCTION & PROCESSING	0	0	0	0	0
2 SYN. ORGANIC CHEM. STORAGE & TRANSFER	0	0	0	0	0
3 GASOLINE AND CRUDE OIL STORAGE	0	0	0	0	0
4 SHIP AND BARGE TRANSFER OF VOC	0	0	0	0	0
5 Barge and Tanker Cleaning	0	0	0	0	0
6 BULK SOLID TERMINALS	0	0	0	0	0
7 GASOLINE BULK PLANTS	0	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0	0
11 CARS-CSTRAGE, TRANSPORT Mkt OF VOC	0	0	0	0	0
12 LUBE OIL MANUFACTURE	0	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0	0
15 TEXTILE POLYMERS & RSTP MANUFACTURE	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0	0
17 SYNTHETIC CHEMICAL MANUFACTURE	0	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
19 FERTILIZATION - FLOC-AS-S	0	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0	0
23 SUPER PLUMBER MANUFACTURE	0	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0
25 IRON AND STEEL MANUFACTURE	0	0	0	0	0
26 METAL PRODUCTS	0	0	0	0	0
27 FUEL PRODUCTS	0	0	0	0	0
28 TIRE & TILL PRODCTS	0	0	0	0	0
29 LUBRICANT & AGRO PRODUCTS	0	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	0	0	0	0	0
31 STONE, CLAY, GLASS, CONCRETE	0	0	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	0	0	0	0	0
33 FERRO-TECHNICAL PRODUCTS	0	0	0	0	0
34 INDUS. FULL USE	0	0	0	0	0
35 OTHERS - INDUSTRIAL PROCESSES	0	0	0	0	0
36 ALKALIS	0	0	0	0	0
37 INK SFC. COATING-LARGE AFFILIATES	0	0	0	0	0
38 INK SFC. COATING-KINET AIR	0	0	0	0	0
39 INK SFC. COATING-AUTO MOBILE	0	0	0	0	0
40 INK SFC. COATING-CAUS	0	0	0	0	0
41 INK SFC. COATING-METAL COILS	0	0	0	0	0
42 INK SFC. COATING-FAPCO	0	0	0	0	0
43 INK SFC. COATING-FABRIC	0	0	0	0	0
44 INK SFC. COATING-MISC. FURNITURE	0	0	0	0	0
45 INK SFC. COATING-ETAL/ACO PRODUCTS	0	0	0	0	0
46 PLASTIC BOATS PAINTING	0	0	0	0	0
47 LARGE SHIPS	0	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0	0
49 INK SFC. COATING-MISC. METAL PRODUCTS	0	0	0	0	0
50 OTHERS - INDUSTRIAL SURFACE COATINGS	0	0	0	0	0

TABLE A-1 (continued)

ECA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1973

COUNTY: 0280

CATEGORY	POINT COUNT	PRIMARY EMISSIONS (TONS/YEAR)					
		TSP	SCC	NOX	HC	CO	SO <sub>2</sub>
51 DRY CLEANING	0	0	0	0	0	0	0
52 DRY CLEANING	0	0	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0	0	0
54 OFFICE - (SOLVENT USE)	0	0	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0	0	0
56 AUTO REFINISHING	0	0	0	0	0	0	0
57 OTHERS - (NON-INDUSTRIAL SURFACE COATING)	0	0	0	0	0	0	0
58 EXT. CURE • BOILERS-STEEL GENERATION	0	0	0	0	0	0	0
59 EXT. COMB. BOILERS-INDUSTRIAL	0	0	0	0	0	0	0
60 EXT. CURE • BOILERS-COMBINIST	1	1	0	0	0	0	0
61 EXT. COMB. SPACE HEATERS-INDUST.	0	0	0	0	0	0	0
62 EXT. COMB. SPACE HEATERS-COMB.	0	0	0	0	0	0	0
63 OTHERS - (FUEL CONSUMPTION)	0	0	0	0	0	0	0
64 SOLID WASTE DISPOSAL-GOV'T.	0	0	0	0	0	0	0
65 SOLID WASTE DISPOSAL-COMM/INST	0	0	0	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	0	0	0	0	0	0
68 WASTE SOLVENT RECOVERY PROCESS	0	0	0	0	0	0	0
69 STATIONARY INTERNAL COMBUSTION ENGINES	0	0	0	0	0	0	0
70 KJL CLASSIFIED	0	0	0	0	0	0	0
COUNTY TOTALS	233	25	62	13	13	0	0

TABLE A-1 (continued)

## VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: CED

CATEGORY	POINT COUNT	PRIMARY EMISSIONS (TONS/YEAR)		
		TSP	SO <sub>2</sub>	NO <sub>x</sub>
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0
2 SYN. ORGANIC CHEM. STORAGE & TRANSFER	0	0	0	0
3 GASCLINE 1-D CLOUD OIL STOCHAGE	0	0	0	0
4 SHIP-TO-TRUCK TRANSFER OF VOC	0	0	0	0
5 BRIDGE 1-D TANKER TRANSFER CLEANING	0	0	0	0
6 BULK OIL/SOLVENT TERMINALS	0	0	0	0
7 GASCLINE BULK PLANTS	0	0	0	0
8 TRUCK TRUCK LOADING	0	0	0	0
9 SERVICE STATION UNLOADING (STAGE I)	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0
11 OTHERS-4-STORAGE • TRANSP. • Mkt OF VOC	0	0	0	0
12 LUBRICANT MANUFACTURE	0	0	0	0
13 PETROLEUM REFINERY	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0
15 TEXTILE-POLYESTER RESIN MANUFACTURE	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0
19 FERMENTATION PROCESSES	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0
23 SKIN BURNER MANUFACTURE	0	0	0	0
24 CABLE CHEMICAL MANUFACTURE	0	0	0	0
25 IRON & STEEL MANUFACTURE	0	0	0	0
26 TIREACCE PRODUCTS	0	0	0	0
27 FCCD FBCOUNTS	180	0	0	0
28 TEXTILE MILL PRODUCTS	0	0	0	0
29 LUMBER AND WOOD PRODUCTS	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	0	0	0	0
31 STONE-CLAY-GLASS-CONCRETE ORINARY & SEC-UNARY METALS & ELECTRICAL	0	0	0	0
32 PLASTICIZED METAL PRODUCTS	0	0	0	0
33 PROCESS FULL USE	0	0	0	0
34 OTHERS - INDUSTRIAL PROCESSES	0	0	0	0
35 ADHESIVES	0	0	0	0
36 FIN. SFC. COATINGS-LARGE APPLIANCES	0	0	0	0
37 FIN. SFC. COATINGS-JACKET FIRE	0	0	0	0
38 IND. SFC. COATING-MOTOR OIL	0	0	0	0
39 IND. SFC. COATING-LEATHER	0	0	0	0
40 IND. SFC. COATING-METAL COILS	0	0	0	0
41 IND. SFC. COATING-SAFETY	0	0	0	0
42 IND. SFC. COATING-FABRIC	0	0	0	0
43 IND. SFC. COATING-NON-FURNITURE	0	0	0	0
44 IND. SFC. COATING-NON-MISC. FURNITURE	0	0	0	0
45 IND. SFC. COATING-METAL/WOOD PRODUCTS	0	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0
47 LARGE SHIPS	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0
49 INC. SFC. COATING-MISC. METAL PRODUCTS	0	0	0	0
50 OTHERS - INDUSTRIAL SURFACE COATING	0	0	0	0
	158	0	0	0
	5	0	0	0

TABLE A-1 (continued)

SCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY:03360

CATEGORY	POINT COUNT	PRIMARY SCA EMISSIONS (TONS/YEAR)				CO
		TSP	SO <sub>2</sub>	SCC NOX	HC	
51 DEGREASING	2	0	0	0	0	0
52 DRY CLEANING	0	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0	0
54 OTHER - ESCAPEMENT USE	0	0	0	0	0	0
55 ARTIFICIAL COATINGS	0	0	0	0	0	0
56 AUTOSERVICE	0	0	0	0	0	0
57 OTHER - INDUSTRIAL SURFACE COATING	0	0	0	0	0	0
58 CLOTHING INDUSTRY	15	0	0	0	0	0
59 CLOTHING INDUSTRY - MANUFACT.	1	0	0	0	0	0
60 CLOTHING INDUSTRY - RETAIL	4	0	0	0	0	0
61 CLOTHING INDUSTRY - SERVICE	3	0	0	0	0	0
62 CLOTHING INDUSTRY - SPECIALTY	0	0	0	0	0	0
63 CLOTHING INDUSTRY - SPORTSWEAR	0	0	0	0	0	0
64 SOLIC WASTE DISPOSAL-GVT.	0	0	0	0	0	0
65 SOLIC WASTE DISPOSAL-COMM/IND	0	0	0	0	0	0
66 SOLIC WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0	0
67 SOLIC WASTE DISPOSAL-SOCIAL	0	0	0	0	0	0
68 SOLIC WASTE PROCESSING	0	0	0	0	0	0
69 SOLIC INTERNAL COMBUSTION ENGINES	0	0	0	0	0	0
PC NOT CLASSIFIED	0	0	0	0	0	0
COUNTY TOTALS	330	2	42	171	8	

TABLE A-1 (continued)

## VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: 0360

CATEGORY	POINT COUNT	EMISSIONS (TONS/YEAR)		
		TSP	SCC	NOX
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0
2 SYNT. ORGANIC CHEM. STAGE & TRANSFER	0	0	0	0
3 G-SOURCE AND CRUDE OIL STORAGE	0	0	0	0
4 SHIP-TO-BARGE TRANSFER OF VOC	0	0	0	0
5 SOURCE AND TANKER CLEAVING	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0
7 GASOLINE BULK PLANTS	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0
11 OPEN-STORAGE TRANSFER Mkt. OF VOC	0	0	0	0
12 JET OIL MANUFACTURE	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0
15 TEXTILE POLYMERS & RESIN MANUFACTURE	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0
18 PETROCHEMICAL MANUFACTURE	0	0	0	0
19 FERTILIZATION PROCESSES	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0
23 SEA-FOUNDER MANUFACTURE	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0
25 IRON AND STEEL MANUFACTURE	0	0	0	0
26 TOBACCO PRODUCTS	0	0	0	0
27 FABRIC PRODUCTS	0	0	0	0
28 TYRTELL KILL PRODUCTS	0	0	0	0
29 LUMBER AND LOG PRODUCTS	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	1	0	0	0
31 STONE-CLAY, GLASS-CONCRETE	0	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	5	0	0	0
33 FASQUELATED METAL PRODUCTS	0	0	0	0
34 PROCESS FULL USE	0	0	0	0
35 OTHER - (INDUSTRIAL PROCESSES)	0	0	0	0
36 ADHESIVES	0	0	0	0
37 I.L. SFC. COATING-LARGE APPLIANCES	0	0	0	0
38 I.V. SFC. COATING-MAGNET WIRE	0	0	0	0
39 I.V. SFC. COATING-AUTO-CAILE	0	0	0	0
40 I.V. SFC. COATING-CINS	0	0	0	0
41 I.V. SFC. COATINGS-METAL COILS	0	0	0	0
42 INC. SFC. COATING-PAPER	0	0	0	0
43 INC. SFC. COATING-FABRIC	0	0	0	0
44 INC. SFC. COATING-MISC. FURNITURE	0	0	0	0
45 INC. SFC. COATING-METAL/WOOD PRODUCTS	2	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0
47 LARGE SHIPS	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0
49 INC. SFC. COATINGS-MISC. METAL PRODUCTS	0	0	0	0
50 OTHERS - (INDUSTRIAL SURFACE COATING)	501	0	0	0

TABLE A-1 (continued)

GCA / TECHNOLOGY DIVISION,  
WEEKEND POINT SOURCE EMISSIONS BY CATEGORY 1973

COUNTY TOTALS

CATEGORY	POINT COUNT	EMISSIONS (TONS/YEAR)			
		TSP	SCC	ROX	CO
51 DREDGINGS	0	0	0	0	0
52 ERY. CLARIFY.	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0
54 OTHER - (SOLVENT USE)	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0
55 AUTO & FINISHING	0	0	0	0	0
57 OTHERS-(INC.)-INDUSTRIAL SURFACE COATING	0	0	0	0	0
58 EXT. COMB. BOILERS-ELCT. GENERATION	0	0	0	0	0
59 EXT. COMB. BOILERS-INDUSTRIAL	0	0	0	0	0
60 EXT. COMB. BOILERS-COMM/INST	0	0	0	0	0
61 EXT. COMB. SPACE HEATERS-INDUST.	0	0	0	0	0
62 EXT. COMB. SPACE HEATERS-COMM.	0	0	0	0	0
63 OTHERS-FUEL CONSUMPTION	0	0	0	0	0
64 SOLID WASTE DISPOSAL-GOV.	0	0	0	0	0
65 SOLID WASTE DISPOSAL-IND/INST	0	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0
67 OTHER ACIDIC WASTE DISPOSAL	0	0	0	0	0
68 WASTE SOLVENT RECOVERY PROCESSES	0	0	0	0	0
69 STATIONARY INTERNAL COMBUSTION ENGINES	7	0	0	14	0
70 NOT CLASSIFIED	0	0	0	0	0
COUNTY TOTALS	261	61	89	516	14

TABLE A-1 (continued)

## VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: 3420

CATEGORY	POINT COUNT	PRIMARY EMISSIONS (TONS/YEAR)				
		TSP	SO <sub>2</sub>	NO <sub>x</sub>	HC	CO
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0	0	0
2 SYNTHETIC ORGANIC CHEM. STORAGE & TRANSFER	0	0	0	0	0	0
3 GASOLINE AND CRUDE OIL STORAGE	0	0	0	0	0	0
4 SHIP AND BARGE TRANSFER OF VOC	0	0	0	0	0	0
5 BARGE AND TANKER CLEANING	0	0	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0	0	0
7 GASOLINE BULK PLANTS	0	0	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0	0	0
11 OTHER-STRASSE, TRANSF. • Mkt. OF VOC	0	0	0	0	0	0
12 LIQUEFIED OIL MANUFACTURE	0	0	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0	0	0
15 TEXTILE - POLYMERS & RUBBER MANUFACTURE	0	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0	0	0
17 BASIC INORG. CHEMICAL MANUFACTURE	0	0	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0	0
19 FERMENTATION PROCESSES	0	0	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0	0	0
23 SYNTH. RUBBER MANUFACTURE	0	0	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0	0	0
25 IRON AND STEEL MANUFACTURE	0	0	0	0	0	0
26 METAL PRODUCTS	0	0	0	0	0	0
27 PLASTIC PRODUCTS	0	0	0	0	0	0
28 TEXTILE WILLL PRODUCTS	0	0	0	0	0	0
29 LUMBER AND WOOD PRODUCTS	0	0	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	0	0	0	0	0	0
31 STONE, CLAY, GLASS, CONCRETE	0	0	0	0	0	0
32 MINING & SECONDARY METALS & ELECTRICAL	0	0	0	0	0	0
33 FABRICATED METAL PRODUCTS	0	0	0	0	0	0
34 TIRE-CARLESS FULL USE	0	0	0	0	0	0
35 OILS - INDUSTRIAL PROCESSES	0	0	0	0	0	0
36 ADHESIVES	0	0	0	0	0	0
37 FIN. SFC. COATINGS-LARGE APPLIANCES	0	0	0	0	0	0
38 FIN. SFC. COATING-MAGNET WIRE	0	0	0	0	0	0
39 FIN. SFC. COATING-AUTOMOBILE	0	0	0	0	0	0
40 FIN. SFC. COATING-CAMS	0	0	0	0	0	0
41 FIN. SFC. COATING-METAL COILS	0	0	0	0	0	0
42 FIN. SFC. COATINGS-PAINT	0	0	0	0	0	0
43 FIN. SFC. COATING-FABRIC	0	0	0	0	0	0
44 FIN. SFC. COATINGS-MISC. FURNITURE	0	0	0	0	0	0
45 FIN. SFC. COATING-METAL/WOOD PRODUCTS	0	0	0	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0	0	0
47 LARGE SHIPS	0	0	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0	0	0
49 FIN. SFC. COATINGS-MISC. METAL PRODUCTS	0	0	0	0	0	0
50 OTHERS - INDUSTRIAL SURFACE COATING	0	0	0	0	0	0

TABLE A-1 (continued)

