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OAQPS GUIDELINES

AEROS MANUAL SERIES
VOLUME III:
SUMMARY AND RETRIEVAL
(Third Edition)

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air, Noise and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

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VOLUME III:
SUMMARY AND RETRIEVAL
(Third Edition)

National Air Data Branch
Monitoring and Data Analysis Division

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air, Noise and Radiation
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Research Triangle Park, North Carolina 27711

July 1981

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PREFACE

This third volume of the AEROS Manual Series is the combined result of efforts by EPA personnel, namely, EPA SAROAD Project Officer Jacob G. Summers and EPA NEDS Project Officer Charles O. Mann. This document has been revised using the standard format of the AEROS Manual Series.

To facilitate the addition of updates, revisions, or additions, a three-hole-punched format was adopted for the manual. The document can be placed in a binder or secured in such a manner that the new pages can be easily inserted.

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LIST OF ABBREVIATIONS

AEROS. . . . . .Aerometric and Emissions Reporting System
AQDM . . . . . .Air Quality Display Model
AQCR . . . . . .Air Quality Control Region
AQDHS-II . . . .Air Quality Data Handling Subsystem-II
CDHS . . . . . .Comprehensive Data Handling System
CDM. . . . . .Comprehensive Data Management
CRT. . . . . .Cathode - Ray - Type Terminals
DPS. . . . . .Data Processing Section
EIS/AS . . . . .Emissions Inventory System/Area Source
EIS/PS . . . . .Emissions Inventory System/Point Source
EMS. . . . .Enforcement Management Subsystem
EPA. . . . . .U.S. Environmental Protection Agency
FMVECP . . . . .Federal Motor Vehicle Emissions Control Program
FPC. . . . . .Federal Power Commission
GMT. . . . . .Greenwich Mean Time
HATREMS. . . . .Hazardous and Trace Emissions System
IPP. . . . . .Implementation Planning Program
MSL. . . . . .Mean Sea Level
NAAQS. . . . . .National Ambient Air Quality Standard
NADB . . . . . .National Air Data Branch
NCC. . . . . .National Computer Center
NEDS . . . . . .National Emissions Data System
NER. . . . . .National Emissions Report
NTS. . . . . .NEDS Terminal System
OGC. . . . . .Office of General Counsel
QCI. . . . . .Quality Control Index
RIS. . . . . .Requests and Information Section
SAROAD . . . . .Storage and Retrieval of Aerometric Data
SDS. . . . . .Systems Development Section
SCC. . . . . .Source Classification Code
SIC. . . . . .Standard Industrial Classification
SIP. . . . . .State Implementation Plan
SMSA . . . . . .Standard Metropolitan Statistical Area
SOTDAT . . . . .Source Test Data System
STS. . . . . .SAROAD Terminal System
TCP. . . . . .Transportation Control Plan
UTM. . . . . .Universal Transverse Mercator
VOC. . . . . .Volatile Organic Compounds

ABSTRACT

The AEROS Summary and Retrieval Manual, Volume III of the OAQPS Guidelines Manual Series, describes and illustrates the reporting and analysis capabilities of the various AEROS systems. The reports available from each of the major systems are described and their retrieval options are explained. Sample computer printouts are used to illustrate the report formats.

This manual also describes the analysis packages available for use in the evaluation of AEROS data and describes the user access procedures for obtaining AEROS reports. It describes the standard publications available from the NADB to provide quarterly or annual information on emissions and air quality.

In an applications section, the manual provides specific examples of applications of AEROS data. The use of AEROS reports in typical air quality control activities is described.

The manual also gives an overview of the Comprehensive Data Handling System (CDHS), which is an AEROS-related system for storing and reporting air quality and emissions data.

This section is used to document Update procedures and record Updates when they are issued and posted in this volume.

Chapter 0.1 describes background and Update procedures. Chapter 0.2 is used to file Update Notices.

As the usefulness of the AEROS Manuals is highly dependent on their completeness, accuracy and timeliness, the following provisions have been made to allow for revisions in the interim between periodic complete review and reprinting of volumes. Revisions will be accomplished through the issuance of AEROS Manual Updates, which may contain one or more separate revisions to a given volume.

Responsibility for technical aspects of revisions is held by the groups in NADB responsible for the relevant system or operation, while compilation of revisions into Updates, and reproduction and distribution are overseen by the AEROS Manual Project Officer, Requests and Information Section.

These Updates will ordinarily be distributed to specific parties in OAQPS and other selected internal users and to AEROS Contacts in Regional Offices, who are designated holders of the appropriate AEROS Manual Volumes by their respective organizational units. These recipients are responsible for reviewing each Update and inserting it in the appropriate Volume and removing outdated portions as directed. They should also notify persons in their organizations to whom specific revisions may be of importance, and provide copies of revisions to those persons requiring them.

Three distinct types of revisions are foreseen: Urgent, Priority and Routine. Urgent revisions must be issued and entered into Manual Volumes as soons as possible to prevent adverse effects on operations.

Prior to compilation in a formal Update, drafts of Urgent revisions will be distributed to NADB and Regional Office AEROS Contacts with instructions on the timing of their use in system operations. These drafts should be filed in the appropriate Manual Volumes immediately preceding the portions to be replaced, pending issuance of the formal Update. Due to their importance, Urgent revisions will be issued by RIS as soon as complete, along with any other revisions which are ready for distribution at that time.

Priority revisions are substantive changes not crucial to system operations, and will generally be issued in Updates on a quarterly basis or combined with Urgent Updates when appropriate. Routine revisions are relatively minor changes such as editorial corrections, and will be included in regular or Urgent quarterly Updates as available.

Updates will consist of the actual revisions and any attendant changes to the Volume's Table of Contents, in appropriate format, accompanied by an Update Notice and any memoranda deemed appropriate by RIS. Updates will be compiled and numbered separately by AEROS Manual Volumes, with the Update Notice serving as an index and guide to implementation of the Update. The Update Notice will specify pages or sections to be removed and/or inserted, with descriptive comments on the content and relevance of changes. It will also include a summary of dates and numbers of previous Updates to the subject Volume, for verification of currency of the Volume. Upon receipt of an Update,

the changes should be made as indicated on the Update Notice and the Notice itself initialed and filed in Section 0, Chapter 2.

A full compilation of Update Notices for each Manual Volume, entitled "Summary of AEROS Manual Updates: Volume ___," is available to users by request to:

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This document will allow the user to examine all previous Updates to determine the currency of any copy of the Volume, and, through the comments, possible relevance of revisions to specific areas of interest. This reference is provided especially for infrequent users and others not receiving Updates on a regular basis.

User input on the AEROS Manuals and possible revisions is welcomed. Technical or substantive matters should be referred directly to the cognizant party in NADB, if possible. Any questions on the appropriate source of technical information and any questions, comments or suggestions on the coverage, organization and other such aspects of this Volume should be directed to:

AEROS Manual Project Officer, MD-14
Requests and Information Section
National Air Data Branch
Environmental Protection Agency
Research Triangle Park, NC 27711

FTS: 629-5694
Commercial: (919) 541-5694

This Update Notice concerns the enclosed replacement pages for Volume III of the AEROS MANUAL SERIES. Please remove and insert pages as listed below.

	REMOVE	INSERT	COMMENTS
1.	v to xiv	v to xiv	Routine. Contents revised to reflect Update.
2.	--	0.0.0-1 to 0.1.0-4	Priority. New section describing Update procedures.
3.	--	0.2.0-1 to 0.2.0-2	Routine. Update Notice III-1.*
4.	2.1.0-1 to 2.1.0-5	2.1.0-1 to 2.1.0-8	Priority. Two new reports listed. Contents of existing pages editorially revised.
5.	2.1.1-1 to 2.1.1-16	2.1.1-1 to 2.1.1-17	Routine. Correction in county code example, comment section expanded, and sample report section expanded.
6.	2.1.2-13 to 2.1.2-14	2.1.2-13 to 2.1.2-14	Priority. Revised to correct retrievals available.
7.	2.1.2-19	2.1.2-19 to 2.1.2-27	Priority. Two new reports added.
8.	2.3.1-1 to 2.3.1-21	2.3.1-1 to 2.3.1-21	Priority. Descriptions of "Raw Data Listings Greater Than or Equal to 24 Hours" and "Raw Data Listing Composite" revised and combined. Improperly placed page replaced with proper page 2.3.1-14. Other pages editorially revised.
9.	2.3.2-1 to 2.3.2-17	2.3.2-1 to 2.3.2-20	Priority. Revision of report descriptions.
10.	2.10.5-1	2.10-5-1 to 2.10.5-6	Priority. Documentation of Polk vehicle reports.

	REMOVE	INSERT	COMMENTS
11.	5.1.2-1	5.1.2-1	Priority. Revised to correct page reference.
12.	6.5.2-1	6.5.2-1 to 6.5.2-2	Routine. Correction of typographical error.

UPDATE SUMMARY

Volume III

Number	Date
III-1	2/7/77

*When you have made the changes indicated in this Notice, initial the Notice and insert it in Chapter 0.2.0 of Volume III as a record of the Updates received and filed.

NOTE: Priority update information on the enclosed update pages is indicated with a vertical line in the left margin. Routine update information is not specifically identified.

This Update Notice concerns the enclosed replacement pages for Volume III of the AEROS Manual Series. Please remove and insert pages as listed below.

	REMOVE	INSERT	COMMENTS
1.	V to XIV	V to XIV	Contents revised to reflect Update
2.		0.2.0-3 to 0.2.0-5	Update Notice III-2
3.	2.1.0-7 to 2.1.0-8	2.1.0-7 to 2.1.0-8	Revised Summary of NEDS Retrievals Table
4.	2.1.1-7 to 2.1.1-17	2.1.1-7 to 2.1.1-25	Revised to include new area source report
5.	2.1.2-1 to 2.1.2-27	2.1.2-1 to 2.1.2-22	Revised to delete obsolete reports, show new report examples
6.	2.3.0-1 to 2.3.0-2	2.3.0-1 to 2.3.0-2	Revised to include new report capability
7.	2.3.0-7	2.3.0-7	Revised to include new report capability
8.	2.3.1-1 to 2.3.1-2	2.3.1-1 to 2.3.1-2	Revised to include new example report
9.	2.3.1-5 to 2.3.1-12	2.3.1-5 to 2.3.1-12	Revised to reflect new selection capabilities.
10.	2.3.1-21	2.3.1-21 to 2.3.1-27	Addition of new SAROAD reports
11.	2.3.2-3 to 2.3.2-4	2.3.2-3 to 2.3.2-4	Revised to reflect new report format
12.	2.3.2-7 to 2.3.2-20	2.3.2-7 to 2.3.2-17	Revised to remove discontinued reports and document new reports

	REMOVE	INSERT	COMMENTS
13.	2.4.1-1 to 2.4.1-25	2.4.0-1	Revised to reflect discontinuation of responses for Air Quality Assurance handling Data
14.		2.5.1-1 to 2.5.2-4	Additions to Hazardous and Trace Emissions System (HATREMS) Chapter
15.	2.7.0-1	2.7.0-1	Revised to delete discontinued reports
16.	2.10.0-1	2.10.0-1	Revised to remove discontinued report
17.	2.10.2-1 to 2.10.2-3	2.10.2-1	Revised to delete discontinued reports
18.	3.0.0-1 to 3.5.0-1	3.0.0-1	Revised to delete discontinued reports
19.	4.2.2-1 to 4.2.2-115	4.2.2-1 to 4.2.2-76	Revised to include new capabilities
20.		4.2.3-1 to 4.2.3-114	New Chapter on NEDS Terminal System
21.	5.2.0-1	5.2.0-1	Revised to document new publication procedures
22.	5.2.1-1 to 5.2.1-6	5.2.1-1 to 5.2.1-5	Revised to document new publication procedures
23.	5.2.2-1 to 5.2.2-4	5.2.2-1 to 5.2.2-3	Revised to document new publication procedures

	REMOVE	INSERT	COMMENTS
24.	5.2.3-1 to 5.2.3-3	5.2.3-1 to 5.2.3-3	Revised to document new publication procedures
25.	6.3.0-1	6.3.0-1	Revised to reflect discontinuation of responses for Air Quality Assurance handling Data
26.	7.2.3-1 to 7.2.3-66	7.2.3-1 to 7.2.3-35	Revised to document new file formats

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UPDATE SUMMARY

Volume III

Number	Date
III-2	3/1/79

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	REMOVE	INSERT	COMMENTS
1.	vii to xii	vii to xii	Contents revised to reflect Update
2.		0.2.0-7 to 0.2.0-8	Update Notice III-3*
3.	1.0.0-1	1.0.0-1 to 1.0.0-2	Revised to reflect new capabilities
4.	2.0.0-1	2.0.0-1	Revised to reflect new capabilities
5.	2.1.0-7 to 2.1.0-8	2.1.0-7 to 2.1.0-16	Revised to document new reports and selection capabilities
6.	2.1.1-1 to 2.1.1-25	2.1.1-1 to 2.1.1-29	Revised to document new reports and selection capabilities
7.	2.1.2-1 to 2.1.2-22	2.1.2-1 to 2.1.2-27	Revised to document new reports and selection capabilities
8.	2.3.0-1 to 2.3.0-7	2.3.0-1 to 2.3.0-7	Revised to document new reports
9.	2.3.1-7 to 2.3.1-8	2.3.1-7 to 2.3.1-8	Revised to include new report format
10.	2.3.2-17	2.3.2-17 to 2.3.2-25	Revised to document new reports
11.	2.3.3-13	2.3.3-13 to 2.3.3-18	Revised to document new reports
12.	7.2.2-1 to 7.2.2-36	7.2.2-1 to 7.2.2-46	Revised to document new file formats

	REMOVE	INSERT	COMMENTS
13.	7.2.3-11 to 7.2.3-35	7.2.3-11 to 7.2.3-43	Revised to document new file formats
14.	8.1.0-1 to 8.5.0-1	8.1.0-1	Revised to document revised procedures

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UPDATE SUMMARY

Volume III

Number	Date
III-3	3/28/80

*When you have made the changes indicated in this Notice, initial the Notice and insert it in Chapter 0.2.0 of Volume III as a record of the Updates received and filed.

This Update Notice concerns the enclosed replacement pages for Volume III of the AEROS MANUAL SERIES. Please remove and insert pages as listed below.

	REMOVE	INSERT	COMMENTS
1.	iii to xiv	iii to xii	Contents revised to reflect Update.
2.	0.0.0-1 to 0.0.0-4	0.0.0-1 to 0.0.0-4	Revised to reflect new telephone numbers.
3.		0.2.0-9 to 0.2.0-10	Update Notice III-4.*
4.	1.0.0-1 to 1.0.0-2	1.0.0-1 to 1.0.0-2	Revised to reflect deleted section.
5.	2.0.0-1 to 2.1.0-16	2.0.0-1 to 2.1.0-17	Revised to reflect new report examples.
6.	2.1.1-1 to 2.1.1-29	2.1.1-1 to 2.1.1-29	Revised to reflect new report examples.
7.	2.1.2-1 to 2.1.2-27	2.1.2-1 to 2.1.2-27	Revised to reflect new report examples.
8.	2.1.3-1 to 2.1.3-6	2.1.3-1 to 2.1.3-6	Revised to reflect new report examples.
9.	2.2.0-1 to 2.2.2-2	2.2.0-1 to 2.2.0-13	Revised to reflect new information on SOTDAT.
10.	2.3.0-1 to 2.3.0-7	2.3.0-1 to 2.3.0-8	Revised to reflect new SAROAD reports.
11.	2.3.1-1 to 2.3.1-27	2.3.1-1 to 2.3.1-32	Addition of new SAROAD report.
12.	2.3.2-1 to 2.3.2-25	2.3.2-1 to 2.3.2-31	Addition of new SAROAD report.
13.	2.3.3-1 to 2.3.3-18	2.3.3-1 to 2.3.3-22	Addition of new SAROAD report.
14.	2.5.1-1 to 2.5.1-4	2.5.1-1 to 2.5.1-12	Addition of new VOC reports.
15.	2.5.2-3 to 2.5.2-4	2.5.2-3 to 2.5.2-4	Revised to reflect new report example.
16.	2.6.0-1 to 2.6.1-5	2.6.0-1	Revised to delete discontinued functions.

	REMOVE	INSERT	COMMENTS
17.	2.8.0-1	2.8.0-1	Revised to delete discontinued functions.
18.	2.10.0-1	2.10.0-1	Revised to delete discontinued functions.
19.	2.10.1-1 to 2.10.1-4	2.10.1-1 to 2.10.1-4	Revised to reflect current data value volumes.
20.	2.10.3-1	2.10.3-1	Incorporated into 2.10.1.
21.	4.0.0-1 to 4.1.0-1	4.0.0-1 to 4.1.0-1	Retyped for format consistency.
22.	4.1.1-1 to 4.1.1-5	4.1.1-1 to 4.1.1-5	Revised to update telephone numbers.
23.	4.2.0-1 to 4.2.1-2	4.2.0-1 to 4.2.1-2	Revised to update telephone numbers.
24.	4.2.3-11 to 4.2.3-12	4.2.3-11 to 4.2.3-12	Revised to include example sort specifications.
25.	4.2.3-49 to 4.2.3-74 4.2.3-89 to 4.2.3-114	4.2.3-49 to 4.2.3-74 4.2.3-89 to 4.2.3-114	Revised to improve print quality.
26.	5.0.0-1 to 5.1.0-1	5.0.0-1 to 5.1.0-1	Revised to reflect information on microfiche.
27.	5.1.1-1 to 5.1.1-2	5.1.1-1 to 5.1.1-2	Retyped for format.
28.	5.1.2-1	5.1.2-1	Retyped for format.
29.	5.2.0-1	5.2.0-1	Revised to reflect change in publication procedures.
30.	6.0.0-1 to 6.6.1-3		Deleted because of outdated applications.
31.	7.2.1-7 to 7.2.1-17	7.2.1-7 to 7.2.1-9	Revised to delete discontinued computer files.
32.	8.1.0-1	8.1.0-1 to 8.1.0-2	Revised to reflect current policy on confidentiality.
33.	9.0.0-1 to 9.2.2-2	9.0.0-1	Revised to delete obsolete information.

UPDATE SUMMARY

Volume III

Number	Date
III-4	8/10/81

*When you have made the changes indicated in this Notice, initial the Notice and insert it in Chapter 0.2.0 of Volume III as a record of the Updates received and filed.

Volume III of the AEROS manual illustrates the reporting capabilities of the various AEROS systems:

Section 2 describes and illustrates the reports available from the major AEROS systems. The sorting and retrieval options for each are also described.

Section 3 is open.

Section 4 outlines the user access procedures for obtaining reports described in this volume. Procedures for both EPA users and non-EPA users are included.

Section 5 describes the various standard publications produced by EPA. These publications, which provide quarterly or annual information on emission levels as well as information on ambient air quality and air quality monitoring procedures, are based primarily on the AEROS emission system (NEDS) and the air quality monitoring system (SAROAD).

Section 6 is open.

Section 7 describes procedures and the interaction between SDS and programmers using AEROS data files and shows the file formats for commonly used files.