3CA / TECHNOLUCY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: C420

CATEGORY	POINT COUNT	PRIMARY SCC EMISSIONS (TONS/YEAR)			
		TSP	SO <sub>2</sub>	NO <sub>x</sub>	HC
51 DEGREASING	0	0	0	0	0
52 DRY CLEANING	1	0	0	0	0
53 GR-FFIC ARTS	0	0	0	0	0
54 OTHER - (SLV-NOT USE)	0	0	0	0	0
55 AUTOMOTIVE COATINGS	0	0	0	0	0
56 AUTOPINTING	0	0	0	0	0
57 OTHER-INDUSTRIAL SURFACE COATING	0	0	0	0	0
58 EXTR. CCMS. BOILERS-ELEC. GENERATION	0	0	0	0	0
59 EXTR. COMB. BOILERS-INDUSTRIAL	0	0	0	0	0
60 EXTR. COMB. BOILERS-COM/INST	4	50	0	0	0
61 EVT. COKE. SPICE HEATERS-INDUST.	3	98	11	1	3
62 EVT. COKE. SPICE HEATERS-COM.	0	0	0	0	0
63 OTHERS-(FUEL COMBUSTION)	0	0	0	0	0
64 SOLID ASST. DISPOSAL-SVT.	0	0	0	0	0
65 SOLID ASST. DISPOSAL-COM/INST	2	4	1	0	12
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	0	0	0	0
68 LIQUID SOLID RECOVERY PROCESSES	0	0	0	0	0
69 STATIONARY INTERNAL COMBUSTION ENGINES	3	1	4	1	3
70 NOT CLASSIFIED	0	0	0	0	0
<b>COUNTY TOTALS</b>		<b>432</b>	<b>138</b>	<b>75</b>	<b>67</b>
					<b>26</b>

TABLE A-1 (continued)

CCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: 0500

CATEGORY	POINT COUNT	EMISSIONS (TONS/YEAR)		
		TSP	SCC	HC
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0
2 SYN. CRACKING CHAM. STORAGE & TRANSFER	0	0	0	0
3 GASOLINE AND CRUDE OIL STORAGE	0	0	0	0
4 SHIP AND BARGE TRANSFER OF VOC	0	0	0	0
5 BARGE AND TANKER CLEANING	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0
7 GASOLINE BULK PLANTS	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0
11 OILERS-STORAGE, TRANSF., MKT OF VOC,	0	0	0	0
12 LUBE OIL MANUFACTURE	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	3	0	0	0
15 TEXTILE POLYMERS & RESIN MANUFACTURE	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0
19 FERTILIZATION PROCESSES	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0
23 SEP. RUBBER MANUFACTURE	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0
25 TICK AND STEEL MANUFACTURE	4	0	0	0
26 TIEACRE PRODUCTS	2	0	0	0
27 FOOD PRODUCTS	0	0	0	0
28 TEXTILE FIBER PRODUCTS	0	0	0	0
29 LUMBER AND WOOD PRODUCTS	0	0	0	0
30 PIPE AND ALLIED PRODUCTS	0	0	0	0
31 STONE, CLAY, GLASS, CONCRETE	0	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	2	0	0	13
33 FABRICATED METAL PRODUCTS	0	0	0	0
34 TRANSPORTS FULL USE	0	0	0	0
35 TRANPS - INDUSTRIAL PROCESSES	3	0	0	1
36 ADSEIVES	0	0	0	0
37 IND. SFC. COATING-LARGE APPLIANCES	0	0	0	0
38 IND. SFC. COATING-MOTOR VEHICLE	0	0	0	0
39 IND. SFC. COATING-AUTOMOBILE	0	0	0	0
40 IND. SFC. COATING-LAUN	0	0	0	0
41 IND. SFC. COATING-METAL CCILS	0	0	0	0
42 IND. SFC. COATING-PAPER	0	0	0	0
43 IND. SFC. COATING-FABRIC	0	0	0	0
44 IND. SFC. COATING-MISC. FURNITURE	0	0	0	0
45 IND. SFC. COATING-METAL/WOOD PRODUCTS	0	0	0	0
46 PLASTIC PARTS PAINTING	0	0	0	0
47 LARGE SHIPS	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0
49 IND. SFC. COATING-NMSC. METAL PRODUCTS	2	0	0	6
50 OTHERS - INDUSTRIAL SURFACE COATING	1	0	0	16

TABLE A-1 (continued)

GCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: CSCO

CATEGORY	POINT COUNT	PRIMARY SCC EMISSIONS (TONS/YEAR)			
		TSF	SC2	NOX	CO
51 DEGREASING	0	0	0	0	0
52 DRY CLEANING	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0
54 OTHER - (SOLVENT USE)	0	0	0	0	0
55 ARCHITECTURAL COATINGS	9	0	0	0	0
56 AUTO PAINTING	0	0	0	0	0
57 OTHER-INDUSTRIAL SURFACE COATING	0	0	0	0	0
58 EXTR. CLOTH. BOILER-SELLC. GENERATION	0	0	0	0	0
59 EXTR. CLOTH. FOILERS-INDUSTRIAL	16	0	0	0	0
60 EXTR. CLOTH. 201ERS-COMM/INST	6	0	0	0	0
61 EXTR. CLOTH. SPACE HEATERS-INDUST.	0	0	0	0	0
62 EXTR. CLOTH. SPACE HEATERS-COMM.	0	0	0	0	0
63 OTHERS-FUEL CONVERSION	0	0	0	0	0
64 SOLID WASTE DISPOSAL-GOV'T	0	0	0	0	0
65 SOLID WASTE DISPOSAL-COMM/INST	1	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	0	0	0	0
68 WASTE SOLVENT RECOVERY PROCESSES	0	0	0	0	0
70 STATIONARY INTERNAL COMBUSTION ENGINES	1	5	14	67	5
7C NOT CLASSIFIED	0	0	0	0	0
<b>COUNTY TOTALS</b>	<b>20</b>	<b>23</b>	<b>68</b>	<b>27</b>	<b>15</b>

TABLE A-1 (continued)

GCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTRY:0520

CATEGORY	POINT COUNT	SCC EMISSIONS (TONS/YEAR)		
		TSP	SC2	HC
1 OIL AND GAS PRODUCTION & PROCESSING	0	0	0	0
2 SYNTHETIC CHEM. STORAGE & TRANSFER	0	0	0	0
3 G-SOLVENT AND CRUDE OIL STORAGE	0	0	0	0
4 SHIP AND BARGE TRANSFER OF VOC	0	0	0	0
5 BARGE AND TANKER CLEANING	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0
7 GASOLINE BULK PLANTS	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0
9 SERVICE STATION LOADING (STAGE I)	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0
11 OTHERS-CITRATE, TRANSPORT, Mkt. OF VOCs	0	0	0	0
12 LARGE OIL MFG. MANUFACTURE	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0
15 TEXTILE POLYMERS & RELATED MANUFACTURE	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0
19 FINE CERAMIC PROCESSES	0	0	0	0
20 VACUUM TUBE PROCESSING	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0
23 STAR RUBBER MANUFACTURE	0	0	0	0
24 OTHER CHEMICAL MANUFACTURE	0	0	0	0
25 IRON & STEEL MANUFACTURE	0	0	0	0
26 TOBACCO PRODUCTS	0	0	0	0
27 FOOD PRODUCTS	0	0	0	0
28 TAPED MILL PRODUCTS	0	0	0	0
29 LUMBER & WOOD PRODUCTS	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	0	0	0	0
31 STONE, CLAY, GLASS, CONCRETE	0	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	0	0	0	0
33 FABRICATED METAL PRODUCTS	0	0	0	0
34 IN-PFCFS FUEL USE	0	0	0	0
35 OTHERS - (INDUSTRIAL PROCESSES)	0	0	0	0
36 ADHESIVES	0	0	0	0
37 INL. SFC. COATING-LP5, APPLIANCES	0	0	0	0
38 INL. SFC. COATING-PAINT, WIRE	0	0	0	0
39 INC. SFC. COATING-AUTO CHILE	0	0	0	0
40 INC. SFC. COATING-CAMS	0	0	0	0
41 INC. SFC. COATING-METAL COILS	0	0	0	0
42 INC. SFC. COATING-DRAPER	0	0	0	0
43 INC. SFC. COATING-FABRIC	0	0	0	0
44 INC. SFC. COAT-3-MISC. FURNITURE	0	0	0	0
45 INC. SFC. COATING-METAL/WIRE PRODUCTS	0	0	0	0
46 PLASTIC PARTS COATING	0	0	0	0
47 LARGE SHIPS	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0
49 INC. SFC. COATING-MISC. METAL PRODUCTS	0	0	0	0
50 OTHERS - (INDUSTRIAL SURFACE COATING)	0	0	0	0

TABLE A-1 (continued)

GCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: 0560

CATEGORY	POINT COUNT	PRIMARY SCC EMISSIONS (TONS/YEAR)				
		TSO	SLC2	ACX	TC	CO
51 DULCERASING	1	0	0	0	165	0
52 DRY CLEANING	0	0	0	0	0	0
53 GRAPHIC ARTS	0	0	0	0	0	0
54 OTHER - (SOLVENT USE)	0	0	0	0	0	0
55 ARCHITECTURAL COATINGS	0	0	0	0	0	0
56 AUTO REFINISHING	0	0	0	0	0	0
57 OTHERS-(INC.) INDUSTRIAL SURFACE COATING	0	0	0	0	0	0
58 EXT. CURE BOILERS-ELEC. GENERATION	0	0	0	0	0	0
59 EXT. COMB. BOILERS-INDUSTRIAL	15	146	0	0	56	39
60 EXT. COMB. BOILERS-COMM/INST	16	2	125	16	0	2
61 EXT. COMB. SPACE HEAT-PS-INDUST.	0	0	0	0	0	0
62 EXT. COMB. SPACE HEAT-PS-COMM.	0	0	0	0	0	0
63 OTHERS-(FUEL COMBUSTION)	0	0	0	0	0	0
64 SOLID WASTE DISPOSAL-INDV.	0	0	0	0	0	0
65 SOLID WASTE DISPOSAL-COMM/INST	1	0	0	0	0	0
66 SOLID WASTE DISPOSAL-INDUSTRIAL	0	0	0	0	0	0
67 OTHER SOLID WASTE DISPOSAL	0	0	0	0	0	0
68 W-SITE SOLVENT RECOVERY PROCESSES	1	0	0	0	3	0
69 STATIONARY INTERNAL COMBUSTION ENGINES	3	0	0	0	0	0
70 NOT CLASSIFIED	0	0	0	0	0	0
<b>COUNTY TOTALS</b>		<b>148</b>	<b>181</b>	<b>55</b>	<b>201</b>	<b>8</b>

TABLE A-1 (continued)

## Vermont Point Source Emissions by Category 1979

COUNTY: CEDAR

CATEGORY	POINT COUNT	PRIMARY EMISSIONS (TONS/YEAR)			SCC EMISSIONS NCX PC CO
		TSP	S02	CO	
1 OIL & GAS PRODUCTION & PROCESSING	9	0	0	0	0
2 SYNTHETIC ORGANIC CHEM. STORAGE & TRANSFER	0	0	0	0	0
3 GASOLINE AND CRUDE OIL STORAGE	0	0	0	0	0
4 SHIFT AND BARGE TRANSFER OF VOC	0	0	0	0	0
5 BARGE AND TANKER CLEANING	0	0	0	0	0
6 BULK GASOLINE TERMINALS	0	0	0	0	0
7 GASOLINE BULK PLANTS	0	0	0	0	0
8 TANK TRUCK LOADING	0	0	0	0	0
9 SERVICE STATION UNLOADING (STAGE I)	0	0	0	0	0
10 SERVICE STATION UNLOADING (STAGE II)	0	0	0	0	0
11 OTHERS - (ST. RACK, TRANSF., Mkt. of VOC)	0	0	0	0	0
12 LUBE OIL MANUFACTURE	0	0	0	0	0
13 PETROLEUM REFINERIES	0	0	0	0	0
14 PHARMACEUTICAL MANUFACTURE	0	0	0	0	0
15 TEXTILE POLYMERS & RESIN MANUFACTURE	0	0	0	0	0
16 SYNTHETIC FIBER MANUFACTURE	0	0	0	0	0
17 ORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
18 INORGANIC CHEMICAL MANUFACTURE	0	0	0	0	0
19 ENVIRONMENTAL PROCESSES	0	0	0	0	0
20 VEGETABLE OIL PROCESSING	0	0	0	0	0
21 PLASTIC PRODUCTS MANUFACTURE	0	0	0	0	0
22 RUBBER TIRE MANUFACTURE	0	0	0	0	0
23 SEA ROOFER MANUFACTURE	0	0	0	0	0
24 CLOTH CHEMICAL MANUFACTURE	0	0	0	0	0
25 IRON AND STEEL MANUFACTURE	11	0	2	0	0
26 THERMO PRODUCTS	0	0	0	0	0
27 FLUGG FFUGGLS	0	0	0	0	0
28 TEXTILE MILL PRODUCTS	0	0	0	0	0
29 LINGERIE AND ADG PRODUCTS	0	0	0	0	0
30 PAPER AND ALLIED PRODUCTS	0	0	0	0	0
31 STONE, CLAY, GLASS, CONCRETE	0	0	0	0	0
32 PRIMARY & SECONDARY METALS & ELECTRICAL	10	0	32	0	0
33 FABRICATED METAL PRODUCTS	0	0	0	0	0
34 TYPE PROCESS FUEL USE	1	0	0	0	0
35 OTHERS - (INDUSTRIAL PROCESSES)	1	0	0	0	0
36 AIRPLINES	0	0	0	0	0
37 INC. SFC. COATING-LARGE APPLIANCES	0	0	0	0	0
38 INC. SFC. COATING-MAGNET & IR	0	0	0	0	0
39 INC. SFC. COATING-AUTOMOBILE	0	0	0	0	0
40 INC. SFC. COATING-CANS	0	0	0	0	0
41 INC. SFC. COATING-METAL COILS	0	0	0	0	0
42 INC. SFC. COATINGS-PAPER	0	0	0	0	0
43 INC. SFC. COATING-FABRIC	0	0	0	0	0
44 INC. SFC. COATINGS-MISC. FURNITURE	0	0	0	0	0
45 INC. SFC. COATINGS-METAL/WOOD PRODUCTS	0	0	0	0	0
46 PLASTIC BOATS PAINTING	0	0	0	0	0
47 LARGE SHIPS	0	0	0	0	0
48 LARGE AIRCRAFT	0	0	0	0	0
49 INC. SFC. COATING-MISC. METAL PRODUCTS	6	0	0	0	0
50 OTHERS - (INDUSTRIAL SURFACE COATING)	79	0	0	0	0

TABLE A-1 (continued)

GCA / TECHNOLOGY DIVISION  
VERMONT POINT SOURCE EMISSIONS BY CATEGORY 1979

COUNTY: GENEVA

CATEGORY	POINT COUNT	PRIMARY EMISSIONS (TONS/YEAR)				
		TSP	SCC	NOX	HC	CO
51 DEGREASING	3	0	0	0	0	29
52 DRY CLEANING	0	0	0	0	0	0
53 GREENIC APPTS	0	0	0	0	0	0
54 OTHER - (SILV-IT USE)	0	0	0	0	0	0
55 ARTIFICIAL COATINGS	0	0	0	0	0	0
56 AUTO FINISHING	0	0	0	0	0	0
57 OTHER - EACH-INDUSTRIAL SURFACE COATINGS	0	0	0	0	0	0
58 EX1 CDM. BOILERS-ELEC. GENERATION	0	0	0	0	0	0
59 EXT. CDM. BOILERS-INDUSTRIAL	11	9	0	0	0	32
60 EXT. CDM. BOILERS-COM/INST	1	5	147	0	0	0
61 EXT. CDM. SPACE HEATERS-INDUST.	15	0	0	0	0	0
62 EXT. CDM. SPACE HEATERS-COMM.	0	0	0	0	0	0
63 OTHER-REFL. INDUSTRIAL	0	0	0	0	0	0
64 SOLID WAST. DISP-SAL-GOV'T.	1	0	0	0	0	0
65 SOLID WAST. DISP-SAL-COMM/INST	0	0	0	0	0	0
66 SOLID WASTE DISP-SOLID-INDUSTRIAL	0	0	0	0	0	0
67 OTHER SOLID WASTE DISPERSAL	0	0	0	0	0	0
68 WASTE SOLID RECOVERY PROCESSES	0	0	0	0	0	0
69 STATIONARY INTERNAL COMBUSTION ENGINES	1	0	0	0	0	0
70 NOT CLASSIFIED	0	0	0	0	0	0
COUNTY TOTALS	41	164	45	171	0	0

## APPENDIX B

### AREA SOURCE EMISSIONS BY CATEGORY FOR THE VERMONT COUNTIES

Table B-1 presents area source emissions, by category, for each of the Vermont counties, which are listed below.