Section 8 describes the procedures used to determine whether data coded confidential are properly classified. Steps required to handle confidentiality are described.

Section 9 describes the Comprehensive Data Handling System, which is an AEROS-related and AEROS-compatible system for monitoring pollutant emissions as well as air quality measurements. This system is utilized primarily by the states to aid in meeting their reporting requirements for entering emissions and monitoring data into the AEROS FILES.

In this section, the reporting capabilities of the various data systems comprising AEROS are described. Individual reports from each system are described and illustrated. These systems and data banks include the following:

Emissions Data System
Source Test Data System
Air Quality Data System
Hazardous and Trace Emissions Data System
Auxiliary Data

The National Emissions Data System is a computerized data handling system which accepts, stores, and reports on information relating to sources of any of the five criteria pollutants (particulates, SO_x, NO_x, CO, and reactive volatile organic compounds). In NEDS, a major distinction is made between two types of sources: point sources and area sources. Point sources, in the broadest sense, are stationary sources large enough to be identified and tracked individually; per NEDS reporting requirements, they are any plants emitting more than 100 tons/year of any of the criteria pollutants. Area sources, on the other hand, are those stationary and mobile sources which individually emit less than 100 tons/year and are too small and too numerous to keep individual records on. In NEDS, area sources are considered collectively on a county basis. A large boiler within a power plant would be an example of a point source, whereas a single automobile is an example of the type of source considered collectively as an area source.

In NEDS, all source-related data are entered into the system via specially formatted point and area source coding forms and are stored in separate point and area source files. The type of data stored in the system for point and area sources is somewhat different and is described below.

POINT SOURCE DATA

The point source data in NEDS fall into the following major groups: General source information--name, address, types of source, Standard

Industrial Classification, year of record, comments, etc.

Emissions data--operating or production rates and capacities, estimated emissions, EPA calculated emissions, control device type and efficiency on each criteria pollutant, etc.

Modeling parameters--UTM coordinates of source, stack height and diameter, exhaust gas temperature, and flow rate.

Compliance information--allowable emissions, compliance status, schedules, etc.

These data are input to NEDS in the standard point source format, an example of which is illustrated in Figure 2.1.1.e.

NEDS point source data are organized into three hierarchial levels.

- Plant level data (corresponding to input card 1) is general information that applies to an entire facility defined as a point source.

- Point level data (corresponding to input cards 2-5) applies to individual emission points within a plant. A plant may contain any number of emission points. A point is that portion of a facility that may be considered individually for emission purposes. A point may contain one or more processes or pieces of equipment that are related in contributing to the emissions from the point. In most cases, a point emits pollutants through a single confined location such as a stack, but it may emit pollutants at more than one location or at no clearly defined location within a plant.

- Process level data (corresponding to input card 6) are source data or use factors which may be used to define and compute emissions for process activities within an emission point. In NEDS, processes are defined by Source Classification Codes (SCC's). In general, for each SCC there are emission factors which relate the quantity of pollutants generated by a process to annual process operating rate. NEDS uses a file of emission factors associated with each SCC to compute emissions. There may be multiple SCC's for an emission point. For instance, if a boiler is defined as an emission point and it burns two fuels, two SCC's are needed to define these processes and allow emissions to be computed. In another example, if an asphalt batch plant is defined as an emission point, emissions may result from aggregate drying, burning fuel to provide heat for the process, and various material transfer points associated with loading and converging of the product. Multiple SCC's would be required to describe all of these processes.

The point source file provides for the use of alternate methods for determining the emissions which are reported. Most commonly, emissions will be calculated for each SCC using the emission factors in the SCC Emission Factor file. However, by use of an appropriate code on the input form and completion of fields for recording hand calculated emission estimates, more accurate estimates of emissions may be input to represent point emissions in place of the emission factor computed emissions. For some SCC's, no emission factors are available, so an alternate method must be used to estimate emissions for these records.

A list of the possible emission estimation methods used for NEDS point source calculations is given below.

0. No emissions
1. Stack-test results or other emission measurement
2. Material balance using engineering knowledge and expertise of process
3. Emissions calculation using emissions factors in SCC file
4. Guess
5. Emissions calculation using special emission factors that differ from the SCC listing
6. New source for which building approval has been granted but which is not yet in operation (zero emissions)
7. Source which has ceased to operate (zero emissions)

The procedure for computer calculation of emissions for each of these cases is as follows:

Methods 0, 6 and 7: Calculated emissions are set to zero.

Methods 1, 2, 4, and 5: Calculated emissions are set equal to hand calculated emission estimates. These must be distributed among multiple SCC's for a point, if necessary.

Method 3: Calculated emissions are derived as:

$$\text{Calculated Emissions} = \begin{pmatrix}\text{Annual operating} \\ \text{rate for SCC}\end{pmatrix} \times \begin{pmatrix}\dfrac{\text{Emission factor from SCC File}}{2{,}000}\end{pmatrix}$$

$$\begin{pmatrix}\text{Fuel parameter} \\ \text{if applicable}\end{pmatrix} \qquad \begin{pmatrix}\dfrac{\text{100-control efficiency}}{100}\end{pmatrix}$$

AREA SOURCE DATA

NEDS area source data may be grouped as follows:

General source information--name and location of area (county) source, year of record.

Activity levels--countywide activity level of each type of area source (e.g., tons of coal burned in all domestic space heating equipment in a county).

Emissions data--emission estimates for the entire county (for each pollutant) as well as for each area source category.

These data are input to NEDS in the standard area source format which is illustrated in Figure 2.1.1.f.

The area source activity levels are derived primarily from related information published by other Federal agencies, supplemented by special data developed by EPA for the purpose of developing NEDS area source inventories. Published data such as fuel use by State, motor vehicle miles of travel by State and county and forest fire acres burned by State are used with related data such as employment, population, and miscellaneous geographic or economic data available on a county-by-

county basis to derive annual estimates of the activity levels for each of the NEDS area source categories. The activity levels derived are adjusted to account for point source activity (such as fuel use by point sources) so that the area source data reflect only the activity levels (and resulting calculated emissions) that are not accounted for by point sources. The area source data are developed mainly by EPA, but may be supplemented by data voluntarily submitted by state agencies.

The area source emission estimates are calculated for each source category by a simple procedure:

$$\text{Calculated Emissions} = \left(\text{Activity Level}\right) \times \left(\frac{\text{Emission Factor}}{2{,}000}\right) \times \left(\text{Fuel Parameter, if applicable}\right)$$

Emission factors are contained in the NEDS area source emission factor file. For many categories the same emission factors are used for all counties. However, for some source categories, state- or county-categories, specific emission factors have been developed which consider local variables that affect calculation of emissions. These more specific emission factors are used in NEDS calculations for all highway motor vehicle and fugitive dust categories and for selected other categories in a few counties where data are available to develop more applicable emission factors than the national emission factors. Provision is also made, as an option, to override computer calculated emissions for any source category for any county, by hand calculated emissions that may be more accurate than any simple emission factor calculation.

NEDS REPORTS

Computer printout reports available from NEDS may be categorized as below:

1. Raw Data Reports
2. Summary Data Reports
3. Management Reports

The raw data reports list the actual data stored for specific emissions sources. The summary reports show collective totals of emissions or related data for specific geographic areas. The management reports provide information on the status of the data contained in the NEDS files.

Table 2.1.0.a gives a summary of all the available reports. Each report is described in detail in the following subjects.

NEDS GENERAL SELECTION AND SORT CAPABILITIES

As shown in Table 2.1.0.a many of the NEDS reports may be retrieved by means of the NEDS general selection and sort program.

Table 2.1.0.a SUMMARY OF NEDS RETRIEVALS

Report	General Selection Capability	Nation (All Records in File)	State	EPA Region	AQCR	State Portions of Interstate AQCR's	All Counties in a State	All Counties in an AQCR	County
Raw Data Reports									
Point Source Report	X								
Condensed Point Source Report	X								
Allowed vs. Computed Emissions Report	X								
AQDM Data Tabulation Report		X					X	X	X
Quick Look Report	X								
Area Source Report		X	X		X	X	X	X	X
Area Source Cards		X					X		X
Area Source File on Tape		X					X		X
Point Source Cards	X								
Point Source Subfile on Tape	X								
Summary Reports									
Emission Summary Report		X	X	X	X	X	X		X
Annual Fuel Summary Report		X	X		X	X	X	X	
Potential Emissions Report[1]	X	X	X		X	X	X		X
Plant Emissions Report	X								
VOC Emissions Summary Report		X	X	X	X	X	X		X
Plant Name Report	X								
Emissions By SCC Report	X								
SIC Emissions Report	X	X	X		X	X	X		X
County Point and Area Source[1] Emissions Report	X						X		
Modeling Parameters Report		X							
Management Reports									
Plant-Point- SCC Count Report		X							
Missing Item Report[1]	X	X	X		X	X	X		X
Highest Plant Number in County Report		X							

[1]The general selection capability applies to the selection of point source data, but the report may be printed as a summary only for the areas with X shown.

All of these reports share a common set of selection and sorting capabilities. The term selection refers to the procedure used to retrieve data from NEDS data files. Sorting refers to the order in which retrieved data are arranged in printed reports or selected data files.

Data Selection

For reports that employ the NEDS general selection program, data may be retrieved using either the "standard" on "free-format" selection option. This capability applies only to the selection of point source data. Reports that require area source data have their own selection capabilities which are described in the following subjects for each specific report.

The "standard" selection option is the most cost-effective means for retrieval of point source data. However, the types of retrievals available are more limited than with the free-format selection option. Using the standard selection option, data may be retrieved according to specific data values for any of the following:

a. State
b. AQCR
c. County
d. Plant ID
e. Point ID
f. Ownership Code
g. Standard Industrial Classification (SIC)
h. Emissions Estimation Method
i. Source Classification Code (SCC) and Component Parts
j. Source emitting more than X tons of any one pollutant
k. Valid combinations of any of the above.

There are only certain combinations of the retrieval categories listed above that are valid. For example, the county code numbers are unique within each state but not across state boundaries. Thus although no two counties in Arizona have the same county code number, 0040 is the county code number both for Apache County in Arizona and Arkansas County in Arkansas. As a result, retrieval by county is only meaningful when combined with retrieval by state.

In the same manner retrieval by plant requires specification of county and state identifiers; retrieval by point requires specification of plant, county, and state identifiers.

It should be noted that the same type of restriction applies to retrieval by SCC parts. Data may be retrieved by SCC as follows:

a. Complete 8-digit SCC
b. First 6 digits of SCC
c. First 3 digits of SCC
d. First digit only of SCC

These selection options allow simple retrieval of data for groups of processes as identified by SCC. For example, a retrieval for SCC 1-02-002-02 would select only records with the complete 8-digit SCC (bituminous coal-fired dry bottom pulverized coal industrial boilers), a retrieval for SCC 1-02-002 would select all records with these first 6 digits regardless of what the last 2 digits are (all industrial coal-fired boilers in this case), a retrieval for SCC 1-02 would select only records with these first 3 digits (all industrial boilers), and a retrieval for SCC 1 would select all records with a first digit of 1 (all boilers).

The "free-format" selection option offers many additional retrieval capabilities not available with the standard selection option. However, depending on the nature of the request, selection by the free format option may require more computer time and thus be more costly to complete than typical reports generated by the standard selection option.

The free format selection option offers the following retrieval capabilities:

a. Retrieval by specific data values for any of 89 point source data items. An example would be the retrieval of all records with fuel sulfur content equal to 1%. A list of all the data items are shown in Table 2.1.0.b.

b. Retrieval, for any data item, according to whether an actual data value is greater than or less than a specified data value. For example the following types of selections are possible:
   - All records with fuel sulfur content greater than 2%.
   - All records with fuel sulfur content less than 1%.
   - All records with fuel sulfur content greater than 1% but less than 2%.

c. Retrieval by valid combinations of data items and data value ranges. For example, a retrieval could be:
   - All records in a specific state with SIC in the range 2000 to 2099, stack heights greater than 200 feet, and particulate emissions greater than 50 tons per year.

d. Two special selection options associated with the SCC are available:
   1. Selection of all records within emission points that have a specified SCC.
   2. Selection of all records within plants that have a specified SCC.

These selection options may be used to retrieve an entire point or an entire plant with at least one record having a specified SCC. These selections may be used to retrieve boilers using multiple fuels or to retrieve all sources in plants with a specific process, for example.

e. Retrieval according to total plant emissions. This option allows retrieval of all plants whose emissions are greater than, less than, or equal to a specified value. For example, all plants in a given state emitting more than 100 tons/year of SO_2 may be retrieved. When a plant is retrieved using this option, all points and SCCs in the plant are retrieved.

Sorting of Output Reports and Files

Data retrieved by either the standard or free format selection options may be sorted at the option of the requestor. If no sort is specified, data will be listed in the standard NEDS point source file record sequence, that is, ascending order by State, County, Plant, Point and SCC. Optional sorting of data will require additional computer time and will thus increase the total cost of producing a report.

Data may be sorted in ascending (from lowest value to highest) or descending (from highest value to lowest) order according to any of the point source data items shown in Table 2.1.0.b. A maximum of 20 sort parameters may be specified for any single report. Sorts are performed in hierarchical order according to each sort parameter specified. For example, if a sort is specified as:

1. State-ascending order
2. SCC - ascending order
3. SO_2 emissions - descending order

the output report or file will be produced with selected records listed in order first according to state code in increasing sequence, next according to SCC in increasing sequence within each state, and finally by SO_2 emissions in descending sequence within each SCC within each State. Records with identical values for state, SCC and SO_2 emissions will appear in random order since no additional sort paramters were specified.

Table 2.1.0.b

POINT SOURCE
FIELD CODE DESCRIPTION TABLE

01 STATE
02 COUNTY CODE
03 PLANT IDENTIFICATION NUMBER
04 POINT IDENTIFICATION NUMBER
05 SOURCE CLASSIFICATION CODE
06 AQCR NUMBER
07 YEAR PLANT INFO LAST UPDATED (CARD 1)
08 CITY CODE
09 UTM ZONE
10 ESTABLISHMENT NAME AND ADDRESS
11 PERSONAL CONTACT
12 OWNERSHIP CODE
13 YEAR POINT INFO LAST UPDATED (CARD 2)
14 STANDARD INDUSTRIAL CLASSIFICATION CODE
15 IPP PROCESS CODE
16 HORIZONTAL UTM COORDINATE (KM)
17 VERTICAL UTM COORDINATE (KM)
18 STACK HEIGHT (FT)
19 STACK DIAMETER (FT)
20 STACK TEMPERATURE (DEG F)
21 FLOW RATE (FT 3/MIN)
22 PLUME HEIGHT
23 FIRST POINT WITH COMMON STACK CODE
24 LAST POINT WITH COMMON STACK CODE
25 YEAR CONTROL INFO LAST UPDATED (CARD 3)
26 BOILER DESIGN CAPACITY (10 6 BTU/HR)

27 PRIMARY CONTROL EQUIPMENT PARTICULATES
28 SECONDARY CONTROL EQUIPMENT PARTICULATES
29 PRIMARY CONTROL EQUIPMENT SO2
30 SECONDARY CONTROL EQUIPMENT SO2
31 PRIMARY CONTROL EQUIPMENT NOX
32 SECONDARY CONTROL EQUIPMENT NOX
33 PRIMARY CONTROL EQUIPMENT VOC
34 SECONDARY CONTROL EQUIPMENT VOC
35 PRIMARY CONTROL EQUIPMENT CO
36 SECONDARY CONTROL EQUIPMENT CO
37 EST CONTROL EFFICIENCY PARTICULATE (%)
38 EST CONTROL EFFICIENCY SO2 (%)
39 EST CONTROL EFFICIENCY NOX (%)
40 EST CONTROL EFFICIENCY VOC (%)
41 EST CONTROL EFFICIENCY CO (%)
42 YEAR EMISSIONS INFO LAST UPDATED (CARD4)
43 % ANNUAL THRU PUT (DEC-FEB)
44 % ANNUAL THRU PUT (MAR-MAY)
45 % ANNUAL THRU PUT (JUN-AUG)
46 % ANNUAL THRU PUT (SEP-NOV)
47 NORMAL OPERATING HOURS PER DAY
48 NORMAL OPERATING DAYS PER WEEK
49 NORMAL OPERATING WEEKS PER YEAR
50 STATE ESTIMATED EMISSIONS PARTICULATES (TONS/YEAR)

51 STATE ESTIMATED EMISSIONS SO2 (TONS/YEAR)
52 STATE ESTIMATED EMISSIONS NOX (TONS/YEAR)
53 STATE ESTIMATED EMISSIONS VOC (TONS/YEAR)
54 STATE ESTIMATED EMISSIONS CO (TONS/YEAR)
55 ESTIMATION METHOD PARTICULATE
56 ESTIMATION METHOD SO2
57 ESTIMATION METHOD NOX
58 ESTIMATION METHOD VOC
59 ESTIMATION METHOD CO
60 % SPACE HEAT
61 YEAR REGULATORY INFO LAST UPDATED (CARD 5)
62 ALLOWABLE EMISSIONS PARTICULATE (TONS/YR)
63 ALLOWABLE EMISSIONS SO2 (TONS/YR)
64 ALLOWABLE EMISSIONS NOX (TONS/YR)
65 ALLOWABLE EMISSIONS VOC (TONS/YR)
66 ALLOWABLE EMISSIONS CO (TONS/YR)
67 COMPLIANCE STATUS
68 COMPLIANCE SCHEDULE - YEAR
69 COMPLIANCE SCHEDULE - MONTH
70 COMPLIANCE STATUS UPDATE - YEAR
71 COMPLIANCE STATUS UPDATE - MONTH
72 COMPLIANCE STATUS UPDATE - DAY
73 EMERGENCY CONTROL ACT PROGRAM STATUS
74 CONTROL REGULATION NUMBER 1
75 CONTROL REGULATION NUMBER 2
76 CONTROL REGULATION NUMBER 3
77 YEAR PROCESS INFO LAST UPDATED (CARD 6)
78 FUEL, PROCESS, SOLID WASTE OPERATING RATE

79 MAXIMUM DESIGN RATE

80 % SULFUR CONTENT

81 % ASH CONTENT

82 HEAT CONTENT (10 6 BTU)

83 SOURCE CODE

84 CONFIDENTIALITY OF DATA

85 COMPUTER CALCULATED PARTICULATE EMISSIONS (TONS/YEAR)

86 COMPUTER CALCULATED SO2 EMISSIONS (TONS/YEAR)

87 COMPUTER CALCULATED NOX EMISSIONS (TONS/YEAR)

88 COMPUTER CALCULATED VOC EMISSIONS (TONS/YEAR)

89 COMPUTER CALCULATED CO EMISSIONS (TONS/YEAR)

POINT SOURCE REPORT

General Description

Sources emitting more than a specific amount per year of any one of the five criteria pollutants (particulates, sulfur oxides, nitrogen oxides, reactive volatile organic compounds, and carbon monoxide) are classified by EPA as point sources.* The basic "Point Source Report" produces a full, formatted listing of all relevant identifying and descriptive point source data as well as estimated and NEDS calculated emissions for each criteria pollutant. More specifically, the following information is available for each emission point+ for each criteria pollutant:

a. Geographic location
b. Year of Record
c. Modeling Parameters - UTM coordinates, stack height, diameter, temperature, etc.
d. Emission Data - Throughput rate, estimated emissions, estimation method, control equipment, control efficiency, etc.
e. Allowable Emissions
f. Compliance Status
g. Operating Information
h. Annual Fuel Consumption
i. Source Operating Characteristics

Each page of computer output contains the data for one process (SCC).