<u>County</u>	<u>NEDS/EIS County Code</u>
Addison	0020
Bennington	0100
Caledonia	0160
Chittenden	0180
Essex	0200
Franklin	0240
Grand Isle	0260
Lamoille	0280
Orange	0360
Orleans	0380
Rutland	0420
Washington	0500
Windham	0580
Windsor	0620

TABLE B-1. COUNTY SUMMARIES OF AREA SOURCE EMISSIONS (1980) FOR VERMONT

**GCA / TECHNOLOGY DIVISION  
AREA SOURCE MASTER FILE SUMMARY  
FOR VERMONT**

COUNTY:J020	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.O.	EMISSIONS FACTOR	EMISSIONS ESTIMATE
C01	STAGE I GASOLINE EVAP	000009783 THOUS GAL		THC	8.35	00000041	
C02	STAGE II GASOLINE EVAP	000009776 THOUS GAL		THC	9.70	00000347	
C03	STORAGE TANK BREATHING	000009763 THOUS GAL		THC	1.00	00000005	
C04	GASOLINE LOADING/TRANSIT	000009783 THOUS GAL		THC	6.87	0000034	
C05	SM IND/COMM DEGREASING	0000029420 POPULATION		THC	7.59	00000112	
C06	DRY CLEANING	0000029420 POPULATION		NHC	1.50	00000022	
C07	ARCH SURFACE COATING	0000029420 POPULATION		NHC	4.60	00000068	
C08	AUTO BODY REFINISHING	0000025420 POPULATION		NHC	1.50	00000026	
C09	STL IND SURFACE COATING	0000000602 THOUS GAL		THC	4.11250	00000004	
C10	GRAPHIC ARTS	0000029420 POPULATION		NHC	0.60	00000012	
C11	CURR/CONS SOLVENT USE	0000029420 POPULATION		NHC	6.30	00000093	
C12	CUTBACK ASPHALT	0000000015 TON		THC	577.00	00000004	
C13	PESTICIDES	0000106666 LBS		NHC	0.90	00000005	
C14	ON-HIGHWAY LDV	000206300 THOUS VMT		NCX NHC	8.18 7.54	0000044 00000778	
C15	ON-HIGHWAY LDT1	000036753 THOUS VMT		NOX NHC	8.81 7.94	0000162 0000146	
C16	ON-HIGHWAY LDT2	000003219 THOUS VMT		NCX NHC	10.00 8.10	0000016 0000013	

TABLE B-1 (continued)

GC 4 / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0020	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION FACTOR I.D.	EMISSIONS ESTIMATE
017	017	ON-HIGHWAY HDG	000005902	THOUS VMT	NOX NHC	27.89 20.67 0000061
018	018	ON-HIGHWAY HDD	000002414	THOUS VMT	NOX NHC	57.88 4.57 0000079
019	019	ON-HIGHWAY MC	000013682	THOUS VMT	NOX NHC	1.58 13.67 0000011 0000094
020	020	RESIDENTIAL ANTHRACITE	000000696	TON	NOX THC	3.00 2.50 0000001
021	021	RESIDENTIAL BITUMINOUS	000000006	TON	NOX THC	3.00 20.00 0000001
022	022	RESIDENTIAL RESIDUAL OIL	000000000	THOUS GAL	NOX THC	18.00 1.00 0000000
023	023	RESIDENTIAL DISTILLATE	000013872	THOUS GAL	NOX THC	18.00 1.00 0000125
024	024	RESIDENTIAL NATURAL GAS	000000040	MIL CU FT	NOX THC	80.00 8.00 0000002
025	025	RESIDENTIAL LPG	000001677	THOUS GAL	NOX THC	7.50 0.75 0000006
026	026	RESIDENTIAL WOOD	000017615	TON	NOX NHC	1.00 5.00 0000044
027	027	COMM/INST ANTHRACITE	000000000	TON	NOX THC	10.00 3.00 0000000
028	028	COMM/INST BITUMINOUS	000000000	TON	NOX THC	6.00 3.00 0000000
029	029	COMM/INST RESIDUAL OIL	000000713	THOUS GAL	NOX THC	60.00 1.00 0000021

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION  
AREA SOURCE MASTER FILE SUMMARY  
FOR VERMONT

CATEGO <sup>R</sup> Y		CATEGO <sup>R</sup> Y	PROCESS	POLLUTANT EMISSION: I.D.	POLLUTANT EMISSION: ESTIMATE
NUMBER	DESCRIPTION	UNITS	THOUS GAL	NOX	NOX
339	COMM/INST DISTILLATE OIL	000000003	THOUS GAL	THC	1.00
031	COMM/INST NATURAL GAS	000000000	MIL CU FT	NOX	22.00
				THC	1.00
032	COMM/INST LPG	000000000	THOUS GAL	NOX	120.00
				THC	3.00
033	COMM/INST WOOD/OTHER	000000000	TON	NOX	11.00
				THC	0.75
034	INDUSTRIAL ANTHRACITE	000000000	TON	NOX	10.00
				THC	3.00
035	INDUSTRIAL BITUMINOUS	000000001	TON	NOX	18.00
				THC	0.00
036	INDUSTRIAL RESIDUAL OIL	000001025	THOUS GAL	NOX	15.00
				THC	1.00
037	INDUSTRIAL DISTILLATE OIL	000000000	THOUS GAL	NOX	60.00
				THC	1.00
038	INDUSTRIAL NATURAL GAS	000000000	MIL CU FT	NOX	22.00
				THC	1.00
039	INDUSTRIAL LPG	000000000	THOUS GAL	NOX	175.00
				THC	3.00
040	INDUSTRIAL WOOD/OTHER	000000000	TON	NOX	11.65
				THC	0.30
041	MILITARY AIRCRAFT	000000000	LND/TAKE OFF	NOX	10.00
				THC	3.00
042	CIVIL AIRCRAFT	0000023360	LND/TAKE OFF	NOX	5.16
				THC	27.10
					0.02
					0.41
					0.000005

TABLE B-1 (continued)

COUNTY	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS LND/TAKE OFF	POLLUTANT I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
0000020	043	COMMERCIAL AIRCRAFT	00000000	LND/TAKE OFF	NOX THC	13.55 24.50	0000000 0000000
	044	RAILROAD LOCOMOTIVES	000000136	THOUS GAL	NOX THC	370.00 94.00	0000025 0000006
	045	VESSELS - GASOLINE	000000201	THOUS GAL	NOX THC	32.72 887.06	0000003 0000069
	046	VESSELS - DISTILLATE OIL	000000000	THOUS GAL	NOX THC	270.00 50.00	0000009 0000009
	047	VESSELS - RESIDUAL OIL	000000000	THOUS GAL	NOX THC	270.00 50.00	0000009 0000009
	048	OFF-HIGHWAY VEHICLES-GAS	000000156	THOUS GAL	NOX THC	105.45 263.94	0000061 0000153
	049	OFF-HIGHWAY VEH - DIESEL	000000644	THOUS GAL	NOX THC	421.13 39.15	0000136 0000313
	050	ON-SITE INCINERATION	000003751	TON	NOX THC	2.13 39.59	0000004 0000075
	051	OPEN BURNING	000014378	TON	NOX THC	5.42 25.21	0000039 0000210
	052	STRUCTURAL FIRES	000000036	FIREs	NOX THC	17.00 107.00	0000003 0000002
	053	FIELD/SLASH BURNING	000000000	TON	NOX THC	4.00 23.50	0000000 0000000
	054	FOREST FIRES	000000033	ACRE	NOX THC	43.21 261.02	0000001 0000004
	999	COUNTY TOTALS			THC NHC NOX		0000014 0001370 000649

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: GLE	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.O.	EMISSION'S ESTIMATE
001	STAGE I GASOLINE EVAP	000014675 THOUS GAL	THC	8.35	0000061	
002	STAGE II GASOLINE EVAP	000014665 THOUS GAL	THC	9.70	0000071	
003	STORAGE TANK BREATHING	000014675 THOUS GAL	THC	1.00	0000007	
004	GASOLINE LOADING/TRANSIT	000014675 THOUS GAL	THC	6.87	0000050	
005	SM IND/COMM DEGREASING	000033310 POPULATION	THC	7.59	0000126	
006	DRY CLEANING	000033310 POPULATION	NHC	1.50	0000025	
207	ARCH SURFACE COATING	000033310 POPULATION	NHC	4.60	0000077	
008	AUTO BODY REFINISHING	000033310 POPULATION	NHC	1.90	0000032	
009	SM IND SURFACE COATING	000006602 THOUS GAL	THC	4,112.50	0000004	
010	GRAPHIC ARTS	000033310 POPULATION	NHC	0.80	0000013	
011	COM/H/CONS SOLVENT USE	000033310 POPULATION	NHC	6.30	0000105	
012	CUTBACK ASPHALT	000006013 TON	THC	577.00	0000004	
013	PESTICIDES	000008784. LBS	NHC	0.90	0000004	
014	ON-HIGHWAY LDV	000160600 THOUS VMT	NOX NHC	8.14 7.93	0000554 0000638	
015	ON-HIGHWAY LDV	00002647 THOUS VMT	NOX NHC	8.74 8.37	0000125 0000120	
016	ON-HIGHWAY LDV	000002309 THOUS VMT	NOX NHC	9.92 8.56	0000012 0000011	

TABLE B-1 (continued)

GCC / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0100	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.D.	EMISSIONS FACTOR ESTIMATE
	217	ON-HIGHWAY HOD	000004600 THOUS VMT		NOX NHC	27.58 21.82 0000063 0000050
018	ON-HIGHWAY HOD		000001622 THOUS VMT		NOX NHC	57.17 5.54 0000054 0000005
019	ON-HIGHWAY MC		0000010664 THCUS VMT		NOX NHC	1.50 14.23 0000009 0000076
020	RESIDENTIAL ANTHRACITE		0000001052 TON		NOX THC	3.00 2.50 0000002 0000001
021	RESIDENTIAL BITUMINOUS		000000000 TON		NOX THC	3.00 20.00 0000000 0000000
022	RESIDENTIAL RESIDUAL OIL		000000000 THOUS GAL		NOX THC	16.00 1.00 0000000 0000000
023	RESIDENTIAL DISTILLATE		0000018074 THCUS GAL		NOX THC	18.00 1.00 00000163 0000009
024	RESIDENTIAL NATURAL GAS		0000000052 MIL CU FT		NOX THC	80.00 8.00 0000002 0000000
025	RESIDENTIAL LPG		0000001734 THCUS GAL		NOX THC	7.50 0.75 0000007 0000001
026	RESIDENTIAL WOOD		0000003829 TON		NOX NHC	1.00 5.00 0000002 0000010
027	COMM/INST ANTHRACITE		000000000 TON		NOX THC	10.00 0.00 0000000 0000000
028	COMM/INST BITUMINOUS		000000000 TON		NOX THC	6.00 3.00 0000000 0000000
029	COMM/INST RESIDUAL OIL		0000000831 THCUS GAL		NOX THC	60.00 1.00 0000025 0000000

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION  
 AREA SOURCE MASTER FILE SUMMARY  
 FOR VERMONT

COUNTY: C100

CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	FOLLUTANT I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
030	COMM/INST DISTILLATE OIL	00000000 THOUS GAL		NOX	22.00	0000000
				THC	1.00	0000000
031	COMM/INST NATURAL GAS	00000000 MIL CU FT		NOX	126.00	0000000
				THC	8.00	0000000
032	COMM/INST LPG	00000000 THOUS GAL		NOX	11.00	0000000
				THC	0.75	0000000
033	COMM/INST WOOD/OTHER	00000000 TON		NOX	10.00	0000000
				THC	36.30	0000000
034	INDUSTRIAL ANTHRACITE	00000000 TON		NOX	18.00	0000000
				THC	0.30	0000000
035	INDUSTRIAL BITUMINOUS	000000001 TON		NOX	15.00	0000000
				THC	1.00	0000000
036	INDUSTRIAL RESIDUAL OIL	000001197 THOUS GAL		NOX	60.00	0000036
				THC	1.00	0000001
037	INDUSTRIAL DISTILLATE OIL	000000000 THOUS GAL		NOX	22.00	0000000
				THC	1.00	0000000
038	INDUSTRIAL NATURAL GAS	000000000 MIL CU FT		NOX	175.00	0000000
				THC	3.00	0000000
039	INDUSTRIAL LPG	000000000 THOUS GAL		NOX	11.65	0000000
				THC	0.30	0000000
040	INDUSTRIAL WOOD/OTHER	000000000 TON		NOX	10.00	0000000
				THC	36.00	0000000
041	MILITARY AIRCRAFT	000000000 LND/TAKE OFF		NOX	5.16	0000000
				THC	27.10	0000000
042	CIVIL AIRCRAFT	000000000 LND/TAKE OFF		NOX	0.02	0000000
				THC	0.41	0000006

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: C100	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS LND/TAKE OFF	POLLUTANT I.D.	EMISSIONS FACTOR ESTIMATE
043	COMMERCIAL AIRCRAFT	000000000 LAND TAKE OFF	NCX THC	13.55 24.90	0000000 0000000	
044	RAILROAD LOCOMOTIVES	0000000164 THOUS GAL	NOX THC	370.00 94.00	00000030 0000006	
045	VESSELS - GASOLINE	000000000 THOUS GAL	NCX THC	32.72 687.06	0000000 0000000	
046	VESSELS - DISTILLATE OIL	000000000 THOUS GAL	NOX THC	270.00 50.00	0000000 0000000	
047	VESSELS - RESIDUAL OIL	000000000 THOUS GAL	NOX THC	270.00 50.00	0000000 0000000	
048	OFF-HIGHWAY VEHICLES-GAS	0000000426 THOUS GAL	NCX THC	105.45 263.94	0000022 0000056	
049	OFF-HIGHWAY VEH - DIESEL	0000000333 THOUS GAL	NOX THC	421.13 35.15	0000070 0000007	
050	ON-SITE INCINERATION	000004514 TON	NOX THC	2.66 36.10	0000006 0000086	
051	OPEN BURNING	000030998 TON	NCX THC	5.42 29.03	0000044 0000450	
052	STRUCTURAL FIRES	000000051 FIRES	NOX THC	17.00 107.00	0000000 0000003	
053	FIELD/SLASH BURNING	000000000 TON	NCX THC	4.00 23.50	0000000 0000000	
054	FOREST FIRES	000000028 ACRE	NOX THC	43.21 261.02	0000001 0000004	
999	COUNTY TOTALS		THC RHC NCX		0000055 0001166 0001366	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTRY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.C.	EMISSION FACTOR	EMISSIONS ESTIMATE
001	STAGE I GASOLINE EVAP	0000012229 THOUS GAL	THC	8.35	00000051	
002	STAGE II GASOLINE EVAP	0000012221 THOUS GAL	THC	9.70	00000059	
003	STORAGE TANK BREATHING	0000012229 THOUS GAL	THC	1.00	00000006	
004	GASOLINE LOADING/TRANSIT	0000012229 THOUS GAL	THC	6.87	00000042	
005	SM IND/CMM DEGREASING	0000025814 POPULATION	THC	7.59	00000098	
006	DRY CLEANING	0000025814 POPULATION	NHC	1.50	00000119	
007	ARCH SURFACE COATING	0000025814 POPULATION	NHC	4.60	00000059	
008	AUTO BODY REFINISHING	0000025814 POPULATION	NHC	1.50	00000025	
009	SM IND SURFACE COATING	0000000001 THOUS GAL	THC	4.112.50	00000002	
010	GRAPHIC ARTS	0000025814 POPULATION	NHC	0.80	00000010	
011	COMM/CCNS SOLVENT USE	0000025814 POPULATION	NHC	6.30	00000081	
012	CUTBACK ASPHALT	0000000015 TON	THC	577.00	00000004	
013	PESTICIDES	0000012548 LBS	NHC	0.90	00000006	
014	ON-HIGHWAY LDV	0000203392 THOUS VKT	NOX NHC	8.16 7.75	00000031 00000089	
015	ON-HIGHWAY LDT1	0000036235 THOUS VKT	NOX NHC	8.77 8.15	00000159 00000148	
016	ON-HIGHWAY LDT2	0000003174 THOUS VKT	NOX NHC	9.87 8.60	00000116 00000014	

TABLE B-1 (continued)

SCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: 0160	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.D.	EMISSIONS ESTIMATE
	017	ON-HIGHWAY HDG	000005819 THOUS VMT	VMT	NOX NHC	27.87 21.11 CCO0961
018	ON-HIGHWAY HDD	000002380 THOUS VMT	VMT	NOX NHC	57.69 5.39 CCO0069	
019	ON-HIGHWAY MC	000013465 THOUS VMT	VMT	NOX NHC	1.54 13.93 CCO0010 CCO094	
020	RESIDENTIAL ANTHRACITE	000001357 TON	TON	NOX THC	3.00 2.50 CCO002 CCO002	
021	RESIDENTIAL BITUMINOUS	000000000 TON	TON	NCX THC	3.00 20.00 CCO003 CCO003	
022	RESIDENTIAL RESIDUAL OIL	000000000 THOUS GAL	GAL	NOX THC	18.00 1.00 CCO000 CCO000	
023	RESIDENTIAL DISTILLATE	000013207 THOUS GAL	GAL	NCX THC	18.00 1.00 CCO0115 CCO0007	
024	RESIDENTIAL NATURAL GAS	000000254 MIL CU FT	MIL CU FT	NOX THC	80.00 6.00 CCO010 CCO0001	
025	RESIDENTIAL LPG	000001792 THOUS GAL	GAL	NOX THC	7.50 0.75 CCO007 CCO001	
026	RESIDENTIAL WOOD	000011684 TON	TON	NOX NHC	1.00 5.00 CCO009 CCO044	
027	COMM/IND ANTHRACITE	000000000 TON	TON	NOX THC	10.00 0.00 CCO000 CCO000	
028	COMM/IND RESIDUAL OIL	000000090 TON	TON	NOX THC	6.00 3.00 CCO000 CCO000	
029	COMM/IND NATURAL GAS	000000594 THOUS GAL	GAL	NOX THC	60.00 1.00 CCO0018 CCO000	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION ARIA SOURCE MASTERS FILE SUMMARY FOR VERMONT						
COUNTY:0160	CATEGORY	PROCESS NUMBER	DESCRIPTION	RATE 00000000 THOUS GAL	UNITS 1.0.	POLLUTANT EMISSION FACTOR
030	COMM/INST DISTILLATE OIL				NOX THC	22.00 1.00 0000000 0000000
031	CITY/VINST NATURAL GAS			00000000 MIL CU FT	NOX THC	120.00 8.00 0000000 0000000
032	COMM/INST LPG			00000000 THOUS GAL	NOX THC	11.00 0.75 0000000 0000000
033	COMM/INST WOOD/OTHER			00000000 TON	NOX THC	10.00 36.00 0000000 0000000
034	INDUSTRIAL ANTHRACITE			00000000 TON	NOX THC	18.00 0.00 0000000 0000000
035	INDUSTRIAL BITUMINOUS			00000001 TON	NOX THC	15.00 1.00 0000000 0000000
036	INDUSTRIAL RESIDUAL OIL	000000854	THOUS GAL		NOX THC	60.00 1.00 0000026 0000000
037	INDUSTRIAL DISTILLATE OIL	000000000	THOUS GAL		NOX THC	22.00 1.00 0000000 0000000
038	INDUSTRIAL NATURAL GAS	000000000	MIL CU FT		NOX THC	175.00 3.30 0000000 0000000
039	INDUSTRIAL LPG			00000000 THOUS GAL	NOX THC	11.65 0.30 0000000 0000000
040	INDUSTRIAL WOOD/OTHER			00000000 TON	NOX THC	10.00 36.00 0000000 0000000
041	MILITARY AIRCRAFT			00000000 LND/TAKE OFF	NOX THC	5.16 27.0 0000000 0000000
042	CIVIL AIRCRAFT			00000000 LND/TAKE OFF	NOX THC	0.02 0.41 0000000 0000002

TABLE B-1 (continued)

SC: TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0160	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS I.D.	POLLUTANT EMISSION FACTOR	EMISSIONS ESTIMATE
043	COMMERCIAL AIRCRAFT	00000000 LIQ/TAKE OFF	NOX THC	13.55 24.50	00000000 00000000	
044	RAILROAD LOCOMOTIVES	000000300 THOUS GAL	NOX THC	370.00 94.00	00000056 0000014	
045	VESSELS - GASOLINE	000000040 THOUS GAL	NOX THC	32.72 887.06	0000001 0000016	
046	VESSELS - DISTILLATE OIL	000000000 THOUS GAL	NOX THC	270.00 50.00	00000000 00000000	
047	VESSELS - RESIDUAL OIL	000000003 THOUS GAL	NOX THC	270.00 50.00	00000000 00000000	
048	OFF-HIGHWAY VEHICLES-GAS	000000529 THOUS GAL	NOX THC	105.45 263.94	00000026 00000070	
049	OFF-HIGHWAY VEH - DIESEL	000000556 THOUS GAL	NOX THC	421.13 39.15	00000117 0000011	
050	ON-SITE INCINERATION	000003295 TON	NOX THC	2.43 40.06	0000004 0000066	
051	OPEN BURNING	000012621 TON	NOX THC	5.55 29.50	0000035 0000163	
052	STRUCTURAL FIRES	000000042 FIRES	NOX THC	17.60 107.00	0000000 0000002	
053	FIELD/SLASH BURNING	000000000 TON	NOX THC	4.00 23.50	0000000 0000000	
054	FOREST FIRES	000000040 ACRE	NOX THC	43.21 261.02	0000001 0000005	
999	COUNTY TOTALS		THC NHC NOX		0000044 0001356 0001599	

TABLE B-1 (continued)  
 GCA / TECHNOLOGY DIVISION  
 AREA SOURCE MASTER FILE SUMMARY  
 FOR VERMONT

COUNTY: C180	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESSES RATE	UNITS	POLLUTANT I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
001	STAGE I	GASOLINE EVAP	000051364	THOUS GAL	THC	8.25	0000214
002	STAGE II	GASOLINE EVAP	000051326	THOUS GAL	THC	9.70	0000249
003	STORAGE TANK BREATHING		000051364	THOUS GAL	THC	1.00	0000026
004	GASOLINE LOADING/TRANSIT		000051364	THOUS GAL	THC	6.67	0000176
005	SM IND/COLUMN DEGREASING		000115598	PCPOPULATION	THC	7.59	0000439
006	DRY CLEANING		000115598	POPULATION	NHC	1.50	0000087
007	ARCH SURFACE COATING		000115598	POPULATION	NHC	4.60	0000266
008	AUTO BODY REFINISHING		000115598	POPULATION	NHC	1.90	0000110
009	SM IND SURFACE COATING		000000006	THOUS GAL	THC	4.11250	0000012
010	GRAPHIC ARTS		000115598	POPULATION	NHC	0.80	0000046
011	COAT/COAT SOLVENT USE		000115598	POPULATION	NHC	6.30	0000364
012	CUTBACK ASPHALT		000000017	TON	THC	577.00	0000005
013	PESTICIDES		000002510	LBS	NHC	0.90	0000001
014	ON-HIGHWAY LDV		000233431	THOUS VMT	NOX NHC	6.12 8.27	0000544b 3609566
015	ON-HIGHWAY LDV1		000041587	THOUS VMT	NOX NHC	8.68 8.68	0000181 0000161
016	ON-HIGHWAY LDV2		00003643	THOUS VMT	NOX NHC	9.51 9.53	0000018 2000017

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT							
COUNTY: 0160	CATEGORY	CATEGORY	PROCESS RATE	UNITS	POLLUTANT EMISSION X.D.	EMISSIONS	ESTIMATE
C17	NON-HIGHWAY HGG	DESCRIPTION	000006578 THOUS VMT	NOX NHC	27.29 22.72	0000091 00000376	
018	ON-HIGHWAY HGG		000002732 THOUS VMT	NOX NHC	57.02 6.17	0000018 0000066	
019	ON-HIGHWAY MC		000015481 THOUS VMT	NOX NHC	1.50 14.67	0000012 0000114	
020	RESIDENTIAL ANTHRACITE		000000916 TON	NOX THC	3.00 2.50	0000001 0000001	
021	RESIDENTIAL BITUMINOUS		000000000 TON	NOX THC	3.00 20.00	0000000 0000000	
022	RESIDENTIAL RESIDUAL OIL		000000000 THOUS GAL	NOX THC	18.00 1.00	0000000 0000000	
023	RESIDENTIAL DISTILLATE		0000046409 THOUS GAL	NOX THC	18.00 1.30	0000418 0000023	
024	RESIDENTIAL NATURAL GAS		000003772 MIL CU FT	NOX THC	60.00 8.00	0000151 0000015	
025	RESIDENTIAL LFG		000004426 THOUS GAL	NOX THC	7.50 0.75	0000017 0000002	
026	RESIDENTIAL WOOD		0000009330 TON	NOX NHC	1.00 5.00	0000005 0000023	
027	COMM/INST ANTHRACITE		000000000 TON	NOX THC	10.00 0.00	0000000 0000000	
028	COMM/INST BITUMINOUS		000000000 TON	NOX THC	6.00 3.00	0000000 0000000	
029	COMM/INST RESIDUAL OIL		0000062731 THOUS GAL	NOX THC	60.00 1.00	0000082 0000011	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION APEA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0180	CATEGORY	DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.L.	EMISSIONS ESTIMATE
030	COMM/INST DISTILLATE CIL	000000000 THOUS GAL		NOX THC	22.00 1.00	0000000
031	COMM/INST NATURAL GAS	000000000 MIL CU FT		NOX THC	120.00 8.00	0000000
032	COMM/INST LPG	000000000 THOUS GAL		NOX THC	11.00 0.75	0000000
033	COMM/INST WOOD/OTHER	000000000 TON		NOX THC	10.00 36.00	0000000
034	INDUSTRIAL ANTHRACITE	000000000 TON		NOX THC	18.00 0.00	0000000
035	INDUSTRIAL BITUMINOUS	000000003 TON		NOX THC	15.00 1.00	0000000
036	INDUSTRIAL RESIDUAL OIL	000003931 THOUS GAL		NOX THC	60.00 1.00	0000000
037	INDUSTRIAL DISTILLATE OIL	000000000 THOUS GAL		NOX THC	22.00 1.00	0000000
038	INDUSTRIAL NATURAL GAS	000000000 MIL CU FT		NOX THC	175.00 3.00	0000000
039	INDUSTRIAL LPG	000000000 THOUS GAL		NOX THC	11.65 0.30	0000000
040	INDUSTRIAL WOOD/OTHER	000000000 TON		NOX THC	10.00 36.00	0000000
041	MILITARY AIRCRAFT	000005222 LND/TAKE OFF		NOX THC	9.16 27.10	0000042 0000125
042	CIVIL AIRCRAFT	000061760 LND/TAKE OFF		NOX THC	0.02 0.41	0000001 0000017

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: C180	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION FACTOR I.D.	EMISSIONS ESTIMATE
	C43	COMMERCIAL AIRCRAFT	0000006345	LND/TAKE OFF	NOX THC	13.55 24.90 0000043 0000079
044	RAILROAD LOCOMOTIVES		0000000219	THOUS GAL	NOX THC	370.76 94.00 0000041 0000010
045	VESSELS - GASOLINE		0000000463	THOUS GAL	NOX THC	32.72 887.06 0000006 0000205
046	VESSELS - DISTILLATE OIL		0000000000	THOUS GAL	NOX THC	270.00 50.00 0000000 0000000
047	VESSELS - RESIDUAL OIL		0000000000	THOUS GAL	NOX THC	270.00 50.00 0000000 0000000
048	OFF-HIGHWAY VEHICLES-GAS		0000001420	THOUS GAL	NOX THC	105.45 263.94 0000075 0000167
049	OFF-HIGHWAY VEH - DIESEL		0000010622	THOUS GAL	NOX THC	421.13 39.15 000237 000208
C50	ON-SITE INCINERATION		0000015381	TON	NOX THC	2.34 38.75 0000018 0000296
051	OPEN BURNING		0000057317	TON	NOX THC	5.51 29.03 0000058 0000832
052	STRUCTURAL FIRES		0000000109	FIRES	NOX THC	17.00 107.00 0000001 0000005
053	FIELD/SLASH BURNING		0000002000	TON	NOX THC	4.00 23.50 0000000 0000000
054	FOREST FIRES		0000000009	ACRE	NOX THC	43.21 261.92 0000000 0000001
999	COUNTY TOTALS				THC NOX NOX	0003133 0002259 0004744

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0200	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.O.	EMISSION FACTOR
001	STAGE I GASOLINE EVAP	000002446 THOUS GAL	THC	8.35	00000010	
002	STAGE II GASOLINE EVAP	000002444 THOUS GAL	THC	9.70	00000012	
003	STORAGE TANK BREATHING	000002446 THOUS GAL	THC	1.00	00000001	
004	GASOLINE LOADING/TRANSPORT	000002446 THOUS GAL	THC	6.87	00000008	
005	SM IND/COMM DEGREASING	000006300 POPULATION	THC	7.59	00000024	
006	DRY CLEANING	000006300 POPULATION	NHC	1.50	00000005	
007	ARCH SURFACE COATING	000006300 POPULATION	NHC	4.60	00000014	
008	AUTO BODY REFINISHING	000006300 POPULATION	NHC	1.90	00000006	
009	SM IND SURFACE COATING	000000000 THOUS GAL	THC	4.112.50	00000000	
010	GRAPHIC ARTS	000006300 POPULATION	NHC	0.80	00000003	
011	COMM/CONS SOLVENT USE	000006300 POPULATION	NHC	6.30	00000020	
012	CUTBACK ASPHALT	000000009 TON	THC	577.00	00000003	
013	PESTICIDES	000062741 LBS	NHC	0.90	00000028	
014	ON-HIGHWAY LDV	000105006 THOUS VMT	NOX NHC	8.22 7.05	0000432 0000370	
015	ON-HIGHWAY LDT1	000018707 THOUS VMT	NOX NHC	8.84 7.48	0000083 0000070	
016	ON-HIGHWAY LDT2	000001639 THOUS VMT	NOX NHC	10.28 7.32	0000008 0000006	

TABLE B-1 (continued)

GCC / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: 0200	CATEGORY NUMBER	DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION FACTOR I.D.	EMISSIONS ESTIMATE
017	0N-HIGHWAY HDD	00000330C4 THOUS VMT	NOX NHC	28.60 18.71	0000043 0000028	
018	0N-HIGHWAY HDD	000001229 THOUS VMT	NOX NHC	58.80 4.57	0000036 0000003	
019	0N-HIGHWAY MC	000006964 THOUS VMT	NOX NHC	1.49	0000005	
020	RESIDENTIAL ANTHRACITE	000000009 TON	NOX THC	12.92	0000045	
021	RESIDENTIAL BITUMINOUS	000000000 TON	NOX THC	3.00 2.50	0000000 0000000	
022	RESIDENTIAL RESIDUAL OIL	000000000 THOUS GAL	NOX THC	3.00 20.00	0000000 0000000	
023	RESIDENTIAL DISTILLATE	000003466 THOUS GAL	NOX THC	18.00 1.00	0000000 0000000	
024	RESIDENTIAL NATURAL GAS	000000000 MIL CU FT	NOX THC	18.00 1.00	0000031 0000002	
025	RESIDENTIAL LPG	000000521 THOUS GAL	NOX THC	80.00 8.00	0000000 0000000	
026	RESIDENTIAL WOOD	000008564 TON	NOX NHC	7.50 0.75	0000002 0000000	
027	CITY/INST ANTHRACITE	000000000 TON	NOX THC	1.00 0.00	0000004 0000021	
028	COMM/INST BITUMINOUS	000000000 TON	NOX THC	10.00 0.00	0000000 0000000	
029	COMM/INST RESIDUAL OIL	000000119 THOUS GAL	NOX THC	60.00 1.00	0000004 0000003	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTRY:0200		CATEGORY	PROCESS	POLLUTANT	EMISSIONS	EMISSIONS
NUMBER	DESCRIPTION	RATE	UNITS	I.D.	NOX	ESTIMATE
030	COMM/INST DISTILLATE OIL	000000000 THOUS GAL		THC	22.00	0000000
031	COMM/INST NATURAL GAS	000000000 MIL CU FT		NOX	1.00	0000000
032	COMM/INST LPG	000000000 THOUS GAL		NOX	120.00	0000000
				THC	8.00	0000000
033	COMM/INST WOOD/OTHER	000000000 TON		NOX	11.00	0000000
				THC	0.75	0000000
034	INDUSTRIAL ANTHRACITE	000000000 TON		NOX	10.00	0000000
				THC	36.00	0000000
035	INDUSTRIAL BITUMINOUS	000000000 TON		NOX	18.00	0000000
				THC	0.00	0000000
036	INDUSTRIAL RESIDUAL OIL	0000000171 THOUS GAL		NOX	15.00	0000000
				THC	1.00	0000000
037	INDUSTRIAL DISTILLATE OIL	000000000 THOUS GAL		NOX	60.00	0000005
				THC	1.00	0000000
038	INDUSTRIAL NATURAL GAS	000000000 MIL CU FT		NOX	22.00	0000000
				THC	1.00	0000000
039	INDUSTRIAL LPG	000000000 THOUS GAL		NOX	175.00	0000000
				THC	3.00	0000000
040	INDUSTRIAL VOC/OTHER	000000000 TON		NOX	11.65	0000000
				THC	0.30	0000000
041	MILITARY AIRCRAFT	000000000 LND/TAKE OFF		NOX	10.00	0000000
				THC	36.00	0000000
042	CIVIL AIRCRAFT	000002920 LND/TAKE OFF		NOX	9.16	0000000
				THC	27.10	0000000
				NOX	0.02	0000000
				THC	0.41	0000001

TABLE B-1 (continued)

GC <sub>2</sub> / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0200	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSIONS FACTOR	EMISSIONS ESTIMATE
	043	COMMERCIAL AIRCRAFT	00000000 LANDFAKE OFF	NOX THC	13.55 24.90	0000000 0000000
044	RAILROAD LOCOMOTIVES	0000000136 THOUS GAL	NOX THC	370.00 94.00	0000025 0000006	
045	VEHICLES - GASOLINE	0000000040 THOUS GAL	NOX THC	867.06 867.06	00000018 00000018	
046	VEHICLES - DISTILLATE OIL	0000000000 THOUS GAL	NOX THC	270.00 50.00	0000000 0000000	
047	VEHICLES - RESIDUAL OIL	0000000009 THOUS GAL	NOX THC	270.00 50.00	0000000 0000000	
048	OFF-HIGHWAY VEHICLES-GAS	0000000162 THOUS GAL	NOX THC	105.45 263.94	0000009 0000021	
049	OFF-HIGHWAY VEH - DIESEL	0000000924 THOUS GAL	NOX THC	421.13 39.15	0000026 0000002	
050	ON-SITE INCINERATION	0000000871 TON	NOX THC	2.30 39.64	0000001 0000017	
051	OPEN BURNING	000003165 TON	NOX THC	5.06 28.44	0000008 0000045	
052	STRUCTURAL FIRES	000000017 FIRES	NOX THC	17.00 107.06	0000000 0000001	
053	FIELD/SLASH BURNING	000000003 TON	NOX THC	4.00 23.50	0000003 0000003	
054	FOREST FIRES	0000000200 ACRE	NOX THC	43.21 261.02	0000004 0000026	
999	COUNTY TOTALS		THC NOX NHC		0000197 0000619 0000327	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION  
AREA SOURCE MASTER FILE SUMMARY  
FOR VERMONT

COUNTY:0240	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
001	STAGE I GASOLINE EVAP	000012229 THOUS GAL	THC	8.35	0000051		
002	STAGE II GASOLINE EVAP	000012221 THOUS GAL	THC	9.70	0000059		
003	STORAGE TANK BREATHING	000012229 THOUS GAL	THC	1.00	0000006		
004	GASCLINE LOADING/TRANSIT	000012229 THOUS GAL	THC	6.87	0000042		
005	SM IND/COLUMN DEGREASING	000034800 POPULATION	THC	7.59	0000132		
006	DRY CLEANING	000034800 POPULATION	NHC	1.50	0000026		
007	ARCH SURFACE COATING	000034800 POPULATION	NHC	4.60	0000060		
008	AUTO BODY REFINISHING	000034800 POPULATION	NHC	1.90	0000033		
009	SM IND SURFACE COATING	00000002 THOUS GAL	THC	4.112.50	0000004		
010	GRAPHIC ARTS	000034800 POPULATION	NHC	0.80	0000014		
011	COM'N/CONS SOLVENT USE	000034800 POPULATION	NHC	6.30	0000110		
012	CUTBACK ASPHALT	000000015 TON	THC	577.00	0000004		
013	PESTICIDES	0000008784 LBS	NHC	0.90	0000004		
014	ON-HIGHWAY LDV	000211631 THOUS VMT	NOX NHC	8.18 7.62	0000066 0000077		
015	ON-HIGHWAY LDV1	000037703 THOUS VMT	NOX NHC	8.77 8.02	0000165 0000151		
016	ON-HIGHWAY LDV2	000003302 THOUS VMT	NOX NHC	9.57 8.51	0000016 0000014		

TABLE B-1 (continued)

SCD / TECHNOLOGY DIVISION AREA SOURCE EAS-TK FILE SUMMARY FOR VERMONT							
COUNTY: 0240	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
017	ON-HIGHWAY HDD	000000054 THOUS VBT	NOX NHC	27.90 20.62	0000085 0000063		
018	ON-HIGHWAY HDD	000002477 THOUS VBT	NOX NHC	57.38 5.51	0000071 0000067		
019	ON-HIGHWAY VC	000014035 THOUS VBT	NOX NHC	1.54 13.74	0000011 0000097		
020	RESIDENTIAL ANTHRACITE	000001741 TON	HCX THC	3.00 2.50	0000003 0000002		
021	RESIDENTIAL BUTYLICOS	000000000 TON	NOX THC	3.00 20.00	0000000 0000009		
022	RESIDENTIAL RESIDUAL OIL	000000000 THOUS GAL	NOX THC	18.00 1.60	0000000 0000003		
023	RESIDENTIAL DISTILLATE	000016764 THOUS GAL	NOX THC	18.00 1.20	0000151 0000038		
024	RESIDENTIAL NATURAL GAS	000000045 MIL CU FT	ACX THC	66.00 8.00	0000019 0000002		
025	RESIDENTIAL LPG	000001589 THOUS GAL	NOX THC	7.50 0.75	0000006 0000001		
026	RESIDENTIAL WCO	000014500 TON	NOX NHC	1.00 5.00	0000007 0000037		
027	COMMERCIAL ANTHRACITE	000000000 TON	NOX THC	10.00 0.00	0000000 0000000		
028	COMMERCIAL FILTERED	000000000 TON	NOX THC	6.00 3.00	0000000 0000000		
029	COMMERCIAL RESIDUAL OIL	0000000831 THOUS GAL	NOX THC	60.00 1.00	0000025 0000000		

TABLE B-1 (continued)

EPA / TECHNOLOGY DIVISION AREA SOURCE MODEL FILE SUMMARY FOR VEHICLE						
CONT. IV : 0224C	CATEGORY	DESCRIPTION	PRODUCT RATE	UNITS	POLLUTANT EMISSION FACCTOR I.D.	EMISSIONS ESTIMATE
C30	COMM/IND DISTILLATE OIL	00000000 THOUS GAL	NOX	22.00	0000000	
			THC	1.00	0000000	
C31	COP/IND NATURAL GAS	00000000 MIL CUB FT	NOX	120.00	0000000	
			THC	8.00	0000000	
C32	COMM/IND LPG	00000000 THOUS GAL	NOX	11.00	0000000	
			THC	0.75	0000000	
C33	COMM/IND WOOD/OTHER	00000000 TON	NOX	16.00	0000000	
			THC	36.00	0000000	
C34	INDUSTRIAL ANTHRACITE	056000000 TON	NOX	18.00	0000000	
			THC	0.00	0000000	
C35	INDUSTRIAL BIOMASS	000000001 TON	NOX	15.70	0000000	
			THC	1.00	0000000	
C36	INDUSTRIAL RESIDUAL OIL	300001197 THOUS GAL	NOX	60.00	0000036	
			THC	1.00	0000001	
C37	INDUSTRIAL DISTILLATE OIL	000000000 THOUS GAL	NOX	22.00	0000001	
			THC	1.00	0000000	
C38	INDUSTRIAL NATURAL GAS	000000000 MIL CUB FT	NOX	175.00	0000000	
			THC	3.00	0000000	
C39	INDUSTRIAL LPG	000000000 THOUS GAL	NOX	11.65	0000000	
			THC	0.30	0000000	
C40	INDUSTRIAL WOOD/OTHER	000000000 TON	NOX	10.00	0000000	
			THC	3.00	0000000	
C41	MILITARY AIRCRAFT	000000000 LAND/TAKE OFF	NOX	9.16	0000000	
			THC	27.10	0000000	
C42	CIVIL AIRCRAFT	000017520 LAND/TAKE OFF	NOX	0.32	0000000	
			THC	0.41	0000004	

TABLE B-1 (continued)

GC : / TECHNOLOGY DIVISION  
 AREA SOURCE REGISTRY FILE SUMMARY  
 FOR VERMONT

COUNTY:0246	CATEGORY	CATEGORY DESCRIPTION	PROCESS RATE UNITS	UNITS I.D.	POLLUTANT FACTOR	EMISSIONS	EMISSIONS ESTIMATE
043	COMMERCIAL AIRCRAFT	0000000000 LBS/TAKE OFF			NOX THC	13.55 24.90	3000000 0000000
044	RAILROAD LOCOMOTIVES	000000329 THOUS GAL			NOX THC	370.00 94.00	0000061 0060615
045	VESSELS - GASOLINE	0000000262 THOUS GAL			NOX THC	32.72 687.06	0000004 0000116
046	VESSELS - DISTILLATE OIL	0000000000 THOUS GAL			NOX THC	270.00 50.00	3000000 0000000
047	VESSELS - RESIDUAL OIL	0000000000 THOUS GAL			NOX THC	270.00 50.00	3000000 0000000
048	OFF-HIGHWAY VEHICLES-GAS	000001122 THOUS GAL			NOX THC	106.45 263.94	0000059 0000148
049	OFF-HIGHWAY VEH - DIESEL	000000611 THOUS GAL			NOX THC	421.13 39.15	0000129 0000012
050	ON-SITE INCINERATION	000004347 TON			NOX THC	2.27 40.33	0000005 0000087
051	OPEN BURNING	000016456 TON			NOX THC	5.54 29.13	0000047 0000247
052	STRUCTURAL FIRES	000000056 FIRES			NOX THC	17.00 107.00	0000000 0000003
053	FIELD/SLASH BURNING	0000000000 TON			NOX THC	4.00 23.50	0000000 0000000
054	FOREST FIRES	000000026 ACRE			NOX THC	43.21 261.02	0000001 0000004
999	COUNTY TOTALS				THC NH3 NOX		0000548 0001443 0301767

TABLE B-1 (continued)

6CA / TECHNOLOGY DIVISION AREA SOURCE PASTURE FILE SURVEY FOR VTPCOT						
COUNTRY:0260	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.O.	EMISSIONS ESTIMATE
001	STATE 1 GASOLINE EVAP	0.60002446 THOUS GAL	THC	8.75	0000010	
002	STATE 11 GASOLINE EVAP	0.00002446 THOUS GAL	THC	9.70	0000012	
003	STORAGE TANK BREATHING	0.00002446 THOUS GAL	THC	1.00	0000001	
004	GASOLINE LOADING/TRANSIT	0.00002446 THOUS GAL	THC	6.87	0000006	
005	SM LU/COMM DEGREASING	0.00004593 POPULATION	THC	7.59	0000017	
006	DRY CLEANING	0.00004593 POPULATION	NHC	1.50	0000003	
007	AFTER SURFACE COATING	0.00004593 POPULATION	NHC	4.60	0000011	
008	AUTO BODY REFINISHING	0.00004593 POPULATION	NHC	4.00	0000004	
009	SM IND SURFACE COATING	0.00000000 THOUS GAL	THC	4.112.50	0000000	
010	GRAFFITI ARTS	0.00004593 POPULATION	NHC	0.80	0000002	
011	COMM/CONS SOLVENT USE	0.00004593 POPULATION	NHC	6.30	0000014	
012	CUTBACK ASPHALT	0.00000002 TON	THC	577.00	0000001	
013	PESTICIDES	0.000062741 LBS	NHC	0.90	0000028	
014	ON-HIGHWAY LDV	0.000041055 THOUS VMT	NOX NHC	6.41 7.41	00000173 0000152	
015	On-HIGHWAY LDV	0.000007314 THOUS VMT	NOX NHC	9.00 7.79	0000033 0000025	
016	ON-HIGHWAY LDV	0.000000541 THOUS VMT	SOX NHC	8.76 8.76	0000000 0000003	

TABLE B-1 (continued)

GCC / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: 0260	CATEGORY NUMBER	DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION FACTOR	EMISSIONS ESTIMATE
			000001174 THOUS VMT	NOX NHC	1.D.	
018	ON-HIGHWAY H/D	000000460 THOUS VMT	NOX NHC	29.41 19.43	0000017 0000012	
019	ON-HIGHWAY M/C	000002722 THOUS VMT	NOX NHC	60.22 3.54	0000014 0000001	
020	RESIDENTIAL ANTHRACITE	00000000 TON	NOX THC	1.18 13.57	0000002 0000016	
021	RESIDENTIAL BITUMINOUS	000000000 TON	NOX THC	3.00 2.50	0000003 0000000	
022	RESIDENTIAL RESIDUAL OIL	000000000 THOUS GAL	NOX THC	16.00 1.00	0000009 0000000	
023	RESIDENTIAL DISTILLATE	000001833 THOUS GAL	NOX THC	3.00 1.00	0000000 0000000	
024	RESIDENTIAL NATURAL GAS	000000000 MIL CU FT	NOX THC	18.00 1.00	0000016 0000001	
025	RESIDENTIAL LPG	000000216 THOUS GAL	NOX THC	80.00 3.00	0000000 0000000	
026	RESIDENTIAL WOOD	000000000 TON	NOX NHC	7.50 0.75	0000001 0000000	
027	COM/IND ANTHRACITE	000020000 TON	NOX THC	1.00 0.00	0000003 0000000	
028	COM/IND BITUMINOUS	000000000 TON	NOX THC	10.00 0.00	0000000 0000000	
029	COM/IND RESIDUAL OIL	000000119 THOUS GAL	NOX THC	6.00 1.00	0000000 0000000	

TABLE B-1 (continued)

GCA / INVENTORY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY	CATEGORY	DESCRIPTION	PROCESS	POLLUTANT EMISSION 1.E.	EMISSIONS FACTOR	EMISSIONS ESTIMATE
030	INDUSTRY	COMM/INST DISTILLATE OIL	00000000 THOUS GAL	NOX THC	22.00 1.00	00000000 00000000
031	COMM/INST NATURAL GAS		00000000 MIL CUB FT	NOX THC	120.00 2.00	00000000 00000000
032	COMM/INST LPG		00000000 THOUS GAL	NOX THC	11.00 0.75	00000000 00000000
033	CORR/INST WOOD/OTHER		00000000 TON	NOX THC	10.00 36.00	00000000 00000000
034	INDUSTRIAL ANTHRACITE		00000000 TON	NOX THC	18.00 0.30	00000000 00000000
035	INDUSTRIAL BITUMINOUS		00000000 TON	NOX THC	15.00 1.00	00000000 00000000
036	INDUSTRIAL RESIDUAL OIL		000000111 THOUS GAL	NOX THC	60.00 1.00	00000005 00000000
037	INDUSTRIAL DISTILLATE OIL		000000000 MIL CUB FT	NOX THC	22.00 1.00	00000000 00000000
038	INDUSTRIAL NATURAL GAS		000000000 THOUS GAL	NOX THC	175.00 3.00	00000000 00000000
039	INDUSTRIAL LFG		000000000 TON	NOX THC	11.65 0.30	00000000 00000000
040	INDUSTRIAL WOOD/OTHER		000000000 MIL CUB FT	NOX THC	10.00 36.00	00000000 00000000
041	MILITARY AIRCRAFT	000000000 LND/TAKE OFF		NOX THC	9.16 27.10	00000000 00000000
042	CIVIL AIRCRAFT	00000510 LND/TAKE OFF		NOX THC	0.92 0.41	00000000 00000001

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FIRE VEHICLE						
COUNTY: 0260	CATEGORY	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.D.	EMISSIONS ESTIMATE
043	COMMERCIAL AIRCRAFT	00000000 LANDTAKE OFF	NOX THC	13.55 24.90	00000000 00000000	
044	RAILROAD LOCOMOTIVES	000000027 THOUS GAL	NOX THC	370.00 94.30	00000005 00000001	
045	VESSELS - GASLINE	000000626 THOUS GAL	NOX THC	32.72 887.06	00000010 30000276	
046	VESSELS - DISTILLATE OIL	000000000 THOUS GAL	NOX THC	270.00 50.00	00000000 00000000	
047	VESSELS - RESIDUAL OIL	000000090 THOUS GAL	NOX THC	270.00 50.00	00000000 00000000	
048	OFF-HIGHWAY VEHICLES-GAS	0000000147 THOUS GAL	NOX THC	105.45 263.94	00000068 00000119	
049	OFF-HIGHWAY VEH - DIESEL	000000066 THOUS GAL	NOX THC	421.13 39.15	00000014 00000001	
050	ON-SITE INCINERATION	0000000539 TON	NOX THC	3.71 44.53	00000001 00000012	
051	OPEN BURNING	000002185 TON	NOX THC	5.49 29.29	00000005 00000032	
052	STRUCTURAL FIRES	000000008 FIRES	NOX THC	17.00 107.00	00000000 00000000	
053	FILLET/SLASH BURNING	000000300 TON	NOX THC	4.00 23.50	00000000 30000000	
054	FOREST FIRES	000000200 ACRE	NOX THC	43.21 261.02	00000004 00000026	
959	COUNTY TOTALS		THC THC NOX	00003420 00000277 00000316		

TABLE B-1 (continued)