---

* The specific amount is an SIP reporting requirement defined in 40 CFR, Section 51.322. NEDS also accepts data based on a state's definition of a point source.

+An emission point is a source which is coded on a single NEDS coding form.

When determining total plant emissions from such a printout, care must be taken to avoid adding duplicate "Hand Calculated Point Emissions" into the total. The "Computer Calculated SCC Emissions" should be used to determine total plant emissions. The calculated emissions are labeled "Computer Calculated SCC Emissions" on the report. The field labeled "Hand Calculated Point Emissions" reflects emissions for a NEDS emission point which are entered by the data originator. The same values for "Hand Calculated Point Emissions" will be repeated on separate pages for points with more than one SCC. Normally, in such cases, the sum of all "Computer Calculated SCC Emissions" for a point will equal the "Hand Calculated Point Emissions" for points with emission estimation method codes of 1,2,4,5,6, and 7. Some data conditions may prevent this relationship from always holding true. For points with emission estimation method code 3 (SCC emission factor file calculation), the calculated emissions have no dependence on any hand calculated point emissions that may be reported.

Retrievals Available

NEDS point source reports may be retrieved and sorted according to the NEDS general selection capabilities described in Section 2.1.0.

Sample Report

Figure 2.1.1a is an example point source report.

```
N E D S   P O I N T   S O U R C E   L I S T I N G        NEDS-USER FILE CREATED ON WEDNESDAY    AUGUST 11, 1982     PAGE    16

STATE(36): OHIO            AQCR(183): ZANESVILLE-CAMBRIDGE                                  CITY(     ):
COUNTY(1520): COSHOCTON CO                  PLANT ID: 5001  POINT ID: 08

NAME-ADDRESS: CONESVL GENERATNG STA C & S OHIO E 43811  SIC(4911):  ELECTRIC SERVICES
PERSONAL CONTACT:                SCC(1-01-002-02): EXTCOMB BOILER    -ELECTRIC GENERATN -BITUMINOUS COAL   -PULV COAL DRY BOT
-----------------------------------------------------------------------------------------------------------------------------
! GENERAL INFORMATION  ! UTM GRID COORDINATES         ! HAND CALCULATED POINT EMISSIONS        ! ALLOWABLE EMISSIONS FOR POINT !
! ******************** ! ********************         ! ******************************           ! ******************************!
! DATE OF              !        UTM ZONE: 17           ! PARTICULATE:       827 TONS/YR         !   PARTICULATE:     1,125 TONS/YR !
! LAST UPDATE: 1980    !                               !        SOX:            TONS/YR          !          SOX:    28,361 TONS/YR !
!                      !      HORIZONTAL:   424.7 KM   !        NOX:            TONS/YR          !          NOX: 9,999,999 TONS/YR !
! OWNERSHIP: UTILITY   !        VERTICAL: 4,448.4 KM   !        VOC:        101 TONS/YR          !          VOC: 9,999,999 TONS/YR !
!                      !-----------------------------!        CO:         339 TONS/YR          !           CO: 9,999,999 TONS/YR !
! IPP PROCESS: 50      ! STACK PARAMETERS              !-------------------------------------!-----------------------------!
!                      ! ****************              ! EMISSION ESTIMATION METHODS          ! COMPUTER CALCD SCC EMISSIONS !
! SOURCE: BOILER       ! STACK HEIGHT:        800 FT   ! ************************           ! ****************************!
!                      ! STACK DIAMETER:     26.0 FT    ! PART: SPECIAL STATE EMISSION FACTOR  !       PART:      827     TONS/YR !
!                      ! GAS TEMPERATURE:     295 F     !  SOX: EMISSION FACTOR(NEDS SCC FILE) !
! NORMAL OPERATIONS    ! GAS FLOW RATE:1,733,300 ACFM   ! NOX: EMISSION FACTOR(NEDS SCC FILE) !        SOX:    6,580     TONS/YR !
! ****************     ! PLUME HT(NO STACK):    0 FT    ! VOC: SPECIAL STATE EMISSION FACTOR   !
!      HOURS/DAY: 24   ! SAME STACK VENTS POINTS   -    !  CO: SPECIAL STATE EMISSION FACTOR   !        NOX:    7,330     TONS/YR !
!      DAYS/WEEK:  7   !-----------------------------!-------------------------------------!
!     WEEKS/YEAR: 52   ! CONTROL DEVICE/METHOD IDENTIFICATION                  ! CONTROL      !        VOC:      101     TONS/YR !
!                      ! ***********************************                   ! EFFICIENCIES !
! % ANNUAL THROUGHPUT  ! PRIMARY PART: ELECTROSTATIC PRECIPITOR - HIGH EFFIC    ! ************ !         CO:      339     TONS/YR !
! ******************** ! SECOND. PART: WET SCRUBBER - HIGH EFFICIENCY          ! PART: 98.1 % !
!        DEC-FEB: 25 % !                                                       !              !
!        MAR-MAY: 25 % !  PRIMARY SOX: WET LIME SLURRY SCRUBBING               !              !
!       JUNE-AUG: 25 % !  SECOND. SOX: NO CONTROL EQUIPMENT                    !  SOX: 89.5 % !
!       SEPT-NOV: 25 % !                                                       !              !
!                      !  PRIMARY NOX: NO CONTROL EQUIPMENT                   !              !
! % SPACE HEAT: 00.0 % !  SECOND. NOX: NO CONTROL EQUIPMENT                    !  NOX: 00.0 % !
!                      !                                                       !              !
! COMPLIANCE INFO      !  PRIMARY VOC: NO CONTROL EQUIPMENT                   !              !
! ***************      !  SECOND. VOC: NO CONTROL EQUIPMENT                   !  VOC: 00.0 % !
! STATUS UNKNOWN       !                                                       !              !
!                      !  PRIMARY CO: NO CONTROL EQUIPMENT                    !              !
! SCHEDULED            !  SECOND. CO: NO CONTROL EQUIPMENT                    !   CO: 00.0 % !
! COMPLIANCE DATE:     !-----------------------------------------------------!-------------------------------!
!                      ! FUEL CHARACTERISTICS                ! OPERATING RATES                                !
! COMPLIANCE STATUS    ! ********************                ! ***************                                !
! UPDATE:     15/02/72 !                                     !    ANNUAL OPERATING RATE:   698,000 TONS BURNED !
!                      !                                     !                                                 !
! EMERGENCY CONTROL    ! FUEL SULFUR CONTENT: 4.60 %         !  HOURLY MAXM DESIGN RATE:   178.550 TONS BURNED !
! ACTION PLAN          !                                     !                                                 !
! ****************     !    FUEL ASH CONTENT: 13.2 %         !   BOILER DESIGN CAPACITY:     4,091 MILLION BTU/HR !
! NOT REQUIRED         !                                     !-------------------------------------------------!
!                      !   FUEL HEAT CONTENT:     22 MILLION BTU/TONS BURNED                   COMMENTS:
-----------------------------------------------------------------------------------------------------------------------------
! PLANT COMMENT :        CERTIFIED BY STATE  6-18-80                                !
! POINT COMMENT :                                                                   !
! SCC   COMMENT :                                                                   !
-----------------------------------------------------------------------------------------------------------------------------
  THESE DATA WERE DESIGNATED PROPRIETARY BY THE SOURCE OR SUBMITTING AGENCY.  A LEGAL DETERMINATION REGARDING RELEASE HAS NOT YET
  BEEN MADE BY OGC OR BY RC IN ACCORDANCE WITH 40CFR PART 2 AND THE FREEDOM OF INFORMATION ACT.
```

Figure 2.1.1-a Point source report

CONDENSED POINT SOURCE REPORT

General Description

The "Condensed Point Source Report" is an abbreviated listing for emission points. To generate this report, a particular pollutant and the minimum value of emissions of that pollutant must be specified. Emission points emitting more than that minimum value of the pollutant will be included in the report.

A heading containing the creation date, minimum value, specified pollutant, and an indication of whether the data are in English or metric units is printed first. Next is displayed a five-line summary for each SCC per emission point.

The five line summary includes the following information for each SCC per emission point: geographic location, ownership, year of record, SIC and annual emissions of each of the five criteria pollutants. Also included are the control equipment, control efficiency, and estimation method relevant to the specified pollutant.

Retrievals Available

Reports may be retrieved and sorted according to the NEDS general selection and sorting capabilities described in Section 2.1.0.

Sample Report

Figure 2.1.1.b is a sample "Condensed Point Source Report." The pollutant specified is hydrocarbons and the minimum value of the pollutant included is 50 tons. The condensed point source report presents only "Computer Calculated SCC Emissions," as described for the full point source report.

FILE CREATED ON WEDNESDAY AUGUST 11, 1982 PAGE 2

N A T I O N A L E M I S S I O N S D A T A S Y S T E M

CONDENSED POINT SOURCE LISTING FOR PARTICULATE
FOR ALL VALUES > THAN OR = TO 0
EMISSIONS ARE IN SHORT TONS

	PART	S O X	N O X	V O C	C O
0009: TVA BULL RUN STEAM PLANT CLINTON 37716 OWNERSHIP: UTILITY 44: TENNESSEE 0040: ANDERSON CO YEAR OF RECORD: 1978 207: EASTERN TENNESSEE-SOUTHWESTE 011: ELECTROSTATIC PRECIPITOR - MEDIUM EFFICIENCY EFF = 99.9 % POINT: 01 ESTIMATE BY (3) USED EMISSIONS FACTORS SIC = 4911 SCC = 1-01-002-02	96	20,951	12,131	40	347
0009: TVA BULL RUN STEAM PLANT CLINTON 37716 OWNERSHIP: UTILITY 44: TENNESSEE 0040: ANDERSON CO YEAR OF RECORD: 1978 207: EASTERN TENNESSEE-SOUTHWESTE 011: ELECTROSTATIC PRECIPITOR - MEDIUM EFFICIENCY EFF = 99.9 % POINT: 01 ESTIMATE BY (3) USED EMISSIONS FACTORS SIC = 4911 SCC = 1-01-005-01					
0009: TVA BULL RUN STEAM PLANT CLINTON 37716 OWNERSHIP: UTILITY 44: TENNESSEE 0040: ANDERSON CO YEAR OF RECORD: 1978 207: EASTERN TENNESSEE-SOUTHWESTE 000: NO CONTROL EQUIPMENT EFF = 0.0 % POINT: 02 ESTIMATE BY (5) SPECIAL EMISSION FACTOR SIC = 4911 SCC = 1-01-005-01		4	10	1	2
0009: TVA BULL RUN STEAM PLANT CLINTON 37716 OWNERSHIP: UTILITY 44: TENNESSEE 0040: ANDERSON CO YEAR OF RECORD: 1978 207: EASTERN TENNESSEE-SOUTHWESTE 000: NO CONTROL EQUIPMENT EFF = 0.0 % POINT: 03 ESTIMATE BY (5) SPECIAL EMISSION FACTOR SIC = 4911 SCC = 1-01-005-01		5	11	1	3
0009: TVA BULL RUN STEAM PLANT CLINTON 37716 OWNERSHIP: UTILITY 44: TENNESSEE 0040: ANDERSON CO YEAR OF RECORD: 1978 207: EASTERN TENNESSEE-SOUTHWESTE 010: ELECTROSTATIC PRECIPITOR - HIGH EFFICIENCY EFF = 90.0 % POINT: 04 ESTIMATE BY (5) SPECIAL EMISSION FACTOR SIC = 4911 SCC = 1-01-002-02		20,951	12,131	2	5
0009: TVA BULL RUN STEAM PLANT CLINTON 37716 OWNERSHIP: UTILITY 44: TENNESSEE 0040: ANDERSON CO YEAR OF RECORD: 1978 207: EASTERN TENNESSEE-SOUTHWESTE 010: ELECTROSTATIC PRECIPITOR - HIGH EFFICIENCY EFF = 90.0 % POINT: 04 ESTIMATE BY (5) SPECIAL EMISSION FACTOR SIC = 4911 SCC = 1-01-005-01		18	15	<1	<1
0007: TVA JOHN SEVIER ST PLT ROGERSVILLE 37857 OWNERSHIP: FEDRL GOVT 44: TENNESSEE 1380: HAWKINS CO YEAR OF RECORD: 1980 207: EASTERN TENNESSEE-SOUTHWESTE 008: CENTRIFUGAL COLLECTOR - MEDIUM EFFICIENCY EFF = 99.3 % POINT: 01 ESTIMATE BY (3) USED EMISSIONS FACTORS SIC = 4911 SCC = 1-01-002-02	287	23,053	6,055	20	173

Figure 2.1.1-b Condensed point source report

ALLOWED VERSUS COMPUTED EMISSIONS REPORT

General Description

For each pollutant, allowed emissions may be entered into NEDS for a given emission point. The calculated emissions refer to the emissions associated with each SCC of that point source. The "Allowed Versus Computed Emissions Report" was written to permit comparison of coded allowable emissions with total calculated emissions for the emission point.

Each plant requested is represented in the report by one or more pages of computer output. A heading containing the creation date and identifying geographic data is printed on the first page. In the pages that follow, the emission data for each plant are described with the points listed in ascending numerical order. For each point, the report prints the allowed emissions for each pollutant (zero values are printed as blanks), the calculated emissions of each pollutant for each SCC, and the totals of the calculated emissions for each pollutant.

Retrievals Available

Reports may be retrieved based on the NEDS general selection and sorting capabilities described in Section 2.1.0.

Sample Report

Figure 2.1.1.c is a sample from an "Allowed Versus Computed Emissions Report" retrieved for the State of Vermont and the Air Quality Control Region of Champlain Valley.

N A T I O N A L E M I S S I O N D A T A S Y S T E M PAGE 26

ALLOWED VERSUS COMPUTED EMISSIONS

DATE: MAY 18, 1982 FILE CREATED ON: APRIL 23, 1982

STATE(41): RHODE ISLAND
AQCR(120): METROPOLITAN PROVIDENCE

PLANT NAME AND ADDRESS: NARR BREWING CO,NEW DEPOT,CRANSTON 02920.

POINT NUMBER: 01

SCC NAME				YEAR OF RECORD
SCC1 : EXTCOMB BOILER	INDUSTRIAL	RESIDUAL OIL	NO 6 OIL	74

	PART	SOX	NOX	VOC	CO
ALLOWED EMISSIONS:	15	169	0	0	0
COMPUTED EMISSIONS:					
SCC1 :	1	19	12		1
TOTAL:	1	19	12		1

REGULATIONS:

POINT NUMBER: 02

SCC NAME				YEAR OF RECORD
SCC1 : EXTCOMB BOILER	INDUSTRIAL	RESIDUAL OIL	NO 6 OIL	74

	PART	SOX	NOX	VOC	CO
ALLOWED EMISSIONS:	18	193	0	0	0
COMPUTED EMISSIONS:					
SCC1 :	2	19	12		1
TOTAL:	2	19	12		1

REGULATIONS:

POINT NUMBER: 03

SCC NAME				YEAR OF RECORD
SCC1 : EXTCOMB BOILER	INDUSTRIAL	RESIDUAL OIL	NO 6 OIL	74

Figure 2.1.1-c Allowed versus computed emissions report

	PART	SOX	NOX	VOC	CO
ALLOWED EMISSIONS:	35	385	0	0	0
COMPUTED EMISSIONS:					
SCC1 :	4	38	24		2
TOTAL:	4	38	24		2

REGULATIONS:

POINT NUMBER: 04

SCC NAME				YEAR OF RECORD
SCC1 : EXTCOMB BOILER	INDUSTRIAL	RESIDUAL OIL	NO 6 OIL	74

	PART	SOX	NOX	VOC	CO
ALLOWED EMISSIONS:	3	20	0	0	0
COMPUTED EMISSIONS:					
SCC1 :	4	38	25	1	2
TOTAL:	4	38	25	1	2

REGULATIONS:

Figure 2.1.1-c (continued) Allowed versus computed emissions report

AQDM DATA TABULATION REPORT

General Description

The AQDM Data Tabulation Report was written to allow review of NEDS point source data that may be used as input to a dispersion model such as AQDM, the Air Quality Display Model. The NEDS-AQDM tabulation includes; Plant name, address and ID, UTM co-ordinates, present and allowable emission estimates for any two pollutants, and stack data in the format required by AQDM for the SORCE and PLUME decks. Emission estimates are converted from tons/year to tons/day. The conversion is based on 365 days per year for all sources. Stack data have been converted to metric units.

Retrievals Available

The report may be produced for the nation, a state, an AQCR, or a county.

Sample Report

Figure 2.1.1.d is an example AQDM data tabulation report.

FILE CREATED ON MONDAY JUNE 07, 1982 REPORT MAY CONTAIN CONFIDENTIAL INFORMATION

NEDS POINT SOURCE EMISSION AND STACK DATA

)24 MINNESOTA 129 DULUTH-SUPERIOR (MINN-WISC) 1660 ITASCA CO

IDENT PLANT POINT	NAME AND ADDRESS	CONF	STK NO	UTM COORDINATE ZN	HOR	VERT	EMISSION ESTIMATES-TONS/DAY PRESENT PART.	PRESENT SO2	ALLOWABLE PART.	ALLOWABLE SO2	STACK DATA HT M	VEL M/SEC	DIA M	TEMP K
)0005	26 HANNA MINING CO #BUTLER TACONITE		2	15	485.0	5244.3	.005	.003	.000	.000	.0	.00	.00	
)0006	01 HAWKINSON CONSTRUCTION CO #PORTABLE PLAN		2	15	461.0	5232.0	.055	.000	.000	.000	6.1	44.56	.91	399
)0007	01 MARCELL MILL + LUMBER		2	15	448.5	5270.3	.000	.000	.000	.000	.0	.00	.00	533
)0009	01 US STEEL CORP #MINERALS BENEFICIATION DI		2	15	480.0	5241.0	.000	.000	.000	.000	3.7	22.64	.30	298
)	02		2	15	480.0	5241.0	.000	.000	.000	.000	9.1	.00	.30	298
)	03		2	15	480.0	5241.0	.000	.000	.000	.000	4.3	9.34	.57	298
)	04		2	15	480.0	5241.0	.000	.000	.000	.000	6.1	.00	.00	298
)	05		2	15	480.0	5241.0	.000	.000	.000	.000	4.3	15.63	.33	298
)0010	01 BLANDIN WOOD PRODUCTS COMPANY		2	15	459.7	5230.6	.000	.000	.000	.000	16.8	4.69	1.06	755
)	02		2	15	459.7	5230.6	.115	.000	.000	.000	17.4	10.40	1.58	390
)	03		2	15	459.7	5230.6	.000	.000	.000	.000	11.0	11.53	.60	305
)	04		2	15	459.7	5230.6	.000	.000	.000	.000	14.6	1.84	.60	319
)	05		2	15	459.7	5230.6	.000	.000	.000	.000	15.2	22.26	.79	305
)	06		2	15	459.7	5230.6	.000	.000	.000	.000	11.6	30.39	.76	324
)	07		2	15	459.7	5230.6	.000	.000	.000	.000	18.3	3.65	1.06	671
)	08		2	15	459.7	5230.6	.000	.000	.000	.000	14.3	14.23	.57	315
)	09		2	15	459.7	5230.6	.000	.000	.000	.000	16.5	23.85	1.00	298
)0011	01 GREAT LAKES GAS TRANSMISSION #DEER RIVER		2	15	436.1	5242.3	.014	.000	.000	.000	9.8	17.49	2.98	721
)	02		2	15	436.1	5242.3	.003	.000	.000	.000	13.1	15.98	2.52	594
)	03		2	15	436.1	5242.3	.003	.000	.000	.000	13.1	16.03	2.52	594

Figure 2.1.1-d AQDM data tabulation report

QUICK LOOK REPORT

General Description

The NEDS Quick Look report is a one-line report of selected data items specified by the requestor. The Quick Look report is part of the NEDS interactive system described in detail in Section 4.2.3. For each selected record, which may be either a point source record or an area source record, any data item may be printed in any order up to the maximum space available on one computer printout page. Thus, the Quick Look report is a means for printing a compact report displaying only those data items of specific interest to the requestor. For each selected record one line is printed, up to a maximum of 45 lines per computer printout page.

Retrievals Available

Data may be retrieved according to the NEDS general selection and sorting capabilities discussed in Section 2.1.0. For the NEDS Quick Look report, this retrieval capability is available for both point and area source data.

Sample Report

Figure 2.1.1.e is a sample NEDS Quick Look Report for selected point source records. In this report the data items specified to be printed were state code, county code, plant name and address, primary and secondary particulate control equipment, particulate control efficiency, and SCC. Any other data items could be printed, if desired, and they could be listed in any order across the page. Note that in NEDS Quick Look reports of point source data, the plant name and address field is truncated after the first 20 characters.

NEDS USER POINT FILE

DATA SELECTION REPORT

DATE: 06/14/82

ST	CNTY	AQCR	PLANT	PT	SCC	NAME-ADDRESS	TSP PCE	TSP SCE	TSP %EFF
44	0040	207	0009	01	10100202	TVA BULL RUN STEAM P	11	10	99.9
44	0040	207	0009	01	10100501	TVA BULL RUN STEAM P	11	10	99.9
44	0040	207	0009	02	10100501	TVA BULL RUN STEAM P	0	0	0
44	0040	207	0009	03	10100501	TVA BULL RUN STEAM P	0	0	0
44	0040	207	0009	04	10100202	TVA BULL RUN STEAM P	10	0	90.0
44	0040	207	0009	04	10100501	TVA BULL RUN STEAM P	10	0	90.0
44	1380	207	0007	01	10100202	TVA JOHN SEVIER ST P	8	10	99.3
44	1380	207	0007	02	10100202	TVA JOHN SEVIER ST P	8	10	99.3
44	1380	207	0007	03	10100202	TVA JOHN SEVIER ST P	8	10	99.1
44	1380	207	0007	03	10100501	TVA JOHN SEVIER ST P	8	10	99.1
44	1380	207	0007	04	10100202	TVA JOHN SEVIER ST P	10	0	95.0
44	1540	208	0011	01	10100202	TVA JHNSNVLLE STEAM	8	10	99.7
44	1540	208	0011	01	10100501	TVA JHNSNVLLE STEAM	8	10	99.7
44	1540	208	0011	02	10100202	TVA JHNSNVLLE STEAM	8	10	99.9
44	1540	208	0011	02	10100501	TVA JHNSNVLLE STEAM	8	10	99.9
44	1540	208	0011	03	10100202	TVA JHNSNVLLE STEAM	8	10	99.9
44	1540	208	0011	03	10100501	TVA JHNSNVLLE STEAM	8	10	99.9
44	1540	208	0011	04	10100202	TVA JHNSNVLLE STEAM	8	10	99.8
44	1540	208	0011	04	10100501	TVA JHNSNVLLE STEAM	8	10	99.8
44	1540	208	0011	05	10100202	TVA JHNSNVLLE STEAM	8	10	99.9
44	1540	208	0011	05	10100501	TVA JHNSNVLLE STEAM	8	10	99.9
44	1540	208	0011	06	10100202	TVA JHNSNVLLE STEAM	8	10	99.7
44	1540	208	0011	06	10100501	TVA JHNSNVLLE STEAM	8	10	99.7
44	1540	208	0011	07	10100202	TVA JHNSNVLLE STEAM	8	10	97.4
44	1540	208	0011	07	10100501	TVA JHNSNVLLE STEAM	8	10	97.4
44	1540	208	0011	08	10100202	TVA JHNSNVLLE STEAM	8	10	99.3
44	1540	208	0011	08	10100501	TVA JHNSNVLLE STEAM	8	10	99.3
44	1540	208	0011	09	10100202	TVA JHNSNVLLE STEAM	8	10	99.4
44	1540	208	0011	09	10100501	TVA JHNSNVLLE STEAM	8	10	99.4
44	1540	208	0011	10	10100202	TVA JHNSNVLLE STEAM	8	10	98.1
44	1540	208	0011	10	10100501	TVA JHNSNVLLE STEAM	8	10	98.1
44	2840	207	0027	01	10100202	WATTS BAR STEAM PLAN	10	0	99.2
44	2840	207	0027	01	10100501	WATTS BAR STEAM PLAN	10	0	99.2
44	2840	207	0027	02	10100202	WATTS BAR STEAM PLAN	10	0	99.2
44	2840	207	0027	02	10100501	WATTS BAR STEAM PLAN	10	0	99.2
44	2840	207	0027	03	10100202	WATTS BAR STEAM PLAN	10	0	98.2
44	2840	207	0027	03	10100501	WATTS BAR STEAM PLAN	10	0	98.2
44	2840	207	0027	04	10100202	WATTS BAR STEAM PLAN	10	0	98.2
44	2840	207	0027	04	10100501	WATTS BAR STEAM PLAN	10	0	98.2
44	2840	207	0027	05	10100501	WATTS BAR STEAM PLAN	0	0	0
44	2840	207	0027	05	10100504	WATTS BAR STEAM PLAN	0	0	0
44	2840	207	0029	08	10100501	TVA WATTS BAR NUCLEA	0	0	0
44	2880	207	0013	01	10100202	KINGSTON STEM PLANT	8	10	99.8
44	2880	207	0013	01	10100501	KINGSTON STEM PLANT	8	10	99.8
44	2880	207	0013	02	10100202	KINGSTON STEM PLANT	8	10	97.4

Figure 2.1.1-e Quick look report

AREA SOURCE REPORT

General Description

Area sources are an aggregation of all sources not defined as point sources in a specific geographic area. Area sources usually included all mobile sources and any stationary sources too small, difficult, or numerous to classify as point sources. Area source emissions are assumed to be spread over the entire area that has been defined as an area source. Activity level data for these sources are compiled on a countywide basis for NEDS.

The complete Area Source Report for each geographic area occupies six printed pages. Page one gives general information: the total calculated emissions, the SIP estimate of total emissions, and comments which explain or amplify particular aspects of the data. Page two lists the activity levels and calculated emissions related to fuel consumption by stationary sources. Page three lists the activity levels and calculated emissions related to solid waste disposal by stationary sources. Page four gives detailed motor vehicle data including vehicle miles, fuel use and calculated emissions by road type and vehicle type. Page five lists data for all mobile sources, including a summary of motor vehicle data plus data for vessels and aircraft. Page six gives the activity levels and calculated emissions for all other area sources which do not fall into the above categories. On each of the last five pages, the appropriate totals and subtotals of activity levels and calculated emissions are also listed. A heading on each page identifies the geographic area, year, and general category to which the data apply and the file creation date of the NEDS area source file.

Retrievals Available

Retrieval options are available for:

a. The geographic area for which data are to be reported.

b. Which of the report pages are to be printed.

c. The level of detail of the report (summary or detail).

The following types of geographic data retrievals are possible:

1)	national:	all data for the entire nation
2)	state:	all data for one state
3)	AQCR:	all data from one AQCR
4)	state/AQCR:	all data for the portion of a state within one AQCR
5)	state/county:	the data for one county
6)	state/county/AQCR:	the data for that portion of a county within one AQCR.

In nearly all instances the state/county and state/county/AQCR data retrievals are identical, since most counties are wholly within one AQCR. Only in those instances where portions of one county are within different AQCR's could there be a difference.

The Area Source Emissions Report which is produced from selected data may be either detailed or a summary. The "detailed" report lists the data for each selected county record plus a total of all selected data. The "summary" report lists only the total. The following table lists the types of totals obtained for each of the geographic selection types.

Sample Report

Figure 2.1.1.f is a sample area source report "summary" for the State of Delaware. Detailed reports for each county are in the same format.

08-19-82 NATIONAL EMISSIONS DATA SYSTEM PAGE 0001-1

AREA SOURCE EMISSIONS REPORT FOR YEAR 1980 DATA FILE LAST UPDATED ON JULY 23, 1982

TOTAL FOR STATE(01): ALABAMA

GENERAL	EMISSIONS IN TONS PER YEAR				
	PART	SOX	NOX	VOC	CO
TOTAL AREA SOURCE EMISSIONS					
SIP ESTIMATE (1970) (REPORTED AS TOTAL HC)	68,500	49,400	262,700	395,300	1,952,400
COMPUTED EMISSIONS (1930)	343,886	75,858	252,497	350,851	1,511,378
RATIO OF SIP ESTIMATE TO COMPUTED EMISSIONS	0.199	0.651	1.040	1.127	1.292

AVERAGE URBAN POPULATION: 30 TO 39 PERCENT

Figure 2.1.1-f NEDS area source report

08-19-82 NATIONAL EMISSIONS DATA SYSTEM PAGE 0001-2

AREA SOURCE EMISSIONS REPORT FOR YEAR 1980 DATA FILE LAST UPDATED ON JULY 23, 1982

TOTAL FOR STATE(01): ALABAMA

FUEL CONSUMPTION			EMISSIONS IN TONS PER YEAR				
			PART	SOX	NOX	VOC	CO
RESIDENTIAL			9,290	3,600	3,740	1,193	65,987
ANTHRACITE COAL	0	TONS	0	0	0	0	0
BITUMINOUS COAL	88,020	TONS	662	3,514	131	439	3,961
WOOD	681,900	TONS	8,534	42	343	578	61,371
DISTILLATE OIL	2,710	THOUSAND GALLONS	0	33	17	0	2
RESIDUAL OIL	0	THOUSAND GALLONS	0	0	0	0	0
NATURAL GAS	64,560	MILLION CUBIC FEET	94	11	3,249	176	653
COMMERCIAL AND INSTITUTIONAL			792	10,601	3,372	104	881
ANTHRACITE COAL	21,010	TONS	106	286	118	0	4
BITUMINOUS COAL	121,020	TONS	381	6,379	734	25	436
WOOD	0	TONS	0	0	0	0	0
DISTILLATE OIL	45,770	THOUSAND GALLONS	39	652	461	4	110
RESIDUAL OIL	24,440	THOUSAND GALLONS	230	3,279	675	8	54
NATURAL GAS	27,420	MILLION CUBIC FEET	36	5	1,364	67	277
INDUSTRIAL			3,697	44,341	54,691	17,079	7,177
ANTHRACITE COAL	0	TONS	0	0	0	0	0
BITUMINOUS COAL	766,990	TONS	3,559	44,267	7,436	22	959
COKE	0	TONS	0	0	0	0	0
WOOD	0	TONS	0	0	0	0	0
DISTILLATE OIL	0	THOUSAND GALLONS	0	0	0	0	0
RESIDUAL OIL	0	THOUSAND GALLONS	0	0	0	0	0
NATURAL GAS	86,350	MILLION CUBIC FEET	124	18	47,192	17,056	6,216
PROCESS GAS	450	MILLION CUBIC FEET	14	56	63	1	2
TOTAL FUEL CONSUMPTION			13,779	58,542	61,803	18,376	74,045
ANTHRACITE COAL	21,010	TONS	106	286	118	0	4
BITUMINOUS COAL	976,030	TONS	4,602	54,160	8,301	486	5,356
COKE	0	TONS	0	0	0	0	0
WOOD	681,900	TONS	8,534	42	343	578	61,371
DISTILLATE OIL	48,480	THOUSAND GALLONS	39	685	478	4	112
RESIDUAL OIL	24,440	THOUSAND GALLONS	230	3,279	675	8	54
NATURAL GAS	178,330	MILLION CUBIC FEET	254	34	51,825	17,299	7,146
PROCESS GAS	450	MILLION CUBIC FEET	14	56	63	1	2

FUEL CHARACTERISTICS:

ANTHRACITE COAL 0.7 % SULFUR, 11.1 % ASH
BITUMINOUS COAL 2.7 % SULFUR, 11.9 % ASH
DISTILLATE OIL 0.2 % SULFUR
RESIDUAL OIL 1.7 % SULFUR

Figure 2.1.1-f (continued) NEDS area source report

08-19-82 NATIONAL EMISSIONS DATA SYSTEM PAGE 0001-3

AREA SOURCE EMISSIONS REPORT FOR YEAR 1980 DATA FILE LAST UPDATED ON JULY 23, 1982

TOTAL FOR STATE(01): ALABAMA

SOLID WASTE DISPOSAL	TONS SOLID WASTE	EMISSIONS IN TONS PER YEAR PART	SOX	NOX	VOC	CO
RESIDENTIAL	755,050	8,874	273	1,750	15,318	47,461
ON SITE INCINERATION	143,050	2,292	29	65	6,437	19,312
OPEN BURNING	612,000	6,582	244	1,685	8,881	28,149
COMMERCIAL AND INSTITUTIONAL	8,900	86	1	19	156	375
ON SITE INCINERATION	0	0	0	0	0	0
OPEN BURNING	8,900	86	1	19	156	375
INDUSTRIAL	15,300	128	3	40	208	764
ON SITE INCINERATION	0	0	0	0	0	0
OPEN BURNING	15,300	128	3	40	208	764
TOTAL SOLID WASTE DISPOSAL	779,250	9,088	277	1,809	15,682	48,600
ON SITE INCINERATION	143,050	2,292	29	65	6,437	19,312
OPEN BURNING	636,200	6,796	248	1,744	9,245	29,288

Figure 2.1.1-f (continued) NEDS area source report

08-19-82 NATIONAL EMISSIONS DATA SYSTEM PAGE 0001-4

AREA SOURCE EMISSIONS REPORT FOR YEAR 1980 DATA FILE LAST UPDATED ON JULY 23, 1982

TOTAL FOR STATE(01): ALABAMA

MOTOR VEHICLES	GALLONS FUEL (THOUSANDS)	CALCULATED VEHICLE MILES (THOUSANDS)	EMISSIONS IN TONS PER YEAR PART	SOX	NOX	VOC	CO
GASOLINE POWERED VEHICLES	1,907,000		85,575	4,329	98,903	130,167	1,167,088
HIGHWAY VEHICLES	1,884,472	26,366,167	85,463	4,278	97,682	126,716	1,127,327
LIGHT DUTY VEHICLES	1,314,551	20,178,354	65,689	2,886	65,333	88,628	760,301
LIMITED ACCESS		0	0	0	0	0	0
RURAL		11,129,840	16,428	1,591	36,437	36,330	253,807
SUBURBAN		0	0	0	0	0	0
URBAN		9,048,514	49,261	1,295	28,896	52,298	506,494
LIGHT DUTY TRUCKS	429,981	5,374,766	16,286	1,068	21,864	25,950	195,304
LIMITED ACCESS		0	0	0	0	0	0
RURAL		3,287,293	4,895	655	13,534	11,819	72,700
SUBURBAN		0	0	0	0	0	0
URBAN		2,087,473	11,391	413	8,330	14,131	122,604
HEAVY DUTY VEHICLES	139,940	813,047	3,488	324	10,485	12,138	171,722
LIMITED ACCESS		0	0	0	0	0	0
RURAL		436,643	1,070	175	6,178	4,325	60,950
SUBURBAN		0	0	0	0	0	0
URBAN		376,404	2,418	149	4,307	7,813	110,772
OFF-HIGHWAY VEHICLES	22,528		112	51	1,221	3,451	39,761
DIESEL POWERED VEHICLES	497,188		13,549	9,620	81,526	13,054	28,680
HIGHWAY VEHICLES - HEAVY DUTY	316,008	1,684,319	10,872	5,196	47,822	5,877	17,411
LIMITED ACCESS		0	0	0	0	0	0
RURAL		969,843	4,628	2,992	27,073	2,323	6,909
SUBURBAN		0	0	0	0	0	0
URBAN		714,476	6,244	2,204	20,749	3,554	10,502
OFF-HIGHWAY VEHICLES	57,340		1,126	892	10,792	1,613	3,217
RAILWAY LOCOMOTIVES	123,840		1,551	3,532	22,912	5,564	8,052
TOTAL - ALL MOTOR VEHICLES	2,404,188		99,124	13,949	180,429	143,221	1,195,768

Figure 2.1.1-f (continued) NEDS area source report

08-19-82 NATIONAL EMISSIONS DATA SYSTEM PAGE 0001-5

AREA SOURCE EMISSIONS REPORT FOR YEAR 1980 DATA FILE LAST UPDATED ON JULY 23, 1982

TOTAL FOR STATE(01): ALABAMA

TRANSPORTATION			EMISSIONS IN TONS PER YEAR				
			PART	SOX	NOX	VOC	CO
	GALLONS FUEL (THOUSANDS)	CALCULATED VEHICLE MILES (THOUSANDS)					
LAND VEHICLES	2,404,188		99,124	13,949	180,429	143,221	1,195,768
HIGHWAY VEHICLES	2,200,480	28,050,486	96,335	9,474	145,504	132,593	1,144,738
LIMITED ACCESS		0	0	0	0	0	0
RURAL		15,023,619	27,021	5,413	83,222	54,797	394,366
SUBURBAN		0	0	0	0	0	0
URBAN		12,226,867	69,314	4,061	62,282	77,796	750,372
OFF-HIGHWAY VEHICLES	79,868		1,238	943	12,013	5,064	42,978
RAILWAY LOCOMOTIVES	123,840		1,551	3,532	22,912	5,564	8,052
TOTAL - ALL GASOLINE VEHICLES	1,907,000		85,575	4,329	98,903	130,167	1,167,008
TOTAL - ALL DIESEL VEHICLES	497,188		13,549	9,620	81,526	13,054	28,680
AIRCRAFT	1,098,250 LANDING-TAKEOFF CYCLES		3,427	295	2,436	4,961	16,619
MILITARY	418,800 LANDING-TAKEOFF CYCLES		3,385	227	1,743	4,062	8,305
CIVIL	626,910 LANDING-TAKEOFF CYCLES		17	9	103	330	6,618
COMMERCIAL	52,540 LANDING-TAKEOFF CYCLES		25	59	590	569	1,696
VESSELS			282	2,578	1,598	9,690	32,709
COAL	0 TONS		0	0	0	0	0
DIESEL OIL	8,510 THOUSAND GALLONS		101	125	952	149	332
RESIDUAL OIL	18,750 THOUSAND GALLONS		181	2,385	392	19	13
GASOLINE	21,465 THOUSAND GALLONS		0	68	254	9,522	32,364
TOTAL TRANSPORTATION			102,833	16,822	184,463	157,872	1,245,096

Figure 2.1.1-f (continued) NEDS area source report

08-19-82 NATIONAL EMISSIONS DATA SYSTEM PAGE 0001-6

AREA SOURCE EMISSIONS REPORT FOR YEAR 1980 DATA FILE LAST UPDATED ON JULY 23, 1982

TOTAL FOR STATE(01): ALABAMA

MISCELLANEOUS	EMISSIONS IN TONS PER YEAR				
	PART	SOX	NOX	VOC	CO
EVAPORATIVE LOSS	0	0	0	134,759	0
116,561 TONS SOLVENT PURCHASED	0	0	0	116,561	0
1,915,200 THOUSAND GALLONS GASOLINE MARKETED	0	0	0	18,198	0
FUGITIVE DUST	196,876	0	0	0	0
73,565,000 VEHICLE MILES ON DIRT ROADS	196,765	0	0	0	0
15,000 LANDING-TAKEOFF CYCLES ON DIRT AIRSTRIPS	111	0	0	0	0
14,493 ACRES UNDER CONSTRUCTION	0	0	0	0	0
0 ACRES UNDER CULTIVATION	0	0	0	0	0
0 ACRES SUBJECT TO WIND EROSION	0	0	0	0	0
OTHER	21,293	159	4,451	24,136	143,630
123,102 ACRES BURNED BY FOREST WILDFIRES AT 9 TONS/ACRE	9,417	83	2,217	13,296	77,562
195,993 ACRES BURNED BY MANAGED BURNING AT 5 TONS/ACRE	9,799	75	1,961	8,816	54,877
76,431 ACRES AGRICULTURAL FIELD BURNING AT 2 TONS/ACRE	1,091	0	153	1,290	7,185
86 ORCHARD HEATERS FIRED ON 0 DAYS/YEAR	0	0	0	0	0
13,757 STRUCTURE FIRES	986	1	120	734	4,006

Figure 2.1.1-f (continued) NEDS area source report

AREA SOURCE CARDS

General Description

The "Area Source Cards" report outputs selected data from NEDS onto computer cards or onto magnetic tape in the NEDS area source input format. Since only input data are reported, no calculated emissions are included.