**OCIA / TECHNOLOGY DIVISION,  
KREA SOURCE PLASTIR FILE SUMMARY  
FOR VERMONT**

CATEGORY NUMBER	CATEGORY DESCRIPTION	PRODUCT RATE	UNITS	POLLUTANT EMISSION FACTOR L.D.	EMISSIONS ESTIMATE
001	STAGE I GASOLINE EVAP	0000073337	THOUS GAL	THC	8.35 0000031
002	STAGE II GASOLINE LVAP	0000073332	THOUS GAL	THC	9.70 0000036
003	STORAGE TANK BREATHING	0000073337	THOUS GAL	THC	1.60 0000004
004	GASOLINE LOADING/TRANSIT	0000073337	THOUS GAL	THC	6.27 0000025
005	SP. INDOOR DREASING	000016769	POPULATION	THC	7.59 0000064
006	DRY CLEANING	000016769	POPULATION	THC	1.50 0000013
007	ARCH SURFACE COATING	000016769	POPULATION	NHC	4.60 0000039
008	AUTO BODY REFINISHING	000016769	POPULATION	NHC	1.30 0000015
009	SP INDO SURFACE COATING	000000001	THOUS GAL	THC	4.112.50 0000062
010	GRAPHIC ARTS	000016769	POPULATION	NHC	0.40 0000007
011	CURR/CCTS SURVANT USE	000016769	POPULATION	NHC	6.30 0000053
012	CUTBACK ASPHALT	000000009	TON	THC	577.90 0000035
013	PESTICIDES	0000020705	LBS	NHC	9.40 0002009
014	ON-HIGHWAY LDV	000120495	THOUS VMT	NOX NHC	6.20 0000494 7.43 0003444
015	OFF-HIGHWAY LDV	000021467	THOUS VMT	NOX NHC	8.79 0000094 7.85 0000064
016	OFF-HIGHWAY LGV	00000180	THOUS VMT	NOX NHC	10.25 0000010 8.54 0000026

TABLE B-1 (continued)

GC: / TECHNOLOGY DIVISION,  
AREA SOURCE MASTER FILE SUMMARY  
FOR VERMONT

CATEGORY LURE ID	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
017	CH-INDUSTRIAL RDG	000003447	THOUS VMT	NOX NHC	28.18 20.26	0000049 0000035
018	ON-HIGHWAY HOD	0000001410	THOUS VMT	NOX NHC	57.52 5.12	0000041 0000004
019	ON-HIGHWAY VC	0000007991	THOUS VMT	NOX NHC	13.56	0000046 0000054
020	RESIDENTIAL ANTHRACITE	0000000192	TON	NOX THC	3.00 2.50	0000000 0000000
021	RESIDENTIAL ELECTRIC	0000000000	TCN	NOX THC	3.00 2.50	0000000 0000000
022	RESIDENTIAL RESIDUAL OIL	0000000000	THOUS GAL	NOX THC	18.00 1.00	0000000 0000000
023	RESIDENTIAL DISTILLATE	0000000471	THOUS GAL	NOX THC	18.00 1.50	0000076 0000004
024	RESIDENTIAL NATURAL GAS	0000000066	MIL CU FT	NOX THC	80.00 2.50	0000003 0000000
025	RESIDENTIAL LPG	000001336	THOUS GAL	NOX THC	7.50 0.75	0000005 0000001
026	RESIDENTIAL WOOD	000004108	TON	NOX NHC	1.00 5.00	0000002 0000010
027	CORR/INST ANTHRACITE	0000000000	TCN	NOX THC	10.00 0.00	0000000 0000000
028	CORR/INST ELECTRIC	0000000000	TCN	NOX THC	6.00 3.00	0000000 0000000
029	CORR/INST RESIDUAL OIL	0000000356	THOUS GAL	NOX THC	60.00 1.00	0000011 0000003

TABLE B-1 (continued)

AREA SOURCE MASS/HR FILE SUMMARY FOR VFR/ON						
COUNTY: 0280		PROCESS	UNITS	FOLIULANT EMISSION FACTOR	EMISSIONS	
CAT. GROUP	CATEGORY DESCRIPTION	GAL	THOUS. GAL	NOX THC	NOX THC	
031	COMMODITY/NATURAL GAS	00000000 MIL CU FT		120.00 6.00	0000000 0005090	
032	COMMODITY/WATER	00000000 THOUS. GAL		11.00 0.75	0000000 2000000	
033	COMMODITY/WOOD/OTHER	00000000 TON		10.00 36.00	0000000 0000000	
034	INDUSTRIAL ACTIVITY	00000000 TON		10.56 0.60	0000000 0000003	
035	INDUSTRIAL EMISSIONS	00000000 TON		15.00 1.00	0000000 0000000	
036	INDUSTRIAL RESIDUAL OIL	000000513 THOUS. GAL		65.00 1.00	0000015 0000000	
037	INDUSTRIAL DISTILLATE OIL	000000000 THOUS. GAL		22.00 1.00	0000000 0000000	
038	INDUSTRIAL NATURAL GAS	00000000 MIL CU FT		175.00 3.00	0000000 0000000	
039	INDUSTRIAL WPC	000000000 THOUS. GAL		11.65 0.30	0000000 0000000	
040	INDUSTRIAL WOOD/OTHER	000000000 TON		10.30 36.00	0000000 0000000	
041	MILITARY AIRCRAFT	000000000 LAND/TAKE OFF		9.16 27.16	0000000 2000000	
042	CIVIL AIRCRAFT	000020440 LAND/TAKE OFF		0.32 0.41	0000000 0000004	

TABLE B-1 (continued)

U.S. / TERRITORIAL DIVISION  
AREA SOURCE WASTIR FILE SUMMARY  
FOR VERMONT

CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS LBD/TAKE OFF	POLLUTANT EMISSION I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
043	COMMERCIAL AIRCRAFT	00000000	LBD/TAKE OFF	NOX	13.55	0000000
044	RAILROAD LOCOMOTIVES	000000136	THOUS GAL	NOX	376.00	0000025
045	VESSELS - GASOLINE	000000020	THOUS GAL	NOX	94.00	0000006
046	VESSELS - DISTILLATE OIL	000000000	THOUS GAL	NOX	32.72	0000006
047	VESSELS - RESIDUAL OIL	000000000	THOUS GAL	NOX	270.00	0000000
048	OFF-HIGHWAY VEHICLES-GAS	000000330	THOUS GAL	NOX	50.00	0000000
049	OFF-HIGHWAY VEH - DIESEL	000000282	THOUS GAL	NOX	105.45	0000017
050	OF-SITE INCINERATION	000002074	TON	NOX	421.13	0000059
051	OPEN BURNING	000008113	TON	NOX	1.93	0000002
052	STRUCTURAL FIRES	000000024	FIRE	NOX	5.42	0000022
053	FIELD/SLASH BURNING	000000000	TON	NOX	17.00	0000009
054	FOREST FIRES	000000066	ACRE	NOX	43.21	0000001
055	COUNTY TOTALS			THC	261.32	0000009
				NHC	0000406	
				HCX	0002730	
					0003532	

TABLE B-1 (continued)

CJUN IV : 0360 AREA SOURCE HAZARD FILE SUMMARY FOR VAPORS							604 / TECHNOLOGY DIVISION		
CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.O.	FACTOR	EMISSIONS ESTIMATE			
001	STAGE I GASOLINE EVAP	0000097183	THOUS GAL	THC	8.35	0000041			
002	STAGE II GASOLINE EVAP	0000097176	THOUS GAL	THC	9.70	0000047			
003	STORAGE TANK BREATHING	0000097183	THOUS GAL	THC	1.00	0000005			
004	GASOLINE LOADING/TRANSIT	0000097183	THOUS GAL	THC	6.67	000034			
005	SIN IRIDIUM DISCHARGING	000022763	POPULATION	THC	7.59	0000085			
006	DRY CLEANING	000022763	POPULATION	NHC	1.50	0000017			
007	ARCH SURFACE COATING	000022763	POPULATION	NHC	4.60	0000052			
008	ALUM BODY REFINISHING	000022763	POPULATION	NHC	1.90	0000022			
009	SURFACE COATING	000000001	THOUS GAL	THC	4,112.50	0000002			
010	DRYWALL ARMS	000022763	POPULATION	NHC	0.80	0000005			
011	CORROSIVE SOLVENT USE	000022763	POPULATION	NHC	6.30	0000072			
012	CUTPACK ASPHALT	000000017	TON	THC	577.00	0000005			
013	PESTICIDES	000015685	LBS	NHC	3.50	0000007			
014	ON-HIGHWAY LDV	000224918	THOUS VMT	NCX NHC	8.20 7.35	0000923 0000825			
015	ON-HIGHWAY LDV	000040070	THOUS VMT	NOX NHC	6.61 7.73	0000177 0000155			
016	ON-HIGHWAY LDV	000003510	THOUS VMT	NOX NHC	10.06 8.46	0000018 0000015			

TABLE B-1 (continued)

GC / TECHNOLOGY DIVISION  
AREA SOURCE REGISTER FILE SUMMARY  
F.R. V. RMOU.T

COUNTRY:0300	CATEGORY	DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.D.	EMISSIONS FACTOR	EMISSIONS ESTIMATE
C17	ON-HIGHWAY RDG		000006435 THOUS VMT		NOX NHC	28.52 15.56	0000091 0003964
D18	ON-HIGHWAY RDG		000002532 THOUS VMT		NOX NHC	58.27 5.49	0000077 200007
C19	ON-HIGHWAY MC		0000014917 THOUS VMT		NOX NHC	1.50 13.40	0000011 0000100
D20	RESIDENTIAL ANTHRACITE		000000831 TON		NOX THC	3.00 2.50	0000001 0000001
C21	RESIDENTIAL BITUMINOUS		000000909 TON		NOX THC	3.00 20.00	0000000 0000000
C22	RESIDENTIAL RESIDUAL OIL		000000000 THOUS GAL		NOX THC	10.00 1.00	0000000 0000000
C23	RESIDENTIAL DISTILLATE		000000004 THOUS GAL		NOX THC	10.00 1.00	0000003 0000003
C24	RESIDENTIAL NATURAL GAS		000000005 MIL CU FT		NOX THC	80.00 6.30	0000000 0000000
C25	RESIDENTIAL LPG		000002360 THOUS GAL		NOX THC	7.50 0.75	0000005 0000001
C26	RESIDENTIAL WOOD		0000015944 Ton		NOX NHC	1.00 5.00	0000008 0000040
C27	COMMERCIAL ANTHRACITE		000000000 TON		NOX THC	10.00 0.00	0000000 0000000
C28	COMMERCIAL BITUMINOUS		000000000 TON		NOX THC	6.00 3.00	0000000 0000000
C29	COMMERCIAL RESIDUAL OIL		0000000475 THOUS GAL		NOX THC	60.00 1.00	0000014 0000000

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: 0360	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS PART	UNITS QUANTITY THOUS GAL	POLLUTANT EMISSION FACTOR 1.0.	EMISSIONS ESTIMATE
030	COMM/INST DISTILLATE OIL	COMM/INST DISTILLATE OIL	00000000 THOUS GAL	NOX THC	22.00 1.00	0000000 0000000
031	COMM/INST NATURAL GAS	COMM/INST NATURAL GAS	00000000 MIL CU FT	NOX THC	120.00 8.00	0000000 0000000
032	COMM/INST LPG	COMM/INST LPG	00000000 THOUS GAL	NOX THC	11.00 0.75	0000000 0000000
033	COMM/INST WOOD/OTHER	COMM/INST WOOD/OTHER	00000000 TON	NOX THC	10.00 36.00	0000000 0000000
034	INDUSTRIAL ANTHACITE	INDUSTRIAL ANTHACITE	00000000 TON	NOX THC	10.00 0.00	0000000 0000000
035	INDUSTRIAL BITUMINOUS	INDUSTRIAL BITUMINOUS	00000000 TON	NOX THC	15.00 1.00	0000000 0000000
036	INDUSTRIAL RESIDUAL OIL	INDUSTRIAL RESIDUAL OIL	00000000 THOUS GAL	NOX THC	60.00 1.00	00000021 0000000
037	INDUSTRIAL DISTILLATE OIL	INDUSTRIAL DISTILLATE OIL	00000000 THOUS GAL	NOX THC	22.00 1.00	0000000 0000000
038	INDUSTRIAL NATURAL GAS	INDUSTRIAL NATURAL GAS	00000000 MIL CU FT	NOX THC	175.00 3.00	0000000 0000000
039	INDUSTRIAL LPG	INDUSTRIAL LPG	00000000 THOUS GAL	NOX THC	11.65 0.30	0000000 0000000
040	INDUSTRIAL WOOD/OTHER	INDUSTRIAL WOOD/OTHER	00000000 TON	NOX THC	10.00 36.00	0000000 0000000
041	MILITARY AIRCRAFT	MILITARY AIRCRAFT	00000000 LOAD/TAKE OFF	NOX THC	9.16 27.10	0000000 0000000
042	CIVIL AIRCRAFT	CIVIL AIRCRAFT	000017520 LND/TAKE OFF	NOX THC	0.02 0.41	0000000 0000004

TABLE B-1 (continued)

OCZ / TECHNOLOGY DIVISION  
ARIA SOURCE POINT & FILE SUMMARY  
FOR VENOM

CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION FACTOR I.D.	EMISSIONS ESTIMATE
043	COMMERCIAL AIRCRAFT	0000000000 LANDTAKE CFF	TON	13.55	2000000
			THC	24.90	0000000
044	RAILROAD LOCOMOTIVES	0000000164 THOUS GAL	NOX	370.00	0000030
			THC	94.00	0000008
045	VESSELS - GASOLINE	000000020 THOUS GAL	NOX	32.72	0000000
			THC	877.66	0000005
046	VESSELS - DISTILLATE OIL	0000000000 THOUS GAL	NOX	270.00	0000000
			THC	50.00	0000100
047	VESSELS - RESIDUAL OIL	0000000000 THOUS GAL	NOX	270.00	0000000
			THC	50.00	0000000
048	OFF-HIGHWAY VEHICLES-VANS	0000000604 THOUS GAL	NOX	105.45	0000032
			THC	263.54	0000080
049	OFF-HIGHWAY VEH - DIESEL	000000322 THOUS GAL	NOX	421.13	0000068
			THC	39.15	0000005
050	ON-SITE INCINERATION	000002845 TON	NOX	2.81	0000004
			THC	40.07	0000057
051	OPEN BURNING	000011049 TON	NOX	5.61	0000031
			THC	29.14	0000161
052	STRUCTURAL FIRES	000000022 FIRES	NOX	17.00	0000000
			THC	107.00	0000001
053	FIELD/SLASH BURNING	000000000 TON	NOX	4.00	0000000
			THC	23.50	0000000
054	FOREST FIRES	000000056 ACRE	NOX	43.21	0000001
			THC	261.02	0000007
999	COUNTY TOTALS		THC	0000561	
			NHC	0001365	
			NOX	0001619	

TABLE B-1 (continued)

SCC / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: 03d0	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.O.	EMISSIONS FACTOR
001	STAGE I GASOLINE EVAP	000004892 THOUS. GAL	THC	0.35	00000020	
002	STAGE II GASOLINE EVAP	000004892 THOUS. GAL	THC	9.70	00000024	
003	STORAGE TANK BREATHING	000004892 THOUS. GAL	THC	1.00	00000002	
004	GASOLINE LOADING/TRANSIT	000004892 THOUS. GAL	THC	6.87	0000017	
005	SF PRO/COMM DEGASSING	000023455 POPULATION	THC	7.59	00000089	
006	DRY CLEANING	000023455 POPULATION	NHC	1.50	00000018	
007	ATC/H SURFACE COATING	000023455 POPULATION	NHC	4.60	00000054	
008	AUTO BODY REFINISHING	000023455 POPULATION	NHC	1.50	00000022	
009	SM LAD SURFACE COATING	000000001 THOUS. GAL	THC	4.11250	00000002	
010	GRAPHIC ARTS	000023455 POPULATION	NHC	3.80	00000059	
011	CC "VOC" SOLVENT USE	000023455 POPULATION	NHC	6.30	00000074	
012	CUTBACK ASPHALT	000000017 TON	THC	577.00	00000005	
013	PLASTICIDES	000012548 LBS	NHC	0.90	00000006	
014	Distillate Fuel LDV	000238877 THOUS. VMT	HCX NHC	6.17 7.61	00000077 00000110	
015	ON-HIGHWAY LDV	000042557 THOUS. VMT	NOX NHC	8.77 8.01	00000197 00000171	
016	ON-HIGHWAY LDV	000003728 THOUS. VMT	ACX NHC d,61	16.12 0000019 0000016		

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION  
AREA SOURCE MASTER FILE SUMMARY  
FOR VERMONT

CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION FACTOR I.O.	EMISSIONS ESTIMATE
C17	ON-HIGHWAY HOG	000006834	THOUS VMT	NOX NHC	27.84 0000095 26.79 0000071
C18	ON-HIGHWAY HOG	000002796	THOUS VMT	NOX NHC	57.43 0000080 5.45 000008
019	ON-HIGHWAY MC	000015842	THOUS VMT	NOX NHC	1.52 0000012 13.78 0000109
020	RESIDENTIAL ANTHRACITE	000001279	TON	NOX THC	3.06 0000002 2.50 0000002
021	RESIDENTIAL BITUMINOUS	000000000	TON	NOX THC	3.00 0000000 20.00 0000000
022	RESIDENTIAL RESIDUAL OIL	000000000	THOUS GAL	NOX THC	1.80 0000000 1.00 0000000
023	RESIDENTIAL DISTILLATE	000011558	THOUS GAL	NOX THC	18.30 0000104 1.00 0000006
024	RESIDENTIAL NATURAL GAS	000000043	MIL CU FT	NOX THC	80.00 0000002 6.00 0000000
025	RESIDENTIAL LPG	000001544	THOUS GAL	NOX THC	7.50 0000006 0.75 0000001
026	RESIDENTIAL WOOD	000015805	TON	NOX NHC	1.00 0000008 5.00 0000000
027	COMMERCIAL ANTHRACITE	000000000	TON	NOX THC	10.00 0000000 0.00 0000000
028	COMMERCIAL BITUMINOUS	000000000	TON	NOX THC	6.00 0000000 3.00 0000000
029	COMMERCIAL RESIDUAL OIL	000000594	THOUS GAL	NOX THC	60.00 0000018 1.00 0000000