Retrievals Available

Cards may be retrieved for the nation, for all counties in a state, or for selected individual counties. No sorts are available. Cards will be produced in order in ascending state-county sequence.

Sample Report

Figure 2.1.1.g gives the format of NEDS area source cards.

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date _____

FORM APPROVED
OMB NO 158 R0095

Name of Person
Completing Form _____

State	County	AQCR
1 2	3 4 5 6	7 8 9

Year of Record	SIP EMISSION ESTIMATES (10^2 tons/yr) Particulate	SO_2	NO_x	HC	CO	SULFUR CONTENT (%) Anth. Coal	Bitum. Coal	Dist. Oil	Resid. Oil	ASH CONTENT (%) Anth. Coal	Bitum. Coal	RESIDENTIAL FUEL Anth. Coal 10^1 tons	Bitumin. Coal 10^1 tons	Dist. Oil 10^4 Gal.	Resid. Oil 10^4 Gal.	Nat. Gas 10^7 ft.^{3}	Wood 10^2 tons	Action	cd
10 11	12 13 14 15 16	17 18 19 20	21 22 23 24	25 26 27 28 29	30 31 32 33 34	35 36	37 38	39 40	41 42	43 44	45 46	47 48	49 50 51 52 53	54 55 56 57 58	59 60 61 62 63 64	65 66 67 68	69 70 71 72 73	74 75 76 77	78 79 80
																			A 1

	COMMERCIAL AND INSTITUTIONAL FUEL Anth. 10^1 tons	Bitumin. 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft^3	Wood 10^2tons	INDUSTRIAL FUEL Anth. Coal 10^1 tons	Bitum. Coal 10^1 tons	Coke 10^1 tons	Dist. Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Nat. Gas 10^7 Ft.^{3}	Wood 10^2 tons	Process Gas 10^7 ft^3	Action	cd
10 11	12 13 14 15 16	17 18 19 20	21 22 23 24	25 26 27 28 29	30 31 32 33 34	35 36	37 38 39 40 41	42 43 44 45 46	47 48 49 50 51	52 53 54 55 56	57 58 59 60 61	62 63 64 65 66	67 68 69	70 71 72 73	74 75 76 77	78 79 80
																A 2

	ON SITE INCINERATION Residential 10^1 tons	Industrial 10^2 tons	Comm Inst 10^2 tons	OPEN BURNING Residential 10^2 tons	Industrial 10^2 tons	Comm'l-Institl. 10^2 tons	GASOLINE FUEL Light Vehicle 10^3 Gals.	Heavy Vehicle 10^3 Gals.	Off Hiway 10^3 Gals.	DIESEL FUEL Heavy Vehicle 10^3 Gals.	Off Hiway 10^4 Gals.	Rail Locomotive 10^4 Gals.	Pop Code	Action	cd
10 11	12 13 14 15 16	17 18 19 20	21 22 23 24	25 26 27 28 29	30 31 32 33 34	35 36	37 38 39 40 41	42 43 44 45 46	47 48 49 50 51	52 53 54 55 56	57 58 59 60 61	62 63 64 65 66	67 68 69 70 71	72 73 74 75 76	77 78 79 80
															A 3

	AIRCRAFT Military LTO CYC 10^2	Civil LTO CYC 10^1	Commercial LTO CYC 10^1	VESSELS Coal 10^1 tons	Diesel Oil 10^4 Gals.	Resid. Oil 10^4 Gals.	Gasoline 10^3 Gals.	EVAPORATION Solvent Purchased tons yr	Gasoline Marketed 10^5 Gals.	MEASURED VEHICLE MILES Limited Access Road 10^4 Miles	Rural Roads 10^4 Miles	Suburban Roads 10^4 Miles	Urban Roads 10^4 Miles	Action	cd
10 11	12 13 14 15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40 41	42 43 44 45 46	47 48 49 50 51	52 53 54 55 56	57 58 59 60 61	62 63 64 65 66	67 68 69 70 71	72 73 74 75 76	77 78 79 80
															A 4

	Dirt Roads Traveled 10^3 Vehicle miles	Dirt Air Strips LTO CYCLES	Construction Acres	Miscellaneous Wind Erosion 10^3 Acres	Land Tilling 10^3 Acres	FOREST WILDFIRES Acres Burned	Tons/acres Burned	MANAGED BURNING (Slash/Prescribed Burning) Acres Burned	Tons/Acres Burned	AGRICULTURAL FIELD BURNING Acres Burned	Tons/Acres Burned	FROST CONTROL 10^2 Orchard Heaters Operating	Days/Fired Days/year	STRUCTURE FIRES Fires/year	Action	cd
10 11	12 13 14 15 16	17 18 19 20 21	22 23 24	25 26 27 28	29 30 31 32	33 34 35 36 37	38 39 40 41	42 43 44 45 46	47 48 49 50 51	52 53 54 55 56	57 58 59 60 61	62 63 64 65 66	67 68 69 70 71	72 73 74 75 76	77 78 79 80
															A 5

COMMENTS	Action	cd
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77	78 79 80
	A 6

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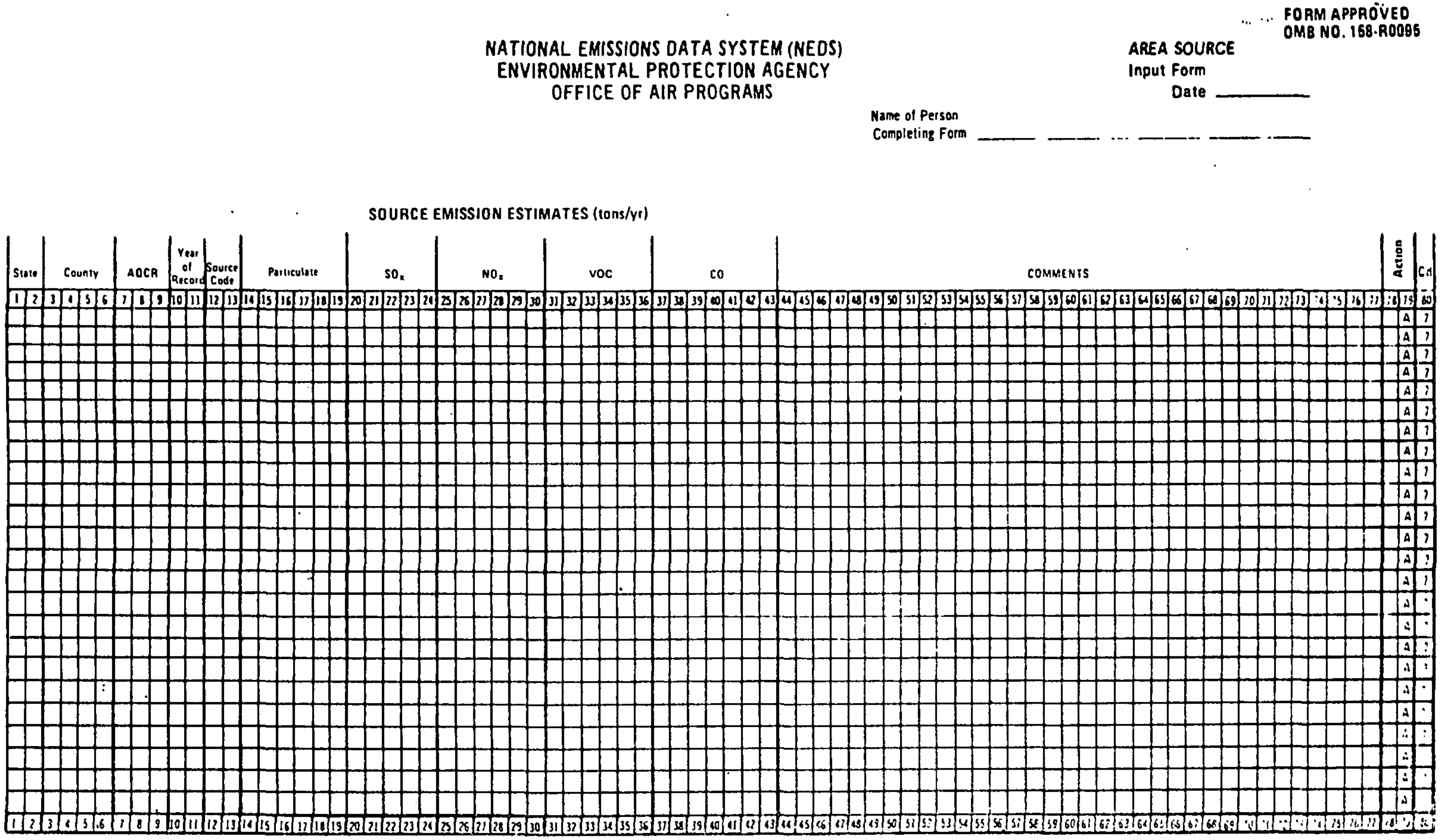
3-72

Figure 2.1.1.g Area Source Cards Format



FORM APPROVED
OMB NO. 158-R0095

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

AREA SOURCE
Input Form
Date ________

Name of Person Completing Form ____________________

SOURCE EMISSION ESTIMATES (tons/yr)

State	County	AQCR	Year of Record	Source Code	Particulate	SO$_x$	NO$_x$	VOC	CO	COMMENTS	Action	Cd
1 2	3 4 5 6	7 8 9	10 11	12 13	14 15 16 17 18 19	20 21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36	37 38 39 40 41 42 43	44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78	79	80
											A	7

Figure 2.1.1-g (continued) Area source cards format

NEDS AREA SOURCE FILE ON TAPE

General Description

This report produces a magnetic tape (ASCII or EBCDIC) containing records in the NEDS area source file format. This format is described in Section 7.2.2. The NEDS area source file consists of one record for each county or county equivalent in the U.S. Each record contains all the input data for each county as shown in Figure 2.1.1g plus calculated emissions for each area source category and for the county as a whole.

Retrievals Available

Area source records may be retrieved using the following selection criteria:

1. Nation
2. State
3. State/county
4. State/county/AQCR
5. State/AQCR
6. AQCR.

Records will be sorted by State/county/AQCR (default) or by AQCR.

POINT SOURCE CARDS

General Description

The "Point Source Cards" report selects data from NEDS and creates punched cards or a magnetic tape in the NEDS point source input format.

Retrievals Available

Cards may be retrieved and sorted by the NEDS general selection and sort programs, described in Section 2.1.0.

Sample Report

Figure 2.1.1.h gives the format of NEDS point source cards.

NATIONAL EMISSIONS DATA SYSTEM (NEDS)
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF AIR PROGRAMS

POINT SOURCE Input Form

FORM APPROVED
OMB NO. 158-R0095
Date _____

Name of Person Completing Form _____

State	County	AQCR	Plant ID Number
1 2	3 4 5 6	7 8 9	10 11 12 13

Card	Columns	Fields
1	14–15	City; Utm Zone; Year of Record; Establishment Name and Address; Contact · Personal; OWN; Action
2	14–15	Point ID; Year of Record; SIC; IPP Process; UTM COORDINATES Horizontal km, Vertical km; STACK DATA Height (ft), Diam (ft), Temp (°F), Flow Rate (ft³/min), Plume Height (if no stack-ft); Points with common stack; Action
3	14–15	Year of Record; Boiler Design Capacity 10⁶ BTU/hr; CONTROL EQUIPMENT Primary Part., Secondary Part., Primary SO₂, Secondary SO₂, Primary NOₓ, Secondary NOₓ, Primary VOC, Secondary VOC, Primary CO, Secondary CO; ESTIMATED CONTROL EFFICIENCY (%) Part., SO₂, NOₓ, VOC, CO; Action
4	14–15	Year of Record; % ANNUAL THRUPUT Dec-Feb, Mar-May, June Aug, Sept-Nov; NORMAL OPERATING Hr/day, D/Wk, Wk/yr; EMISSION ESTIMATES (tons/year) Particulate, SO₂, NOₓ, VOC, CO; ESTIMATION METHOD Part., SO₂, NOₓ, VOC, CO; % Space Heat; Action
5	14–15	Year of Record; ALLOWABLE EMISSIONS (tons/year) Particulate, SO₂, NOₓ, VOC, CO; Comp Stat; COMPLIANCE SCHEDULE Year, Mo; COMPLIANCE STATUS UPDATE Year, Mo, Day; ECAP; CONTROL REGULATIONS Reg 1, Reg 2, Reg 3; Action
6	14–15	Year of Record; SCC I, II, III, IV; Annual Fuel, Process, Solid Waste Operating Rate; Hourly Maximum Design Rate; Fuel Sulfur Content %; Fuel Ash Content %; Fuel Heat Content 10⁶ BTU/scc; Comments; Source Contid.; Action
7	14–15	Point ID; Year of Record; SCC I, II, III, IV; COMMENTS; Action

Figure 2.1.1-h Point source cards format

NEDS POINT SOURCE SUBFILE ON TAPE

General Description

The NEDS point source subfile contains records selected from the NEDS point source file on magnetic tape. Each record selected contain all point source input data plus computer calculated emissions. The NEDS-SUBFILE format is described in Section 7.2.2.

Retrievals Available

The NEDS-SUBFILE may be selected and sorted according to the NEDS general selection and sorting capabilities discussed in Section 2.1.0.

EMISSION SUMMARY REPORT

General Description

The "Emission Summary Report" shows the annual number of tons of particulates, sulfur oxides, nitrogen oxides, reactive VOC, and carbon monoxide emitted by source category within a given geographical area. The emission source categories included are:

- Fuel Combustion
  - Residential Fuel (Area)
  - Electric Generation (Point)
  - Industrial Fuel (Area and Point)
  - Commercial-Institutional Fuel (Area and Point)
  - Internal Combustion (Point)

- Industrial Process (Point)
  - 13 Categories

- Solid Waste Disposal
  - Government (Point)
  - Residential (Area)
  - Commercial-Institutional (Area and Point)
  - Industrial (Area and Point)

- Transportation (Area)
  - Land Vehicles
  - Aircraft
  - Vessels

- Miscellaneous (Area)

A grand total of emissions, subdivided in area and point source portions, is also printed.

Retrievals Available

The retrieval keys for the "Emission Summary Report" are as follows:

a. Nation
b. State
c. EPA Region
d. State/County
e. AQCR
f. State portions of interstate AQCRs
g. All counties in a state

Sample Report

A sample "Emission Summary Report" is represented in Figure 2.1.2.a.

The format of this report is somewhat shorter when retrieval is for an area where all categories of emissions are not present because the inactive categories will be omitted.

NATIONAL EMISSIONS DATA SYSTEM
****

ENVIRONMENTAL PROTECTION AGENCY
****

STATE EMISSIONS REPORT
****
STATE 26:MISSOURI

RUN DATE: THURSDAY AUGUST 19, 1982
AREA EMISSIONS AS OF: FRIDAY JULY 23, 1982
POINT EMISSIONS AS OF: WEDNESDAY AUGUST 11, 1982

	PARTICULATES ********** TONS / YR	SOX ********** TONS / YR	NOX ********** TONS / YR	VOC ********** TONS / YR	CO ********** TONS / YR
FUEL COMBUSTION **********					
EXTERNAL COMBUSTION					
RESIDENTIAL FUEL (AREA)					
BITUMINOUS COAL	0	4	0	70	3
DISTILLATE OIL	57	771	485	96	127
NATURAL GAS	249	34	8389	636	1678
WOOD	12387	51	492	914	89037
TOTAL (RESIDENTIAL)	12693	860	9366	1716	90345
ELEC GENERATION (POINT)					
BITUMINOUS COAL	100020	1148109	295151	1600	10355
RESIDUAL OIL	25	1939	296	6	14
DISTILLATE OIL	0	132	60	1	18
NATURAL GAS	14	5	4048	33	303
TOTAL (ELEC GEN)	100059	1150185	299555	1640	10690
INDUSTRIAL FUEL					
ANTHRACITE COAL					
POINT SOURCES	74	1108	525	9	29
BITUMINOUS COAL					
AREA SOURCES	2793	36138	6604	142	843
POINT SOURCES	3832	7211	1430	23	310
RESIDUAL OIL					
AREA SOURCES	0	0	0	30	0
POINT SOURCES	1020	4948	1835	66	193
DISTILLATE OIL					
POINT SOURCES	8	39	39	3	6
NATURAL GAS					
AREA SOURCES	3	0	836	264	108
POINT SOURCES	129	28	8225	155	885
PROCESS GAS					
POINT SOURCES	15	1840	265	5	65
WOOD					
AREA SOURCES	2	0	2	2	4

Figure 2.1.2-a NEDS emissions summary report

LIQUID PETROL GAS					
POINT SOURCES	2	0	13	0	3
OTHER					
POINT SOURCES	316	830	6581	453	1302
TOTAL (INDUSTRIAL)					
AREA SOURCES	2798	36138	7442	438	955
POINT SOURCES	5396	16004	18913	714	2793
COMM-INSTITUTIONAL FUEL					
BITUMINOUS COAL					
AREA SOURCES	158	2749	319	13	190
POINT SOURCES	964	1279	211	8	56
RESIDUAL OIL					
AREA SOURCES	260	3396	790	29	57
POINT SOURCES	7	94	159	3	6
DISTILLATE OIL					
AREA SOURCES	54	965	665	86	159
POINT SOURCES	1	7	3	0	0
NATURAL GAS					
AREA SOURCES	85	14	3318	209	664
POINT SOURCES	58	4	1129	1266	96
TOTAL (COMM-INST)					
AREA SOURCES	557	7124	5092	337	1070
POINT SOURCES	1030	1384	1502	1277	158
TOTAL (EXTERNAL COMB)					
AREA SOURCES	16048	44122	21900	2491	92870
POINT SOURCES	106485	1167573	319970	3631	13641
INTERNAL COMBUSTION (POINT)					
ELECTRIC GENERATION					
DISTILLATE OIL	26	159	337	25	107
NATURAL GAS	2	2	17	2	19
TOTAL (ELEC GEN)	28	161	354	27	126
INDUSTRIAL FUEL					
NATURAL GAS	4	1	191	2	38
DIESEL FUEL	1	3	20	1	1
TOTAL (INDUSTRIAL)	5	4	211	3	39
COMM-INSTITUTIONAL					
TOTAL (COMM-INST)	43	40	600	37	131
TOTAL (INTERNAL COMB)	76	205	1165	67	296
TOTAL (FUEL COMBUSTION)					
AREA SOURCES	16048	44122	21900	2491	92870
POINT SOURCES	106561	1167778	321135	3698	13937

INDUSTRIAL PROCESS (POINT)
****

Figure 2.1.2-a (continued) NEDS Emissions Summary Report

CHEMICAL MANUFACTURING	66482	3876	15493	50599	48040
FOOD/AGRICULTURAL	6724	1	5	1	1
PRIMARY METAL	5668	30795	0	0	0
SECONDARY METALS	94	35	12	9	1215
MINERAL PRODUCTS	161073	24751	12388	273	3168
PETROLEUM INDUSTRY	789	18247	3543	1724	103
WOOD PRODUCTS	9	0	0	376	0
ORGANIC SOLVENT EVAPORATION	230	0	1	111756	0
PETROLEUM STORAGE/TRANSPORT	0	0	0	9119	0
METAL FABRICATION	2362	0	0	3675	0
OTHER/NOT CLASSIFIED	237	5754	16	6	7
TOTAL (INDUSTRIAL)	243668	83459	31458	177538	52534
SOLID WASTE DISPOSAL					
**********					
GOVERNMENT (POINT)					
MUNICIPAL INCINERATION	749	560	453	336	7825
OTHER INCINERATION	1	0	0	0	0
TOTAL (GOVERNMENT)	750	560	453	336	7825
RESIDENTIAL (AREA)					
ON SITE INCINERATION	4483	69	140	12606	37819
OPEN BURNING	6441	230	1655	8670	27487
TOTAL (RESIDENTIAL)	10924	299	1795	21276	65306
COMMERCIAL-INSTITUTIONAL					
ON SITE INCINERATION					
AREA SOURCES	112	35	53	65	152
POINT SOURCES	4	1	2	2	5
OPEN BURNING					
AREA SOURCES	11	0	3	21	50
TOTAL (COMM-INST)					
AREA SOURCES	123	35	56	86	202
POINT SOURCES	4	1	2	2	5
INDUSTRIAL					
ON SITE INCINERATION					
AREA SOURCES	171	33	33	155	228
POINT SOURCES	4172	547	290	797	8129
OPEN BURNING					
AREA SOURCES	67	2	21	114	404
POINT SOURCES	60	0	7	14	175
TOTAL (INDUSTRIAL)					
AREA SOURCES	238	35	54	269	632
POINT SOURCES	4232	547	297	811	8304
TOTAL (SOLID WASTE DISP)					
AREA SOURCES	11285	369	1905	21631	66140
POINT SOURCES	4986	1108	752	1149	16134
TRANSPORTATION (AREA)					

Figure 2.1.2-a (continued) NEDS Emissions Summary Report

**********					
LAND VEHICLES					
GASOLINE					
LIGHT DUTY VEHICLES	94014	3631	82544	108751	1055948
LIGHT DUTY TRUCKS	24391	1537	31615	34634	287703
HEAVY DUTY VEHICLES	4176	375	12423	13925	207989
OFF HIGHWAY	113	45	1381	3898	44945
TOTAL (GASOLINE)	122694	5588	127963	161208	1596585
DIESEL					
HEAVY DUTY VEHICLES	13576	5790	56182	7588	22641
OFF HIGHWAY	2984	2354	28547	4275	8513
RAIL	918	2078	13477	3273	4736
TOTAL (DIESEL)	17478	10222	98206	15136	35890
AIRCRAFT					
MILITARY	343	22	176	412	839
CIVIL	27	13	185	612	12246
COMMERCIAL	108	248	2514	2428	7228
TOTAL (AIRCRAFT)	478	283	2875	3452	20313
VESSELS					
DIESEL FUEL	212	264	1966	306	687
GASOLINE	0	53	225	8413	28614
TOTAL (VESSELS)	212	317	2191	8719	29301
TOTAL (TRANSPORTATION)	140862	16410	231235	188515	1682089
MISCELLANEOUS (AREA)					
**********					
FOREST WILDFIRES	10812	89	2545	15266	89047
STRUCTURAL FIRES	1335	2	151	1001	5441
GASOLINE STA EVAP LOSS	0	0	0	23910	0
SOLVENT EVAPORATION LOSS	0	0	0	175746	0
UNPAVED ROADS	2356543	0	0	0	0
UNPAVED AIRSTRIPS	250	0	0	0	0
TOTAL (MISCELLANEOUS)	2368940	91	2696	215923	94488
GRAND TOTAL					
**********					
AREA SOURCES	2537135	60992	257736	428560	1935587
POINT SOURCES	355215	1252345	353345	182385	82605
TOTAL	2892350	1313337	611081	610945	2018192

Figure 2.1.2-a (continued) NEDS Emissions Summary Report

ANNUAL FUEL SUMMARY REPORT

General Description

The "Annual Fuel Summary Report" summarizes fuel use by fuel type for both point and area sources in a specific geographic area. The area source fuel use data are reported for both stationary and mobile area sources. Stationary source fuel use is further subdivided into residential, industrial, and commercial-institutional categories. Mobile source fuel use is reported for light and heavy highway vehicles, railroads, off-highway vehicles (farm machinery, construction equipment, etc.) and vessels. The point source fuel use is broken down according to the kind of equipment in which the fuel is consumed--either external combustion equipment (boilers), internal combustion engines, or inprocess fuel use (dryers, furnaces, etc.). External and internal combustion categories are subdivided into electric utility, industrial, and commercial-institutional portions. Inprocess fuel use is all by industrial sources. The fuel types included are anthracite and bituminous coal, residual and distillate oil, natural gas, wood/bark, gasoline, diesel fuel, lignite coal, coke, bagasse, industrial process gas, liquified petroleum gas, jet fuel, solid waste, and liquid waste.

The date of file creation is included at the beginning of each report. Subtotals are printed for area and point sources, and a grand total is given for each fuel. Either English or metric units of measurement may be selected.

Retrievals Available

The retrieval keys for the "Annual Fuel Summary Report" are as follows:

a. Nation

b. State

c. County

d. AQCR

e. State portions of interstate AQCR's

f. All counties in a state

Sample Report

A sample "Annual Fuel Summary Report" is presented in Figure 2.1.2.b.

STATE: PENNSYLVANIA

NEDS ANNUAL FUEL SUMMARY REPORT
USER FILE CREATE DATE: FRIDAY OCTOBER 10, 1980
AREA FILE CREATE DATE: WEDNESDAY SEPTEMBER 24, 1980

DATE OF RUN: 10/16/80

	ANTH COAL	BITM COAL	RESID OIL	DIST OIL	NAT GAS	WOOD/BARK	GASOLINE	DIESEL
	**********	**********	**********	**********	**********	**********	**********	**********
	TONS	TONS	1000 GALS	1000 GALS	10E6 CUFT	TONS	1000 GALS	1000 GALS
AREA SOURCES								
STATIONARY								
RESIDENTIAL	790830	41010		1759510	295780	55500		
INDUSTRIAL			389230	172370	98190			
COMM-INSTL	1004960		168250		94770			
MOBILE								
LIGHT DUTY VEHICLES							4176101	
LIGHT DUTY TRUCKS							668467	
HEAVY DUTY VEHICLES							234859	743465
RAILROAD								171640
OFF-HIGHWAY							154883	177940
VESSELS			42380				16756	11900
AREA TOTAL	1795790	41010	599860	1931880	488740	55500	5251066	1104945
POINT SOURCES								
EXT COMB								
ELEC GEN	1445286	35621232	1127602	89721	9294	1297		
INDUSTRIAL	117757	4236199	617732	82495	183595	131800		
COMM-INSTL	168956	151481	129255	82489	15847	103475		
INPROCESS		160200	7349	6201	2255	6		
INTERNL COMB								
ELEC GEN				77079				86
INDUSTRIAL					498			
COMM-INSTL								
POINT TOTAL	1731999	40169112	1881938	337985	211489	236578		86
GRAND TOTAL	3527789	40210122	2481798	2269865	700229	292078	5251066	1105031

	LIGNITE	COKE	BAGASSE	PROCESS GAS	LIQ-PETRO	JET FUEL	SOLID WASTE	LIQUID WASTE
	**********	**********	**********	**********	**********	**********	**********	**********
	TONS	TONS	TONS	10E6 CUFT	1000 GALS	1000 GALS	TONS	1000 GALS
POINT SOURCES								
EXT COMB								
ELEC GEN		163620						
INDUSTRIAL				980156	113			695
COMM-INSTL								
INPROCESS		147		53	108			
INTERNL COMB								
ELEC GEN								
INDUSTRIAL								
COMM-INSTL								
GRAND TOTAL		163767		980209	221			695

Figure 2.1.2-b NEDS Annual Fuel Summary Report

POTENTIAL EMISSIONS REPORT

General Description

The potential emissions report produces a report and/or files of uncontrolled emissions, maximum controlled emissions, and maximum uncontrolled emissions. Either a full or summary report may be specified with the summarization of calculations at the level specified by the user. Summarization may be specified at any one of the following levels:

a. National
b. State
c. County (State/County)
d. AQCR
e. State/AQCR
f. Plant (State/County/Plant)

Emission values are computed as follows:

1) Uncontrolled emissions = CALCULATED EMISSIONS VALUE* (100/(100 - CONTROL EFFICIENCY)),
2) Maximum Controlled Emissions = CALCULATED EMISSIONS VALUE* RATIO
   WHERE RATIO = (MAXIMUM DESIGN RATE * HOURS-DAY* DAYS-WEEK * WEEKS-YEAR) /OPERATING RATE, and
3) Maximum Uncontrolled Emissions = UNCONTROLLED EMISSIONS * RATIO (See RATIO formula above).

Retrievals Available

The potential emissions report may be selected and sorted according to the NEDS general selection and sorting capabilities described in Section 2.1.0.

The sort selected should coincide with the level of summarization requested. That is, if summarization by plant is requested, sorting by at least State/County/Plant, and preferably by State/County/Plant/Point/SCC should be performed. It is recommended that, in general, only sorts by State/County/Plant/Point/SCC or by calculated emissions be requested. Other sorts are possible but since other data items do not appear on the report output, the report may appear confusing or in random order if this is done.

Example Output

A sample page of the Potential Emissions Report is presented in Figure 2.1.2.c. In this example, only data for one state was selected, with the summarization at the state level requested.

MONDAY JUNE 28, 1982 NATIONAL EMISSION DATA SYSTEM

	CALCULATED EMISSIONS (TONS/YR)	UNCONTROLLED EMISSIONS (TONS/YR)	MAXIMUM CONTROLLED EMISSIONS (TONS/YR)	MAXIMUM UNCONTROLLED EMISSIONS (TONS/YR)	ST CNTY PLNT PT SCC-CODE
PART	0.000	0.000			41 0140 0002 07 40200801
SO2	0.000	0.000			
NOX	0.000	0.000			
VOC	0.000	0.000			
CO	0.000	0.000			
PART	0.000	0.000			41 0140 0002 07 40299999
SO2	0.000	0.000			
NOX	0.000	0.000			
VOC	0.000	0.000			
CO	0.000	0.000			
PART	4.000	4.000			41 0140 0004 01 10200401
SO2	47.000	47.000			
NOX	18.000	18.000			
VOC	0.000	0.000			
CO	1.000	1.000			
PART	0.000	0.000			41 0140 0004 02 40100202
SO2	0.000	0.000			
NOX	0.000	0.000			
VOC	149.000	149.000			
CO	0.000	0.000			
PART	0.000	0.000			41 0140 0004 03 40100202
SO2	0.000	0.000			
NOX	0.000	0.000			
VOC	83.000	83.000			
CO	0.000	0.000			
PART	0.000	0.000			41 0140 0004 04 40200101
SO2	0.000	0.000			
NOX	0.000	0.000			
VOC	6.000	6.000			
CO	0.000	0.000			
PART	0.000	0.000			41 0140 0004 05 40200101
SO2	0.000	0.000			
NOX	0.000	0.000			
VOC	8.000	8.000			
CO	0.000	0.000			

Figure 2.1.2-c Potential emissions report

PLANT EMISSION SUMMARY REPORT

General Description

The "Plant Emission Summary Report" lists the name, identifying geographic data, and criteria pollutant emissions for each plant in the region requested. For each of the five criteria pollutants, emission totals are printed, as well as subtotals for fuel combustion and process emissions. If the emissions total are different from the sum of fuel combustion and process emissions, the difference is the plant solid waste emissions.

Retrievals Available

The report may be selected and sorted according to the NEDS general selection and sorting capabilities described in Section 2.1.0.

Sample Report

A sample page from the "Plant Emission Summary Report" retrieved for the Air Quality Control Region of Metropolitan Providence is presented in Figure 2.1.2.d.

PLANT EMISSIONS REPORT (TONS/YR) UPDATE DATE: MONDAY JUNE 07, 1982 PAGE 3

STATE	COUNTY	PLANT	AQCR	PLANT NAME AND ADDRESS		PART	SO2	NOX	VOC	CO
41	0320	0036	120	MIRIAM HOSPITAL,164 SUMMIT AV,PROVIDENCE	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	1	49	17	1	2
					PLANT TOTAL	1	49	17	1	2
41	0320	0120	120	PROV GRAVURE,99 W RIVER PROV 02904	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	4	47	18	0	2
					PLANT TOTAL	4	47	18	108	2
41	0140	0004	120	BOSTITCH (TEXTRON), EAST GREENWICH 02818	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	4	47	18	0	1
					PLANT TOTAL	4	47	18	880	1
41	0320	0058	120	MEMORIAL HOSP,PROSPECT ST,PAWTUCKET	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	3	46	16	0	1
					PLANT TOTAL	3	46	16	0	1
41	0320	0031	120	PAWTUCKET INCINERATOR,PAWTUCKET	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	0	0	0	0	0
					PLANT TOTAL	222	46	37	28	648
41	0320	0028	120	SCHOOL HOUSE CANDY CO. PAWTUCKET 02860	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	6	43	22	1	1
					PLANT TOTAL	6	43	22	1	1
41	0140	0006	120	LEESONA CORP,STRAWBERRY FD WARWICK 02887	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	3	42	15	0	1
					PLANT TOTAL	3	42	15	66	1
41	0320	0044	120	ST JOSEPH'S HOSP,OLP,PEACE ST PROV.02907	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	3	41	14	0	1
					PLANT TOTAL	3	41	14	0	1
41	0320	0230	120	VA HOSPITAL,CHALKSTONE, PROVIDENCE02908	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	3	41	14	0	1
					PLANT TOTAL	3	41	14	0	1
41	0320	0019	120	COLLYER INSULATED WIRE CO. LINCOLN 02865	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	3	40	14	0	1
					PLANT TOTAL	3	40	14	6	1
41	0320	0009	120	UNITED WIRE,ELMWOOD AVE. CRANSTON 02910	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	4	35	14	0	1
					PLANT TOTAL	4	35	14	310	1
41	0320	0013	120	MOBIL OIL, WAMPANOAG TR. EAST PROV.02915	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	1	35	5	0	1
					PLANT TOTAL	1	35	5	525	1
41	0140	0002	120	ARKWRIGHT INC, MAIN ST. COVENTRY 02823	PROCESS TOTAL	0	0	0	0	0
					FUEL COMB TOTAL	3	31	12	0	1
					PLANT TOTAL	3	31	12	701	1
41	0380	0017	120	IMPERIAL WALLPAPER MILL WESTERLY02891	PROCESS TOTAL	0	0	0	0	0

Figure 2.1.2-d Plant emissions report

VOC EMISSIONS SUMMARY REPORT

General Description

The "VOC Emissions Summary Report" shows the annual number of tons of reactive volatile organic compounds emitted by source category within a given geographical region. The emission source categories included are:

- Storage, Transportation and Marketing of VOC
  - Gasoline & Crude Oil Storage (Point)
  - Synthetic Organic Chemical Storage & Transfer (Point)
  - Ship & Barge Transfer of VOC (Point)
  - Bulk Gasoline & VOC Terminals (Point)
  - Service Station Loading (Point)
  - Service Station Unloading (Area & Point)

- Industrial Process (Point)
  - 11 categories

- Industrial Surface Coating (Point)

- Other Solvent Use
  - Degreasing (Point)
  - Dry Cleaning (Point)
  - Graphic Arts (Point)
  - Adhesives (Point)
  - Other (Area & Point)

- Other Miscellaneous Sources
  - Fuel Combustion (Area & Point)
  - Solid Waste Disposal (Area & Point)
  - Forest, Agricultural, & Other Open Burning (Area)
  - Stationary Internal Combustion Engines (Point)

- Mobile Sources (Area)
  - Highway Vehicles
  - Off-highway Vehicles
  - Rail
  - Aircraft
  - Vessels

A grand total of emissions, subdivided by area & point sources, is also printed.

Retrievals Available

The retrieval keys for the "VOC Emissions Summary Report" are as follows:

a. Nation
b. State
c. EPA Region
d. State/county
e. AQCR
f. State portions of interstate AQCR's
g. All counties in a State
h. State portions of interstate non-attainment areas
i. State non-attainment report
j. EPA Region non-attainment report
k. National non-attainment report

Sample Report

A sample "VOC Emissions Summary Report" is presented in Figure 2.1.2.e.