TABLE B-1 (continued)

SCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0330	CATEGORY NUMBER	DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION F.U.	EMISSIONS ESTIMATE
030	COMM/INST DISTILLATE OIL	000000000 THOUS GAL			NOX THC	22.00 1.00 000000 000000
031	COMM/INST NATURAL GAS	000000000 MIL CU FT			NOX THC	120.00 8.00 000000 000000
032	COMM/INST LPG	000000000 THOUS GAL			NOX THC	11.00 0.75 000000 000000
033	COMM/INST FOOD/OTHER	000000000 TON			NOX THC	10.00 36.00 000000 000000
034	INDUSTRIAL ANTHRACITE	000000000 TON			NOX THC	18.00 0.00 000000 000000
035	INDUSTRIAL BITUMINUS	000000001 TON			NOX THC	15.00 1.00 000000 000000
036	INDUSTRIAL RESIDUAL OIL	000000034 THOUS GAL			NOX THC	60.00 1.00 000000 000000
037	INDUSTRIAL DISTILLATE OIL	000000000 THOUS GAL			NOX THC	22.00 1.00 000000 000000
038	INDUSTRIAL NATURAL GAS	000000000 MIL CU FT			NOX THC	175.00 3.00 000000 000000
039	INDUSTRIAL LPG	000000000 THOUS GAL			NOX THC	11.65 0.30 000000 000000
040	INDUSTRIAL FOOD/OTHER	000000000 TON			NOX THC	10.00 36.00 000000 000000
041	MILITARY AIRCRAFT	000000000 LND/TAKE OFF			NOX THC	9.16 27.13 000000 000000
042	CIVIL AIRCRAFT	000012410 LND/TAKE OFF			NOX THC	0.02 0.41 000000 000003

TABLE B-1 (continued)

GCN / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT							
COUNTY: 0380	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
043	COMMERCIAL AIRCRAFT	000002500 LANDTAKE OFF	NOX THC	13.55 24.50	00000000 00000000		
044	RAILROAD LOCOMOTIVES	000000136 THOUS GAL	NOX THC	370.30 94.00	00000025 00000006		
045	VESSELS - GASOLINE	0000000141 THOUS GAL	NOX THC	32.72 887.06	00000002 00000063		
046	VESSELS - DISTILLATE OIL	0000000000 THOUS GAL	NOX THC	270.00 50.00	00000000 00000000		
047	VESSELS - RESIDUAL OIL	0000000000 THOUS GAL	NOX THC	270.00 50.00	00000000 00000000		
048	OFF-HIGHWAY VEHICLES-GAS	000000027 THOUS GAL	NOX THC	105.45 263.54	00000044 0000109		
049	OFF-HIGHWAY VEH - DIESEL	0000000479 THOUS GAL	NOX THC	421.13 39.15	0000101 0000009		
050	ON-SITE INCINERATION	0000003024 TON	NOX THC	2.65 39.68	00000004 00000060		
051	OPEN BURNING	0000011506 TON	NOX THC	5.56 26.85	0000032 0000166		
052	STRUCTURAL FIRES	000000037 FIRES	NOX THC	17.00 107.00	00000009 00000002		
053	FILE/SLASH BURNING	000000000 TON	NOX THC	4.36 23.50	00000009 00000000		
054	FOREST FIRES	000000040 ACRE	NOX THC	43.21 261.02	00000001 00000005		
999	COUNTY TOTALS		THC NHC NOX	00000591 00000508 0001745			

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCEMASTER FILE SUMMARY FOR VERMONT						
COUNTY: J420	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.O. FACTOR	EMISSIONS ESTIMATE
001	STAGE 1 GASOLINE EVAP	000031796 THOUS GAL	THC	8.35	0000133	
002	STAGE 11 GASOLINE EVAP	000031774 THOUS GAL	THC	9.70	0000154	
003	STORAGE TANK BREATHING	000031796 THOUS GAL	THC	1.00	0000016	
004	GASOLINE LOADING/TRANSIT	000031776 THOUS GAL	THC	6.67	00000109	
005	SM IND/COMM DEGREASING	000058332 POPULATION	THC	7.59	0000221	
006	DRY CLEANING	000058332 POPULATION	NHC	1.50	0000044	
007	ARCH SURFACE COATING	000058332 POPULATION	NHC	4.60	0000134	
008	AUTO BODY REFINISHING	000058332 POPULATION	NHC	1.50	0000055	
009	SM IND SURFACE COATING	000000003 THOUS GAL	THC	4.112.50	00000006	
010	GRAPHIC ARTS	000058332 POPULATION	NHC	0.80	0000023	
011	COMMS/CONS SOLVENT USE	000058332 POPULATION	NHC	6.30	0000184	
012	CUTBACK ASPHALT	000000019 TON	THC	577.00	0000005	
013	PLASTICS/PLS	000005647 LBS	NHC	0.90	0000003	
014	ON-HIGHWAY LDV	000256602 THOUS VMT	NOX NHC	8.16 7.87	0001048 0001010	
015	ON-HIGHWAY LDV	003045715 THOUS VMT	NOX NHC	8.76 8.27	0000200 0000169	
016	ON-HIGHWAY LDV	000004004 THOUS VMT	NOX NHC	9.62 9.02	0000023 0000018	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AFEA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: 0420	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.O.	EMISSIONS ESTIMATE
	017	ON-HIGHWAY HOG	000007341 THOUS VMT	VMT	NOX NHC	27.78 0000102 21.65 0000079
	018	ON-HIGHWAY HDD	000003003 THOUS VMT	VMT	NOX NHC	57.22 000030d5 5.61 000000e
	019	ON-HIGHWAY MC	000017018 THOUS VMT	VMT	NOX NHC	1.51 0000013 14.15 0000120
	020	RESIDENTIAL ANTHRACITE	000002302 TON	TON	NOX THC	3.00 0000003 2.50 0000003
	021	RESIDENTIAL BITUMINOUS	000000000 TON	TON	NOX THC	3.00 0000000 20.00 0000000
c22	RESIDENTIAL RESIDUAL OIL	000000000 THOUS GAL	GAL	NOX THC	18.50 0000000 1.00 0000000	
023	RESIDENTIAL DISTILLATE	000031392 THOUS GAL	GAL	NOX THC	18.00 0000263 1.00 0000016	
c24	RESIDENTIAL NATURAL GAS	000000266 MIL CU FT	MIL CU FT	NOX THC	80.00 0000011 6.00 0000001	
c25	RESIDENTIAL LPG	000002884 THOUS GAL	GAL	NOX THC	7.50 0000011 0.75 0000001	
026	RESIDENTIAL WOOD	000021862 TON	TON	NOX NHC	1.00 0000011 5.00 0000055	
027	COMMERCIAL ANTHRACITE	000000000 TON	TON	NOX THC	10.00 0000000 0.30 0000000	
028	COMMERCIAL BITUMINOUS	000000000 TON	TON	NOX THC	6.30 0000000 3.00 0000000	
029	COMMERCIAL RESIDUAL OIL	000001307 THOUS GAL	GAL	NOX THC	60.00 0000039 1.30 0000001	

TABLE B-1 (continued)

EPA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR V-RHONT						
COUNTY: 0420	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS THOUS GAL	POLLUTANT EMISSION FACTOR	EMISSIONS ESTIMATE
030	COMM/INST DISTILLATE OIL	00000000 THOUS GAL	NOX THC	22.00 1.00	00000000 00000000	
031	COMM/INST NATURAL GAS	00000000 MIL CU FT	NOX THC	120.00 9.66	00000000 00000000	
032	COMM/INST LPG	00000000 THOUS GAL	NOX THC	11.00 0.75	00000000 00000000	
033	COMM/INST WOOD/OTHER	00000000 TON	HCX THC	10.00 36.00	00000000 00000060	
034	INDUSTRIAL ANTHRACTITE	00000000 TON	HCX THC	18.00 0.00	00000000 00000000	
035	INDUSTRIAL CEMENT MINUS	00000002 TON	NOX THC	15.60 1.00	00000000 00000000	
036	INDUSTRIAL RESIDUAL OIL	000001630 THOUS GAL	NOX THC	60.00 1.00	0000056 0000001	
037	INDUSTRIAL DISTILLATE OIL	00000000 THOUS GAL	NOX THC	22.00 1.00	00000000 00000000	
038	INDUSTRIAL NATURAL GAS	00000000 MIL CU FT	HCX THC	175.00 3.00	00000000 00000000	
039	INDUSTRIAL LPG	00000000 THOUS GAL	NOX THC	11.65 0.30	00000000 00000000	
040	INDUSTRIAL WOOD/OTHER	00000000 TON	HCX THC	10.00 36.00	00000000 00000000	
041	MILITARY AIRCRAFT	00000000 LND/TAKE OFF	NOX THC	9.16 27.10	00000000 00000000	
042	CIVIL AIRCRAFT	000023360 LND/TAKE OFF	NOX THC	0.02 0.41	00000000 00000005	

TABLE B-1 (continued)

COUNTY: 0420	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE 000000000 LND/TAKE OFF	UNITS 1.0.	POLLUTANT EMISSION FACTOR	EMISSIONS ESTIMATE
	043	COMMERCIAL AIRCRAFT			NOX THC	13.55 24.50 000000 000000
	044	RAILROAD LOCOMOTIVES	000000329 THOUS GAL		NOX THC	370.60 94.00 0000061 0000015
	045	VESSELS - GASOLINE	000000081 THOUS GAL		NOX THC	32.72 887.06 0000001 0000036
	046	VESSELS - DISTILLATE OIL	000000000 THOUS GAL		NOX THC	270.00 50.00 0000000 0000000
	047	VESSELS - RESIDUAL OIL	000000000 THOUS GAL		NOX THC	270.00 50.00 0000000 0000000
	048	OFF-HIGHWAY VEHICLES-GAS	000000008 THOUS GAL		NOX THC	105.45 263.54 0000048 00000120
	049	OFF-HIGHWAY VEH - DIESEL	000000509 THOUS GAL		NOX THC	421.13 39.15 0000124 0000012
	050	ON-SITE INCINERATION	000007336 TON		NOX THC	2.65 39.26 0000010 0000014
	051	OPEN BURNING	000028639 TON		NOX THC	5.45 29.12 0000078 0000017
	052	STRUCTURAL FIRES	000000072 FIRES		NOX THC	17.00 107.00 0000001 0000004
	053	FIELD/SLASH BURNING	000000000 TON		NOX THC	4.00 23.50 0000000 0000000
	054	FOREST FIRES	0000000018 ACRE		NOX THC	43.21 261.02 0000000 0000002
	999	COUNTY TOTALS			THC NHC NOX	0001422 0001522 0002206

TABLE B-1 (continued)

APKA SOURCE PASTURE FUEL SUMMARY FOR VERMONT						
COUNTRY:1500	CATEGORY NUMBER	CATEGORY DESCRIPTION	FLOWLESS RATE	UNITS	POLLUTANT EMISSION FACTOR I.D.	EMISSIONS ESTIMATE
001	STAGE I GASOLINE EVAP	000029349 THOUS GAL	THC	8.35	0000123	
002	STAGE II GASOLINE EVAP	000029330 THOUS GAL	THC	5.73	0000142	
c03	STORAGE TANK BREATHING	000025349 THOUS GAL	THC	1.00	0000015	
004	GASOLINE LOADING/TRANSIT	000029349 THOUS GAL	THC	6.87	00000101	
005	SM IND/CORN DEGREASING	000052391 POPULATION	TPC	7.59	0000199	
006	DRY CLEANING	000052391 POPULATION	NHC	1.50	0000039	
007	ARCH SURFACE COATING	000052391 POPULATION	NHC	4.60	0000120	
c08	AUTO BODY REFINISHING	000052391 POPULATION	NHC	1.50	0000050	
009	SM IND SURFACE COATING	000000003 THOUS GAL	THC	4.11250	0000006	
010	GRAPHIC ARTS	000052391 POPULATION	NHC	9.40	0000021	
c11	CURINGS SOLVENT USE	000052351 POPULATION	NHC	6.30	0000165	
012	CUTBACK ASPHALT	060000019 TON	THC	577.00	0000005	
013	PESTICIDES	000006274 LBS	NHC	0.90	0000003	
014	ON-HIGHWAY LDV	060245207 THOUS VMT	NOX NHC	6.14 8.09	00000994 00003992	
c15	ON-HIGHWAY LDV	006043684 THOUS VMT	NOX NHC	8.75 8.51	0000191 0000186	
016	ON-HIGHWAY LDV	060003626 THOUS VMT	NOX NHC	9.66 9.44	0000017 0000016	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION  
AREA SOURCE MASTER FILE SUMMARY  
FOR VERMONT

COUNTY:0500	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.D.	EMISSION FACTOR	EMISSIONS ESTIMATE
	017	ON-HIGHWAY HOG	000007015	THOUS VMT	NOX NHC	27.47 22.20	0000095 0000078
018	ON-HIGHWAY HDD	000002870	THOUS VMT	NOX NHC	56.79 5.59	0000082 0000008	
019	ON-HIGHWAY MC	0000016262	THOUS VMT	NOX NHC	1.48 14.46	0000012 0000018	
020	RESIDENTIAL ANTHRACITE	000002949	TON	NOX THC	3.00 2.50	0000004 0000004	
021	RESIDENTIAL BITUMINOUS	000000000	TON	NOX THC	3.00 20.00	0000000 0000000	
022	RESIDENTIAL RESIDUAL OIL	000000000	THOUS GAL	NOX THC	18.00 1.00	0000000 0000003	
023	RESIDENTIAL DISTILLATE	000027645	THOUS GAL	NOX THC	18.00 1.00	0000249 0000014	
024	RESIDENTIAL NATURAL GAS	000000153	MIL CU FT	NOX THC	80.00 6.00	0000006 0000001	
025	RESIDENTIAL LPG	000003031	THOUS GAL	NOX THC	7.50 0.75	0000011 0000001	
026	RESIDENTIAL WOOD	0000010792	TON	NOX THC	5.50 0.00	0000005 0000027	
027	COMMERCIAL ANTHRACITE	000000000	TON	NOX THC	10.00 0.00	0000000 0000000	
028	COMMERCIAL BITUMINOUS	000000000	TON	NOX THC	6.00 3.00	0000000 0000000	
029	COMMERCIAL RESIDUAL OIL	0000001108	THOUS GAL	NOX THC	60.00 1.00	0000036 0000001	

TABLE B-1 (continued)

DACA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VENTURE						
CATEGORY		CATEGORY	PROCESS	POLLUTANT	EMISSION	EMISSIONS
NUMBER	DESCRIPTION		RATE	UNITS	I.D.	ESTIMATE
030	COPP/INST DISTILLATE OIL	00000000 THOUS GAL		HCX THC	22.00 1.00	0000000 0000000
031	COMF/INST NATURAL GAS	00000000 MIL CU FT		NOX THC	120.00 8.00	0000000 0000000
032	COMM/INST LPG	00000000 THOUS GAL		NOX THC	11.00 0.75	0000000 0000000
033	COMM/INST WOOD/OTHER	00000000 TON		NOX THC	10.00 36.00	0000000 0000000
034	INDUSTRIAL ANTHRACITE	00000000 TON		NOX THC	16.30 0.00	0000000 0000000
035	INDUSTRIAL BITUMINOUS	00000002 TON		NOX THC	15.00 1.00	0000000 0000000
036	INDUSTRIAL RESIDUAL OIL	000001709 THOUS GAL		NOX THC	60.00 1.60	0000051 0000001
037	INDUSTRIAL DISTILLATE OIL	000000000 THOUS GAL		HCX THC	22.00 1.00	0000000 0000000
038	INDUSTRIAL NATURAL GAS	00000000 MIL CU FT		NOX THC	175.00 3.00	0000000 0000000
039	INDUSTRIAL LPG	00000000 THOUS GAL		HCX THC	11.65 0.30	0000000 0000000
040	INDUSTRIAL WOOD/OTHER	00000000 TON		NOX THC	10.00 36.00	0000000 0000000
041	MILITARY AIRCRAFT	000000000 LND/TAKE OFF		NOX THC	5.16 27.10	0000000 0000000
042	CIVIL AIRCRAFT	000063510 LND/TAKE OFF		HCX THC	0.02 0.41	0000001 0000013

TABLE B-1 (continued)