While this report is similar to the "Emissions Summary Report" (Figure 2.1.2.a), the "VOC Emissions Summary Report" focuses on the source categories that contribute the most VOC emissions to the grand total.

NATIONAL EMISSIONS DATA SYSTEM
****

ENVIRONMENTAL PROTECTION AGENCY
****

NATIONWIDE V.O.C. EMISSIONS REPORT
****
UNITED STATES

RUN DATE: WEDNESDAY AUGUST 18, 1982
AREA EMISSIONS AS OF: FRIDAY JULY 23, 1982
POINT EMISSIONS AS OF: WEDNESDAY JULY 07, 1982

	V.O.C. ********** TONS / YR
STORAGE, TRANSPORTATION AND MARKETING OF VOC (POINT UNLESS NOTED OTHERWISE) **********	
OIL AND GAS PRODUCTION & PROCESSING	13617
GASOLINE AND CRUDE OIL STORAGE	538729
SYNTHETIC ORGANIC CHEMICAL STORAGE & TRANSFER	65607
SHIP AND BARGE TRANSFER OF VOC	38673
BULK GASOLINE & VOC TERMINALS	368700
GASOLINE BULK PLANTS	3155
SERVICE STATION LOADING (STAGE I)	13426
SERVICE STATION UNLOADING (STAGE II)	
AREA	977587
POINT	14784
OTHERS	36203
TOTAL(STORAGE, TRANSPORTATION, ETC)	
AREA	977587
POINT	1142894
INDUSTRIAL PROCESSES (POINT) **********	
PETROLEUM REFINERIES	477388
ORGANIC CHEMICAL MANUFACTURE	354172
INORGANIC CHEMICAL MANUFACTURE	41689
FERMENTATION PROCESSES	26515
VEGETABLE OIL PROCESSING	10216
PHARMACEUTICAL MANUFACTURE	887
PLASTIC PRODUCTS MANUFACTURE	7065
RUBBER TIRE MANUFACTURE	36449
SBR RUBBER MANUFACTURE	78354
POLYMERS & RESIN MANUFACTURE	183909
SYNTHETIC FIBER MANUFACTURE	37092
IRON AND STEEL MANUFACTURE	86209
OTHERS	885956
TOTAL(INDUSTRIAL PROCESSES)	2225901
INDUSTRIAL SURFACE COATING (POINT) **********	

Figure 2.1.2-e VOC emissions summary report

AUTOMOBILES	242
CANS	29357
METAL COILS	384
PAPER	2233
FABRIC	1575
METAL WOOD PRODUCTS	1659
MISCELLANEOUS METAL PRODUCTS	1106
LARGE SHIPS	283
LARGE AIRCRAFT	16
OTHER	1174822
TOTAL(INDUSTRIAL SURFACE COATING)	1211676
OTHER SOLVENT USE (POINT UNLESS NOTED OTHERWISE) **********	
DEGREASING	179528
DRY CLEANING	23710
GRAPHIC ARTS	234322
ADHESIVES	29704
SOLVENT EXTRACTION PROCESSES	2966
OTHER	
AREA	6660448
POINT	204186
TOTAL(OTHER SOLVENT USE)	
AREA	6660448
POINT	674416
OTHER MISCELLANEOUS SOURCES (POINT UNLESS NOTED OTHERWISE) **********	
FUEL COMBUSTION	
AREA	760918
POINT	177340
SOLID WASTE DISPOSAL	
AREA	672816
POINT	71800
FOREST-AGRICULTURAL, AND OTHER OPEN BURNING	
AREA	1361967
STATIONARY INTERNAL COMBUSTION ENGINES	120309
TOTAL(OTHER MISCELLANEOUS)	
AREA	2795701
POINT	369448
MOBILE SOURCES (AREA) **********	
HIGHWAY VEHICLES	
A) LIGHT DUTY AUTOMOBILES	4849662
B) LIGHT DUTY TRUCKS	1294292
C) HEAVY DUTY GASOLINE TRUCKS	649297
D) HEAVY DUTY DIESEL TRUCKS	298714

Figure 2.1.2-e (continued) VOC emissions summary report

OFF-HIGHWAY VEHICLES	373289
RAIL	200935
AIRCRAFT	185917
VESSELS	420652
TOTAL(MOBILE SOURCES)	8272759
GRAND TOTAL	18706494
AREA	5624335
POINT	
TOTAL	24330829

Figure 2.1.2-e (continued) VOC emissions summary report

PLANT NAME REPORT

General Description

The "Plant Name Report" gives one line of information concerning each plant requested. Included are plant ID, plant name, plant contact, a count of points and SCC's, UTM coordinates, and the plant comment field.

Retrievals Available

The plant name report may be selected and sorted according to the NEDS general selection and sorting capabilities described in section 2.1.0.

When sorting the plant name report, requestors should be aware that the report has a page break on county so that it is desirable to begin each sort selected with state/county. The two sorts recommended for use with the "Plant Name Report" are:

State/County/Plant Name/Plant ID/Point ID/SCC
State/County/Plant ID/Point ID/SCC

The first step is an alphabetical ordering by plant name and the second a numerical ordering by plant ID. If one of the above sorts is not used, the plant name may appear several times and the SCC count may be incorrect.

Sample Report

A sample "Plant Name Report" for the State of Rhode Island and the County of Providence is presented in Figure 2.1.2.f--sorted by plant name.

FILE CREATED ON WEDNESDAY MARCH 12, 1975 PAGE 41-0001

N A T I O N A L E M I S S I O N S D A T A S Y S T E M

PLANT NAME LISTING FOR ALL PLANTS WITH SCC EMITTING >OR = 0 TONS PER YEAR OF PARTICULATE

STATE (41): RHODE ISLAND COUNTY (0320): PROVIDENCE CO

PLANT ID	P L A N T N A M E	PLANT CONTACT	COUNT OF PT	SCC	UTM X	COORD Y	P L A N T C O M M E N T
0016	BACCALA & SONS,100 ARMENTO ST,JOHNSTON	R.BACCALA	1	1	293.8	4636.0	
0011	BIRD & SON, DEXTER ROAD,PHILIPSDALE,E PROVD	R.WILLIAMS	2	2	303.3	4634.2	
0025	BLACKSTONE VALLEY PWR PLANT, PAWTUCKET	MR.STEELMACH	12	12	302.3	4637.5	
0022	BRANCH RIVER WOOL,GREAT RD,N.SMITHFIELD	G.WARLOP	3	3	288.7	4657.4	
0033	BROWN UNIVERSITY, PROVIDENCE	MR REMY	1	3	300.5	4632.9	
0032	BROWN&SHARPE,WATERMAN AVE,PROVIDENCE	GREENSLADE	1	2	299.0	4633.6	

Figure 2.1.2.f. Plant Name Report

EMISSIONS BY SCC REPORT

General Description

This report summarizes, by SCC, the calculated emissions for the five major pollutants (particulate, nitrogen oxides, sulfur oxides, reactive VOC and carbon monoxide). All data selected are summarized by SCC and total emissions are provided for the four parts of each SCC. The report also gives the number of records for each SCC, for both complete SCC's and component parts, and total process throughput for each complete SCC (Parts I + II + III + IV).

Retrievals Available

Generally, only reports by nation, state, AQCR or county will be meaningful. Should the need exist, any of the NEDS general selection and sorting capabilities may be used to produce the report. To be meaningful, however, the report must be sorted by SCC. Otherwise, report output will not appear in any logical order.

Sample Report

A sample page of the Emissions by SCC Report is presented in Figure 2.1.2.g. A report will produce multiple pages showing data for all SCCs in the selected file.

FILE CREATED ON WEDNESDAY AUGUST 11, 1982 PAGE 1

NATIONAL EMISSONS DATA SYSTEM

EMISSIONS BY SOURCE CLASSIFICATION CODE

STATE: 26 MISSOURI

		PART	SOX	NOX	VOC	CO
1 01 002 01 FOR EXTCOMB BOILER	12 RECORDS WITH THRUPUT OF 4,878,132 TONS BURNED ELECTRIC GENERATN BITUMINOUS COAL PULV COAL WET BOT	6,390	221,848	80,630	523	2,169
1 01 002 02 FOR EXTCOMB BOILER	21 RECORDS WITH THRUPUT OF 13,194,797 TONS BURNED ELECTRIC GENERATN BITUMINOUS COAL PULV COAL DRY BOT	61,662	584,436	138,504	508	4,007
1 01 002 03 FOR EXTCOMB BOILER	3 RECORDS WITH THRUPUT OF 2,128,647 TONS BURNED ELECTRIC GENERATN BITUMINOUS COAL CYCLONE FURNACE	2,015	95,507	39,379	206	863
1 01 002 04 FOR EXTCOMB BOILER	12 RECORDS WITH THRUPUT OF 880,647 TONS BURNED ELECTRIC GENERATN BITUMINOUS COAL SPREADER STOKER	1,576	76,890	6,205	131	792
1 01 002 05 FOR EXTCOMB BOILER	9 RECORDS WITH THRUPUT OF 734,834 TONS BURNED ELECTRIC GENERATN BITUMINOUS COAL TRV GRATE OF STKR	434	44,286	2,757	34	1,868
1 01 002 23 FOR EXTCOMB BOILER	2 RECORDS WITH THRUPUT OF 1,496,000 TONS BURNED ELECTRIC GENERATN SUBBITUMINUS COAL CYCLONE FURNACE	27,941	125,140	27,675	197	654
1 01 002 FOR EXTCOMB BOILER	59 RECORDS ELECTRIC GENERATN SUBBITUMINUS COAL	100,019	1,148,110	295,153	1,600	10,355
1 01 004 01 FOR EXTCOMB BOILER	14 RECORDS WITH THRUPUT OF 6,354 1000 GALLONS BURNED ELECTRIC GENERATN RESIDUAL OIL ND 6 OIL NORM FRG	25	1,938	296	6	14
1 01 004 FOR EXTCOMB BOILER	14 RECORDS ELECTRIC GENERATN RESIDUAL OIL	25	1,938	296	6	14

Figure 2.1.2-g Emissions by SCC report

SIC EMISSIONS REPORT

General Description

The SIC Emissions Report shows total emissions of particulates, sulfur oxides, nitrogen oxides, reactive VOC and carbon monoxide by Standard Industrial Classification (SIC) code. The report also identifies the number of plants with each SIC code. If different emission points at a plant have different SICs recorded the plant will be counted in the report once for each unique SIC that appears. Thus a plant with three different SICs would be tabulated as three plants in the report.

Retrievals Available

The SIC Emissions Report may be produced for the following levels of summarization:

a. National
b. State
c. AQCR
d. State portion of interstate AQCR
e. State/County
f. All counties in a state

Records may be selected from the file according to any of the NEDS general selection capabilities and summarized for any of the geographic areas shown above. For the report to be meaningful the selected records must be sorted by SIC. Thus no other sorts are applicable.

Sample Report

Figure 2.1.2.h is an example SIC Emissions Report.

DATE: 07/07/82 FILE CREATED ON: WEDNESDAY JULY 07, 1982

N A T I O N A L E M I S S I O N S D A T A S Y S T E M PAGE 4

NEDS SIC EMISSIONS REPORT (TONS/YEAR)

SUMMARY FOR: STATE(41) - RHODE ISLAND COUNTY(0320) - PROVIDENCE CO

SIC	NUMBER OF FACILITIES	PARTICULATES	SOX	NOX	VOC	CO
2751	1	0	0	0	68	0
2641	1	0	0	0	38	0
3444	1	0	0	0	37	0
TOTAL:	83	3089	4272	4037	9523	2041

SUMMARY FOR: STATE(41) - RHODE ISLAND COUNTY(0380) - WASHINGTON CO

SIC	NUMBER OF FACILITIES	PARTICULATES	SOX	NOX	VOC	CO
8221	1	4	50	19	1	2
	1	5	70	29	0	2
8221	1	I	22	11	0	<1
2262	1	9	112	43	1045	4
2261	1	15	199	69	529	6
2295	1	0	0	0	207	0
3541	1	0	0	0	98	0
2649	1	2	18	7	173	1
8063	1	8	98	37	1	3
9621	1	26	314	120	2	10
3731	1	0	0	0	36	0
3931	1	0	0	0	33	0
9711	1	<1	10	41	11	3
TOTAL:	13	72	896	378	2138	34

****

TOTAL RECORDS READ - 551

****

Figure 2.1.2-h SIC emissions report

COUNTY POINT AND AREA SOURCE EMISSIONS REPORT

General Description

This report outputs a detailed and/or summary listing showing total county point and area source emissions. The detailed format report lists each point source individually in each county giving the plant ID, plant name and address, plant contact name, AQCR, city code, UTM coordinates, number of emission points, most recent year of record of any emission point, and emissions of each of the five pollutants in tons per year. Pollutant emissions marked by an asterisk indicate the existence of at least one emission point at the plant with emissions of more than 25 tons per year. The detailed report also indicates the total number of plants in the county with emissions of more than 100 tons per year, and gives the total point and area source emissions for the county. The summary listing shows only total point and area source emissions for the county and the number of plants emitting more than 100 tons per year of each pollutant.

Retrievals Available

Either the detailed or summary report or both may be produced. Point source data may be selected by the NEDS general selection procedures. Area source data may be selected only for all counties in a state. Thus it is most meaningful to produce the report only for all counties in a state.

Sample Reports

A detailed County Point and Area Source Emissions Report is shown in Figure 2.1.2.i. A summary report is shown in Figure 2.1.2.j.

STATE:01 ALABAMA COUNTY:1920 JACKSON CO PAGE: 36

PLNT	NAME AND ADDRESS	CONTACT	SIC	AQR	CITY	UTMX	UTMY	PT	YR	PARTIC	SO2	NOX	VOC	CO
0004	PEVERE COPPER + BRASS INC GOOSE POND ISL	CAVANAGH	3352	007	3000	5866	38278	10	79	148*	0	0	0	0
0005	VULCAN MATERIALS CO SCOTTSBORO 35768	FRIDLEY	1422	007	3000	5842	38323	07	77	74*	0	0	0	0
0006	WARREN BROS PORTER RD SCOTTSBORO 35768	B F WILSON	2951	007	3000	5840	38319	01	77	2	2	1	2	1
0007	TENNESSEE ALLOYS CORP GARNER RD 35740	SNYDER	3339	007	0460	6181	38677	09	77	14	0	0	0	0
0008	WIDOWS CREEK STEAM PLANT		4911	007		6138	38607	08	80	1276*	67478*	34829*	116*	999*
0010	GOODYEAR TIRE & RUBBER-SCOTTSBORO	SPANN W B	3011	007	3000	3831	58450	02	79	12	2	42*	14	9
0012	REVERE COPPER + BRASS-AL RED. REVERE RD	MURPHY	3334	007	3000	5867	38277	09	79	1092*	0	0	0	0
0014	THE MEAD CORP. STEVENSON , JACKSON CO.	RUTH GEORG	2649	007		6109	38586	02	79	88*	1678*	450*	2	41*
0015	MID-SOUTH PAVERS PO BOX 188 TUSCUMBIA	RECHTER	2951	007		5701	38322	01	76	10	20	10	22	11
0016	HOOVER INC PO BOX 17346 NASHVILLE 37217	JENKINS	3281	007	3000	5701	38322	04	76	421*	0	0	0	0
0017	HOOVER INC HOLLYWOOD 35752	JENKINS	1422	007		5952	38432	05	76	477*	0	0	0	0
0019	BURGREEN CONTRACTING SCOTTSBORO 35768	W K BURGRE	2951	007	3000	5842	38323	01	77	4	1	1	2	1
0020	GOLD KIST OLD LARKINSVILLE RD SCOTTSBORO	D GIBSON	5153	007	3000	5867	38376	01	77	3	0	0	0	0
6001	SEQUATCHIE CONCRETE SERVICE STEVENSON	KIRK	3273	007		6086	38594	01	75	0	0	0	0	0
6003	W J WORD LUMBER CO P O BOX 907 SCOTTS	GROSS	3273	007	3000	5873	38372	02	77	0	0	0	607*	112*
6004	WEBB CONCRETE PROD CO SCOTTSBORO	WEBB	3273	007	3000	5895	38372	01	75	1	0	0	0	0
6005	SEQUATCHIE CONCRETE SERVICE 35768	R R THOMAS	3273	007	3000	5934	38405	01	77	0	0	0	0	0
6006	TVA BELLEFONTE PLANT HOLLYWOOD 35752	P KRENKEL	4911	007		5966	38414	01	80	1	0	0	0	0
8001	WAREHOUSE GROCERY, SCOTTSBORO	R. RUTLEDG	4953	007	3000	5884	38346	01	73	0	0	0	0	0
										NUMBER OF PLANTS >100 TONS PER YEAR	0000005	0000002	0000002	0000002	0000002
										TOTAL COUNTY POINT SOURCE EMISSIONS	3624.	69183.	35333.	766.	1174.
										(007) 1980 COUNTY AREA SOURCE EMISSIONS	5528.	1615.	3793.	5088.	21831.

Figure 2.1.2-i Detailed county point and area source emissions report

NORTH DAKOTA — NEDS POINT AND AREA SOURCE EMISSIONS — NUMBR PLANTS>100TONS — PAGE: 2

ST CNTY	AQR	YR		PARTIC	SO2	NOX	VOC	CO	PAR	SO2	NOX	VOC	CO
35 0500			POINT	669.	248.	99.	2.	57.	2	1	0	0	0
	172	80	AREA	50735.	2933.	5946.	4061.	21495.					
			TOTAL	51404.	3187.	6045.	4063.	21552.					
35 0520			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	25791.	101.	438.	266.	1392.					
			TOTAL	25791.	101.	438.	266.	1392.					
35 0540			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	10392.	101.	413.	287.	1344.					
			TOTAL	10392.	101.	413.	287.	1344.					
35 0560			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	18602.	61.	480.	297.	1575.					
			TOTAL	18602.	61.	480.	297.	1575.					
35 0580			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	19684.	89.	544.	461.	2547.					
			TOTAL	19684.	89.	544.	461.	2547.					
35 0620			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	18687.	128.	724.	510.	2571.					
			TOTAL	18687.	128.	724.	510.	2571.					
35 0640			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	15518.	55.	348.	254.	1270.					
			TOTAL	15518.	55.	348.	254.	1270.					
35 0660			POINT	58.	1700.	2413.	12.	103.	0	1	1	0	1
	172	80	AREA	30082.	138.	871.	642.	3582.					
			TOTAL	30140.	1838.	3284.	654.	3685.					
35 0680			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	15595.	300.	559.	393.	1597.					
			TOTAL	15595.	300.	559.	393.	1597.					
35 0700			POINT	0.	16.	101.	6.	14.	0	0	0	0	0
	172	80	AREA	42325.	106.	971.	510.	2623.					
			TOTAL	42325.	122.	1073.	516.	2637.					
35 0720			POINT	6165.	2482.	13700.	69.	587.	1	1	1	0	1
	172	80	AREA	36256.	137.	1177.	963.	4859.					
			TOTAL	42421.	2619.	14877.	1031.	5446.					
35 0760			POINT	1487.	46151.	32162.	145.	1365.	3	3	3	1	3
	172	80	AREA	15590.	177.	674.	488.	2089.					
			TOTAL	17077.	46328.	32836.	633.	3454.					
35 0800			POINT	1067.	11875.	2502.	1183.	1411.	2	2	2	1	2
	172	80	AREA	39013.	749.	2713.	1918.	10827.					
			TOTAL	40079.	12623.	5215.	3101.	12238.					
35 0820			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	28959.	111.	734.	597.	3039.					
			TOTAL	28959.	111.	734.	597.	3039.					
35 0840			POINT	0.	0.	0.	0.	0.	0	0	0	0	0
	172	80	AREA	15560.	96.	562.	415.	2169.					
			TOTAL	15560.	96.	562.	415.	2169.					
35 0860			POINT	724.	26395.	31478.	130.	1120.	1	1	1	1	1
	172	80	AREA	9362.	44.	311.	691.	2859.					
			TOTAL	10087.	26439.	31790.	821.	3979.					
35 0880			POINT	849.	1149.	383.	4.	319.	1	1	1	0	1
	172	80	AREA	18804.	216.	1256.	898.	4121.					
			TOTAL	19653.	1365.	1639.	903.	4440.					