6C: / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0500	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS	POLLUTANT	EMISSION I.D.	EMISSIONS ESTIMATE
043	COMMERCIAL AIRCRAFT	0000000000 LAND/TAKL OFF	NOX THC	15.55 24.90	00000000 00000000	
044	RAILROAD LOCOMOTIVES	0000000191 THOUS GAL	NOX THC	370.00 54.60	00000035 00000099	
045	VESSELS - GASOLINE	0000000040 THOUS GAL	NOX THC	32.72 887.06	00000001 00000016	
046	VESSELS - DISTILLATE OIL	0000000000 THOUS GAL	NOX THC	270.00 50.00	00000000 00000000	
047	VESSELS - RESIDUAL OIL	0000000050 THOUS GAL	NOX THC	270.00 50.00	00000000 00000000	
048	OFF-HIGHWAY VEHICLES-GAS	0000000702 THOUS GAL	NOX THC	105.45 263.94	00000037 00000093	
049	OFF-HIGHWAY VEH - DIESEL	000001719 THOUS GAL	NOX THC	421.13 39.15	00000352 00000034	
050	ON-SITE INCINERATION	000000613 TON	NOX THC	2.42 40.22	00000008 00000133	
051	OPEN BURNING	0000025520 TON	NOX THC	5.56 29.00	00000071 00000370	
052	STRUCTURAL FIRES	000000643 FIRES	NOX THC	17.00 107.00	00000000 00000002	
053	FIELD/SLASH BURNING	0000000000 TON	NOX THC	4.00 23.50	00000000 00000003	
054	FOREST FIRES	0000000020 ACRE	NOX THC	43.21 261.02	00000000 00000003	
995	COUNTRY TOTALS		THC HHC NOX	0001286 0001625 0002275		

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION  
AREA SOURCE MASTER FILE SUMMARY  
FOR VERMONT

COUNTY	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION 1.0.	EMISSIONS FACTOR	EMISSIONS ESTIMATE
000	001	STAGE 1 GASOLINE EVAP	000026903	THOUS GAL	THC	8.35	0000112
	002	STAGE II GASOLINE EVAP	000026886	THOUS GAL	THC	9.70	0000130
	003	STORAGE TANK BREATHING	000026903	THOUS GAL	THC	1.00	0000013
	004	GASOLINE LOADING/TRANSIT	000026903	THOUS GAL	THC	6.87	0000092
	005	SM IND/COMM. DECREASING	000036880	POPULATION	THC	7.59	0000140
	006	DRY CLEANING	000036880	POPULATION	NHC	1.50	0000028
	007	ARCH SURFACE COATING	000036880	POPULATION	NHC	4.60	0000085
	008	AUTO BODY REFINISHING	000036880	POPULATION	NHC	1.50	0000035
	009	SM IND SURFACE COATING	000000002	THOUS GAL	THC	4.112.50	0000004
	010	GRAPHIC ARTS	000036880	POPULATION	NHC	0.40	0000015
	011	COMIN/CCLS SOLVENT USE	000036880	POPULATION	NHC	6.30	0000116
	012	CUTBACK ASPHALT	000000017	TON	THC	577.00	0000005
	013	FESTICIDES	000006784	LBS	NHC	0.90	0000004
	014	ON-HIGHWAY LDV	000241803	THOUS MWT	NOX	8.17	0000988
	015	ON-HIGHWAY LDV	000043078	THOUS MWT	NOX	7.66	0003927
	016	ON-HIGHWAY LDV	000003773	THOUS MWT	NHC	8.78	0000189
						8.07	C0CCG174
						10.00	0000619
						8.51	0000016

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION  
AREA SOURCE VERIFICATION SUMMARY

COUNTRY CODE	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT I.O.	EMISSION FACTOR	EMISSIONS ESTIMATE
017	ON-HIGHWAY HD6		000006916	THOUS VMT	NOX NHC	27.85 20.69	0000096 0000072
018	ON-HIGHWAY HDD		000002830	THOUS VMT	NOX NHC	57.31 5.67	0000061 0000008
019	ON-HIGHWAY MC		000016036	THOUS VMT	NOX NHC	1.50 13.87	0000012 0000111
020	RESIDENTIAL ANTHRACITE		000004413	TON	NOX THC	3.90 2.50	0000007 0000006
021	RESIDENTIAL BITUMINOUS		000004000	TON	NOX THC	3.00 20.00	0000000 0000000
022	RESIDENTIAL RESIDUAL OIL		000000000	THOUS GAL	NOX THC	18.00 1.00	0000000 0000000
023	RESIDENTIAL DISTILLATE		000019568	THOUS GAL	NOX THC	18.00 1.00	0000176 0000010
024	RESIDENTIAL NATURAL GAS		000000026	MIL CU FT	NOX THC	80.00 6.00	0000001 0000000
025	RESIDENTIAL LPG		000004617	THOUS GAL	NOX THC	7.50 0.75	0000017 0000002
026	RESIDENTIAL WOOD		000012811	TON	NOX NHC	1.00 5.00	0000006 0000032
027	COMM/INST ANTHRACITE		000000003	TON	NOX THC	10.00 0.00	0000000 0000000
028	COMM/INST BITUMINOUS		000000000	TON	NOX THC	6.00 3.00	0000000 0000000
029	CUMM/INST RESIDUAL OIL		000000831	THOUS GAL	NOX THC	60.00 1.00	0000025 0000000

TABLE B-1 (continued)

EPA / TECHNOLOGY DIVISION  
AREA SOURCE MASTER FILE SUMMARY  
FOR VERMONT

CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.O.		EMISSIONS ESTIMATE
				NOX	THC	
030	COMM/IND DISTILLATE OIL	00000000 THOUS GAL		22.00	0000000	
031	COMM/INST NATURAL GAS	00000000 KIL CU FT		1.00	0000000	
032	COMM/INST LPG	00000000 THOUS GAL		120.00	0000000	
033	COMM/INST WOOD/OTHER	00000000 TON		6.00	0000000	
034	INDUSTRIAL ANTHRACITE	00000000 TON		11.00	0000000	
035	INDUSTRIAL BITUMENUS	000000001 TON		0.75	0000000	
036	INDUSTRIAL RESIDUAL OIL	000000197 THOUS GAL		10.00	0000000	
037	INDUSTRIAL DISTILLATE OIL	000000000 THOUS GAL		36.00	0000000	
038	INDUSTRIAL NATURAL GAS	000000000 KIL CU FT		15.00	0000000	
039	INDUSTRIAL LPG	000000000 THOUS GAL		1.00	0000000	
040	INDUSTRIAL WOOD/OTHER	000000000 TON		175.00	0000000	
041	MILITARY AIRCRAFT	000000000 LAND/TAKE OFF		3.00	0000000	
042	CIVIL AIRCRAFT	000027740 LAND/TAKE OFF		10.30	0000000	
				36.00	0000000	
				27.10	0000000	
				0.02	0000000	
				0.41	0000000	

TABLE B-1 (continued)

GCR / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT							
COUNTRY: 0580		CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS LND/TAKE OFF	POLLUTANT I.O.	EMISSION FACTOR
043	COMMERCIAL AIRCRAFT	0000000000	LND/TAKE OFF	NOX THC	13.55 24.90	0000000 0000000	
044	RAILROAD LOCOMOTIVES	000000164	THOUS GAL	NOX THC	370.00 54.00	0000030 0000009	
045	VESSELS - GASOLINE	000000060	THOUS GAL	NOX THC	32.72 807.06	0000001 0000027	
046	VESSELS - DISTILLATE OIL	000000000	THOUS GAL	NOX THC	270.00 50.00	0000000 0000000	
047	VESSELS - RESIDUAL OIL	000000000	THOUS GAL	NOX THC	270.00 50.00	0000000 0000000	
048	OFF-HIGHWAY VEHICLES-GAS	000000493	THOUS GAL	NOX THC	105.45 263.34	0000025 0000065	
049	OFF-HIGHWAY VEH - DIESEL	000000395	THOUS GAL	NOX THC	421.13 39.15	0000083 0000008	
050	ON-SITE INCINERATION	000004986	TON	NOX THC	2.41 38.11	0000006 0000095	
051	OPEN BURNING	000018387	TON	NOX THC	5.55 29.04	0000051 0000267	
052	STRUCTURAL FIRES	000000034	FIREs	NOX THC	17.00 107.00	0000000 0000002	
053	FIELDS/SLASH BURNING	000000060	TON	NOX THC	4.00 23.50	0000000 0000000	
054	FOREST FIRES	000000028	ACRE	NOX THC	43.21 261.02	0000001 0000004	
999	COUNTY TOTALS			THC NOx NOx		0000997 0001623 0000001	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0620	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.G.	EMISSIONS ESTIMATE
001	STAGE 1 GASCLINE EVAP	000029349 THOUS GAL		THC	8.35	0000123
002	STAGE II GASOLINE EVAP	000029330 THOUS GAL		THC	9.70	0000142
003	STORAGE TANK BREATHING	000029349 THOUS GAL		THC	1.00	0000015
004	GASOLINE LOADING/TRANSLIT	000029349 THOUS GAL		THC	6.87	0000101
005	SM IN/COM DEGREASING	000050674 POPULATION		THC	7.59	0000193
006	DRY CLEANING	000050674 POPULATION		NHC	1.50	0000036
007	IRON SURFACE COATING	000050674 POPULATION		NHC	4.60	0000117
008	AUTO BODY REFINISHING	000050674 POPULATION		NHC	1.90	0000046
009	SM IND SURFACE COATING	000000003 THOUS GAL		THC	4.112.50	0000005
010	GRAPHIC ARTS	000050674 POPULATION		NHC	0.80	0000120
011	COMMERCIAL SOLVENT USE	000050674 POPULATION		NHC	6.30	0000160
012	CUTBACK ASPHALT	000000031 TON		THC	577.30	0000009
013	PESTICIDES	000006274 LBS		NHC	0.90	0000003
014	ON-HIGHWAY LDV	000366957 THOUS VMT		NOX NHC	6.20 7.38	100155 0001354
015	ON-HIGHWAY LDV	000065375 THOUS VMT		NOX NHC	8.81 7.78	0000268 0000255
016	ON-HIGHWAY LDV	000005726 THOUS VMT		NOX NHC	9.95 8.27	0000029 0000024

TABLE B-1 (continued)

GCN / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY:0626	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	POLLUTANT EMISSION I.D.	EMISSIONS ESTIMATE
C17	ON-HIGHWAY FDD	00000458 THOUS VMT	NOX NHC	28.22 29.04	0000148 0000155	
018	ON-HIGHWAY FDD	000004295 THOUS VMT	NOX NHC	57.77 5.64	0000124 0000011	
C19	ON-HIGHWAY NC	0000024337 THOUS VMT	NOX NHC	1.51 13.46	0000018 0000164	
020	RESIDENTIAL ANTHRACITE	000003269 TON	NOX THC	3.00 2.50	0000005 0000004	
C21	RESIDENTIAL BITUMINOUS	00000000 TON	NOX THC	3.00 20.00	0000000 3000000	
022	RESIDENTIAL RESIDUAL OIL	00000000 THOUS GAL	NOX THC	16.00 1.00	0000000 3000000	
023	RESIDENTIAL DISTILLATE	0000027904 THOUS GAL	NOX THC	18.03 1.00	0000251 0000014	
024	RESIDENTIAL NATURAL GAS	0000000147 MIL CU FT	NOX THC	80.00 8.00	0000005 0000001	
025	RESIDENTIAL LPG	0000005064 THOUS GAL	NOX THC	7.50 0.75	0000019 0000002	
C26	RESIDENTIAL WOOD	0000023811 TON	NOX NHC	1.00 5.00	0000012 0000060	
C27	COMMERCIAL ANTHRACITE	000000000 TON	NOX THC	10.00 0.00	0000000 0000000	
028	COMMERCIAL BITUMINOUS	000000000 TON	NOX THC	6.00 3.00	0000000 0000000	
029	COMMERCIAL RESIDUAL OIL	0000001188 THOUS GAL	NOX THC	60.00 1.00	0000036 0000001	

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION APEA SOURCE MASTER FILE SUMMARY FOR VENICE						
COUNTRY: 0620	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS	FOLIUTANT EMISSION FACTOR	EMISSIONS ESTIMATE
030	030	COM/INST DISTILLATE OIL	00000000 THOUS GAL	NOX THC	22.00 1.00	00000000 00000000
031	031	COM/INST NATURAL GAS	00000000 MIL CU FT	NOX THC	120.00 6.00	00000000 00000000
032	032	COM/INST LPG	00000000 THOUS GAL	NOX THC	11.00 0.75	00000000 00000000
033	033	COMM/INST WOOD/OTHER	00000000 TON	NOX THC	10.00 36.00	00000000 00000000
034	034	INDUSTRIAL ANTHRACITE	00000000 TON	NOX THC	18.00 0.30	00000000 00000000
035	035	INDUSTRIAL BITUMINUS	00000002 TON	NOX THC	15.00 1.00	00000000 00000000
036	036	INDUSTRIAL RESIDUAL OIL	000001709 THOUS GAL	NOX THC	60.00 1.00	0000051 0000001
037	037	INDUSTRIAL DISTILLATE OIL	00000000 THOUS GAL	NOX THC	22.00 1.00	00000000 00000000
038	038	INDUSTRIAL NATURAL GAS	00000000 MIL CU FT	NOX THC	175.00 3.00	00000000 00000000
039	039	INDUSTRIAL LPG	00000000 THOUS GAL	NOX THC	11.65 0.30	00000000 00000000
040	040	INDUSTRIAL WOOD/OTHER	00000000 TON	NOX THC	10.00 36.00	00000000 00000000
041	041	MILITARY AIRCRAFT	00000000 LNDO/TAKE OFF	NOX THC	9.16 27.10	00000000 00000000
042	042	CIVIL AIRCRAFT	00005100 LNDO/TAKE OFF	NOX THC	0.02 0.41	00000001 00000010

TABLE B-1 (continued)

GCA / TECHNOLOGY DIVISION AREA SOURCE MASTER FILE SUMMARY FOR VERMONT						
COUNTY: 0620	CATEGORY NUMBER	CATEGORY DESCRIPTION	PROCESS RATE	UNITS UND/TAKE OFF	POLLUTANT EMISSION I.D.	EMISSIONS ESTIMATE
	043	COMMERCIAL AIRCRAFT	000000003	LND/TAKE OFF	NOX THC	13.55 24.90 00000000 00000000
044	RAILROAD LOCOMOTIVES		000000300	THOUS GAL	NOX THC	370.00 94.00 0000056 00000014
045	VESSELS - GASLINE		000000020	THOUS GAL	NOX THC	32.72 887.96 00000000 00000009
046	VESSELS - DISTILLATE OIL		000000000	THOUS GAL	NOX THC	270.00 50.00 00000000 00000000
047	VESSELS - RESIDUAL OIL		030000000	THOUS GAL	NOX THC	270.00 50.00 00000000 00000000
048	OFF-HIGHWAY VEHICLES-GAS		000000790	THOUS GAL	NOX THC	105.45 263.94 0000042 0000004
049	OFF-HIGHWAY VEH - DIESEL		000001547	THOUS GAL	NOX THC	421.13 39.15 0000326 0000030
050	ON-SITE INCINERATION		000006806	TON	NOX THC	2.35 38.48 0000000 00000131
051	OPEN BURNING		0000025276	TON	NOX THC	5.54 28.56 0000070 0000036
052	STRUCTURAL FIRES		000000034	FIRES	NOX THC	17.00 107.30 0000060 0000002
053	FIELD/SLASH BURNING		000000000	TON	NOX THC	4.00 23.50 0000000 0000000
054	FOREST FIRES		000000020	ACRE	NOX THC NH3 NOX	43.21 261.02 0000000 0000003
999	COUNTRY TOTALS				THC NH3 NOX	0001261 0002359 9002995

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REPORT NO. EPA-450/4-82-013m	2.	3. RECIPIENT'S ACCESSION NO.
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6. ABSTRACT

This report discusses the development of the Northeast Corridor Regional Modeling Project (NECRMP) annual regional emission inventory. The inventory reflects 1979/1980 data and focuses on point, area and mobile source emissions of Volatile Organic Compounds (VOC) and Nitrogen Oxides ( $\text{NO}_x$ ), although particulate, sulfur oxides and carbon monoxide emissions were also compiled for point sources. The study area includes the entire northeast quadrant of the United States from longitude  $69^\circ$  to  $82^\circ$  West, and latitude  $38^\circ$  to  $45^\circ$  North. This Volume discusses the emission inventory for Vermont.

7. KEY WORDS AND DOCUMENT ANALYSIS

DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Emission Inventory Inventory Source Inventory Point Sources Area Sources Ozone Nitrogen Oxides Volatile Organic Compounds		
DISTRIBUTION STATEMENT	19. SECURITY CLASS ( <i>This Report</i> ) Unclassified	21. NO. OF PAGES 124
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