Figure 2.1.2-j Summary county point and area source emissions report

MODELING PARAMETERS

General Description

This report is designed to list maximum, minimum, and average values of selected data items of interest for air quality modeling purposes. These values are reported for each NEDS Source Classification Code (SCC). The report also shows the number of occurrences of each SCC. Data items for which maximum, minimum and average values are computed are stack height and diameter, exhaust gas temperature and flow rate, plume height if no stack, annual operating rate, and annual controlled and uncontrolled emissions of each pollutant.

Retrievals Available

The report is available only for the nation.

Sample Report

A sample report page is shown in Figure 2.1.2.k. All SCCs will be listed in the complete report.

SCC	NO. OF SOURCES		STACK HEIGHT (FT)	DIAMETER (FT)	TEMP (F)	FLOW (ACFM)	PLUME HEIGHT (FT)	HOURS/ YEAR	OPERATING RATE	
***	*******		******	********	****	******	******	******	*********	
10100203	80	AVG	375.	16.2	312.	984285.	0.	6963.	488091.	TONS BURNED
		MAX	828.	34.0	650.	5396800.	0.	8736.	2354950.	
		MIN	70.	.5	228.	20000.	0.	528.	6480.	

CONTROLLED		PARTICULATES (TONS/YR)	SO2 (TONS/YR)	NOX (TONS/YR)	VOC (TONS/YR)	CO (TONS/YR)
		*********	*********	*********	*********	*********
	AVG	745.809	23594.019	8943.573	63.802	177.175
	MAX	4295.655	146191.123	64761.000	2483.881	1142.000
	MIN	.000	.000	.000	.000	.000

UNCONTROLLED		PARTICULATES (TONS/YR)	SO2 (TONS/YR)	NOX (TONS/YR)	VOC (TONS/YR)	CO (TONS/YR)
		*********	*********	*********	*********	*********
	AVG	7220.102	24612.243	8943.573	63.802	177.175
	MAX	55621.986	146191.121	64761.000	2483.881	1142.000
	MIN	.000	.000	.000	.000	.000

SCC	NO. OF SOURCES		STACK HEIGHT (FT)	DIAMETER (FT)	TEMP (F)	FLOW (ACFM)	PLUME HEIGHT (FT)	HOURS/ YEAR	OPERATING RATE	
***	*******		******	********	****	******	******	******	*********	
10100204	138	AVG	167.	8.5	382.	97603.	30.	5631.	39178.	TONS BURNED
		MAX	400.	34.0	700.	1149918.	30.	8736.	924600.	
		MIN	30.	1.3	235.	2080.	30.	168.	119.	

CONTROLLED		PARTICULATES (TONS/YR)	SO2 (TONS/YR)	NOX (TONS/YR)	VOC (TONS/YR)	CO (TONS/YR)
		*********	*********	*********	*********	*********
	AVG	124.639	1270.872	236.899	5.009	53.981
	MAX	1910.655	66656.327	6472.154	99.000	957.000
	MIN	.000	.000	.000	.000	.000

UNCONTROLLED		PARTICULATES (TONS/YR)	SO2 (TONS/YR)	NOX (TONS/YR)	VOC (TONS/YR)	CO (TONS/YR)
		*********	*********	*********	*********	*********
	AVG	3069.799	1270.872	236.902	5.009	53.981
	MAX	297666.477	66656.326	6472.154	99.000	957.000
	MIN	.000	.000	.000	.000	.000

Figure 2.1.2.k Modeling parameters report

PLANT-POINT-SCC COUNT REPORT

GENERAL DESCRIPTION

The "Plant-Point-SCC Count Report" is available on a nationwide basis only. For each "state" this report lists the state code, state name, and total number of plants, plant-points, and plant-point-SCCs. The "states" themselves are listed in ascending numerical order according to state code number. A grand total of plants, plant-points, and plant-point-SCCs is printed at the end. A sample "Plant-Point SCC Count Report" is presented in Figure 2.1.3.a.

05/07/75 NATIONAL EMISSIONS DATA SYSTEM PAGE: 1

ST NO	STATE	TOTAL NUMBER PLANTS	TOTAL NUMBER PLANT-POINTS	TOTAL NUMBER PLANT-POINT-SCC
01	ALABAMA	361	1,736	2,769
02	ALASKA	178	267	410
03	ARIZONA	361	589	1,201
04	ARKANSAS	236	689	813
	GRAND TOTAL	30,127	83,202	108,238

Figure 2.1.3.a Plant-Point-SCC count report

MISSING ITEM REPORT

GENERAL DESCRIPTION

The "Missing Item Report" is a point source inventory of missing data items. Seven geographical summarization types are available. They are as follows:

a. National
b. State
c. State/County
d. AQCR
e. State/AQCR
f. State/County/Plant
g. State/County/Plant/Point

This report presents a count of the missing items according to the summarization type requested. Any data can be selected to be summarized based on the point source selection capability. After the data are selected, they can be summarized using any of the above report types. For example, all boilers could be selected and summarized by state to determine the number of boilers and data available for boilers. In addition to totals for the number of plants, points and SCCs present, totals are printed to indicate the confidentiality status of processes and plants.

Figure 2.1.3.b is a "Missing Item Report" for the State of Massachusetts.

N A T I O N A L E M I S S I O N S D A T A S Y S T E M S PAGE: 1

POINT SOURCE INVENTORY - INCOMPLETE DATA ITEMS

DATE: AUGUST 19, 1932 FILE CREATED ON: 1982 THURSDAY AUGUST 19,
STATE(38) : OREGON

MISSING DATA ITEMS
THE COUNTS BELOW APPLY TO CORRESPONDING DATA FIELDS
FOR EACH NEDS POINT SOURCE FORM SUBMITTED FOR THIS
GEOGRAPHICAL AREA. THERE ARE 5079 POINTS REPORTING
IN THIS AREA.

DATA ITEM	# MISSING
CARD #1	
YEAR OF RECORD	0
CITY	690
UTM ZONE	2
NAME AND ADDRESS	0
CONTACT-PERSONAL	575
OWNERSHIP	0
CARD #2	
YEAR OF RECORD	0
SIC	0
UTM-HORIZONTAL	592
UTM-VERTICAL	592
STACK DATA	
HEIGHT	3739
DIAMETER	3739
TEMPERATURE	3743
FLOW RATE	0
PLUME HEIGHT	3739
CARD #3	
YEAR OF RECORD	0
BOILER DESIGN CAP	1575
CONTROL EQUIPMENT	
PRIMARY PART.	3337
SECONDARY PART.	4819
PRIMARY SOX.	5062
SECONDARY SOX	5062
PRIMARY NOX	5062
SECONDARY NOX	5062
PRIMARY VOC	5060
SECONDARY VOC	5060
PRIMARY CO	5062
SECONDARY CO	5062
EST. CONTROL EFF.	
PART.	3337
SOX	5063
NOX	5062
VOC	5060
CO	5062

DATA ITEM	# MISSING
CARD #4	
YEAR OF RECORD	0
ANNUAL THROUGHPUT	
DEC-FEB	0
MAR-MAY	0
JUNE-AUG	0
SEPT-NOV	0
NORMAL OPERATING	
HOURS/DAY	1554
DAYS/WEEK	1554
WEEKS/YEAR	1554
EMISSION ESTIMATE	
PART.	2
SOX	3
NOX	3
VOC	0
CO	2
ESTIMATION METHOD	
PART.	2
SOX	2
NOX	2
VOC	0
CO	2
% SPACE HEAT	1577

DATA ITEM	# MISSING
CARD #5	
YEAR OF RECORD	0
ALLOWABLE EMISS.	
PART.	5079
SOX	5079
NOX	5079
VOC	5079
CO	5079
COMPL. STATUS	5073
COMPL. SCHEDULE	
YEAR	5073
MONTH	5073
COMPL. STATUS UPD.	
YEAR	5073
MONTH	5073
DAY	5073
ECAP	5079
CARD #6	
YEAR OF RECORD	5
OPERATING RATE	887
MAX. DESIGN RATE	5064
SULFUR CONTENT	1355
ASH CONTENT	1439
HEAT CONTENT	1560
SOURCE	0

NUMBER OF PLANTS IN NEDS:	2296
NUMBER OF POINTS WITHIN THE PLANTS ABOVE:	5079
NUMBER OF PROCESSES(SCC'S) WITHIN THE POINTS ABOVE:	5088

CONFIDENTIALITY STATUS:

NUMBER OF PROCESSES DESIGNATED CONFIDENTIAL:	119
NUMBER OF PROCESSES DESIGNATED NON CONFIDENTIAL:	4969
NUMBER OF PROCESSES WITH CONFIDENTIALITY UNKNOWN:	0
NUMBER OF PLANTS WITH CONFIDENTIAL PROCESSES:	22

Figure 2.1.3-b Missing item report

HIGHEST PLANT NUMBER BY COUNTY REPORT

GENERAL DESCRIPTION

The "Highest Plant Number by County Report" gives the number of the last plant updated in each county and thus the last included in the NEDS file. The counties are listed in alphabetical order by state; the states themselves are listed in ascending order of state code. In each case, the state and county code numbers are provided in addition to their names. The output from this report is used to assist in assigning new plant numbers. Figure 2.1.3.c presents that portion of the "Highest Plant Number by County Report" for the first seven counties in the State of Alabama.

FILE CREATED ON TUESDAY APRIL 15, 1975

N A T I O N A L E M I S S I O N S D A T A S Y S T E M
S O U R C E I N V E N T O R Y
H I G H E S T P L A N T N U M B E R B Y C O U N T Y

STATE	COUNTY	PLANT ID		
ALABAMA	AUTAUGA	01	0240	0002
	BALDWIN	01	0260	9007
	BARBOUR	01	0280	0013
	BIBB	01	0360	0007
	BLOUNT	01	0400	0002
	BULLOCK	01	0520	9004
	BUTLER	01	0540	9001

Figure 2.1.3.c Highest plant number by county report

The Source Test Data (SOTDAT) System is an automated data processing system utilized to store data from testing and analysis of emissions from stationary sources of air pollution. The system contains source test data for many different pollutants but the largest volume of data is for the five "criteria" pollutants (particulates, sulfur dioxide, carbon monoxide, nitrogen oxides, and hydrocarbons). Additional capabilities exist for the storage of trace element analyses and particle sizing tests.

The primary purpose of SOTDAT is to make use of source test data in the development and revision of air pollutant emission factors. Empirical models can be used to predict emission factors and their characteristics for specific kinds of sources, based on SOTDAT emission, process, and fuel parameters reported from tests on such specific sources. These emission factors are essential components of other AEROS systems such as the National Emissions Data System (NEDS), in which they are used to estimate process emissions if actual measurements are not available. They are published for use by EPA and other groups in the Compilation of Air Pollutant Emission Factors (AP-42).

Additional possible applications of SOTDAT data include technical evaluation of process emissions and control equipment, prediction of control method costs, coordination of enforcement and surveillance activities, and planning and evaluation of source tests.

The basic unit of organization in SOTDAT is the individual "source test," or sampling run. All information on a SOTDAT coding form, computerized data record or SOTDAT report pertains to a single sampling run (i.e., to the same sampling site and time period). The data from a typical source test report are entered into SOTDAT as the results of a number of sampling runs.

The data items in SOTDAT have been selected, defined and arranged so that sufficient information on each source test may be obtained to allow evaluation of each source test's applicability to a SOTDAT user's purpose, and to present that information in a logical format for both coder and user. Data items are grouped in various categories, which are maintained in the SOTDAT coding form, data record and computer outputs.

To assure usefulness of SOTDAT data for the main purposes of the system, test reports entered into SOTDAT have been required to include either uncontrolled or pre-control device tests or post-control device tests with substantial documentation of actual control device operation and efficiency. Data are not accepted from a number of test types, including tests involving experimental, developmental or obsolete processes, or testing methods, permanently-installed continous in-stack monitors, compliance tests conducted for enforcement purposes, tests conducted under atypical or unusual conditions, and tests on most sources other than conventional stationary sources (e.g., mobile sources or fugitive emissions).

SOTDAT General Selection and Sort Capabilities

All SOTDAT report formats utilize a standard selection and sort program. The SOTDAT select/sort capability allows the user to select SOTDAT test runs containing specific data values or ranges of values and to specify data items by which a selected group of test runs should be sorted prior to printing in one of the SOTDAT report formats. Only certain data items can be used as selection and sort criteria, as follows:

a. Pollutant
b. Test method
c. Source Classification Code
d. Standard Industrial Classification Codes
e. Run date
f. Reason tested
g. Party testing
h. Fuel type
i. Particle sizing device
j. Analysis method
k. Sampling position
l. Control device
m. SOTDAT Form Number
n. State
o. County
p. Air Quality Control Region
q. NEDS plant identification number
r. NEDS point identification number

Through the choice of appropriate selection criteria, SOTDAT retrievals can be limited to test runs containing information likely to be of interest to the user. Tests conducted at specific plants can be obtained by requesting only those test runs with desired NEDS plant identification numbers. Tests of all processes of given types can be obtained by specifying the relevant Source Classification Codes. Maximum and/or minimum criteria can be used to specify retrieval of groups of tests with related selection criteria, such as those tests with similar SOTDAT form numbers, run dates, test or analysis methods, etc. Up to 20 selection criteria can be used

simultaneously to define the subset of SOTDAT desired. Each selection can consist of an equality, maximum or minimum or both maximum and minimum values for one of the criteria.

Selected test runs can be sorted by any combination of the select/sort keys, in user-specified order. All 24 keys can theoretically be used at one time. Typical sorts will involve only two or three keys, however, since each successive sort key operates only on test runs with identical values for all previous keys. Since SOTDAT Form Numbers are unique, sort keys to be used after the Form Number will have no effect.

Standard SOTDAT Report

The Standard SOTDAT Report contains all information entered into SOTDAT for a given test run. It may also include several data values calculated from entered data by algorithms in the SOTDAT Edit-Validation Program, depending on the completeness of the information originally entered. All data values entered as numeric or alphabetic codes are fully interpreted by referencing code description files, and appear in the Standard Report with English descriptors.

Figure 2.2.0-a is an example of the Standard SOTDAT Report.

```
                    S T A N D A R D   S O T D A T   R E P O R T          DATE  04/30/81   RECORD NO.  0001

                                  FORM NUMBER:  A00106

**********************SOURCE IDENTIFICATION************************     **********************TEST DESCRIPTION************************

STATE(23): MICHIGAN                                                  REPORT NO:              RUN DATE: 02/10/71     RUN NO: 00001
COUNTY(5320): WAYNE CO                                               REASON TESTED(1): NSPS PREPARATION
AQCR(123): METROPOLITAN DETROIT-PORT HURON                           TESTED BY(7): FEDERAL AGENCY CONTRACTOR
PLANT(0096):  DETROIT EDISON*TRENTON MICH                            SPONSORING AGENCY/PROGRAM:
NEDS POINT:                  ZIP CODE:              SOURCE TESTING ORGANIZATION:                                    PH:(    )   -

*********************************************************** PROCESS DATA ***********************************************************

SIC(     ):  NO DATA                                                                    IPP(  )
SCC(1-01-002-02):   EXTCOMB BOILER      ELECTRIC GENERATN   BITUMINOUS COAL     PULV COAL DRY BOT
PROCESS RATES IN UNITS OF TONS BURNED                                DESIGN CAPACITY=            THIS RUN=0193.000    AVERAGE=

        FUEL TYPE                FUEL FEED RATE      SULFUR    ASH     NITROGEN     HEAT CONTENT        PROCESS HEAT RATE
( ):NO DATA                    000017.5 KG/HR        02.53%   12.85%    01.29%          NO DATA                  NO DATA

*********************************************** SAMPLING ENVIRONMENT AND CONDITIONS ***********************************************

   *** AMBIENT CONDITIONS ***                 *** STACK/DUCT GEOMETRY ***                          *** GAS PARAMETERS ***
TEMPERATURE =       DEGREES CELSIUS   ( )NO DATA     CROSS SECTION = 0018.70 SQ.METERS     GAS TEMPERATURE   = 130.0 DEGREES CELSIUS
BAROMETRIC PRESSURE =      MM HG      EQUIVALENT DIAMETER =        METERS                GAS PRESSURE      =  0741.0 MM HG ABSOLUTE
RELATIVE HUMIDITY =       %           ANGLE WITH VERTICAL =      DEGREES                 AVERAGE VELOCITY  = 40.40 METERS/SECOND
                                      STACK HEIGHT =       METERS                        AVERAGE FLOW RATE = 30557  SCMM-DRY

              *** SAMPLING SITE DESCRIPTION ***                                                  *** GAS COMPOSITION ***
SITE DESCRIPTION(  ): NO DATA                                                          DRY MOLECULAR WEIGHT = 30.44 GM./GM-MOLE
                                                                                        % EXCESS AIR       = 00031 %
NUMBER OF STACK EQUIVALENT DIAMETERS FROM SAMPLING SITE TO NEAREST DISTURBANCE--        % WATER BY VOLUME = 03.3 %
      UPSTREAM: 09 DIAMETERS.  DOWNSTREAM:    DIAMETERS                                 % CO2   BY VOLUME = 14.0 %
                                                                                        % CO    BY VOLUME = 00.0 %
                                                                                        % O2    BY VOLUME = 05.1 %
                                                                                        % N     BY VOLUME = 80.9 %
                                                                                        % SO2   BY VOLUME =      %

*************************************************** CONTROL DEVICE DATA ***************************************************

CONTROL DEVICE(011): ELECTROSTATIC PRECIPITATOR-MED EF   UPSTREAM                    DESIGN OPERATING PARAMETER              VALUE
MAIN POLLUTANT CONTROLLED(      ):                PHYSICAL STATE      (  )NO DATA                                          =
UNDEFINED                                   - NO DATA                 (  )NO DATA                                          =
CONTROL EFFICIENCY =       %                                          (  )NO DATA                                          =
YEAR INSTALLED = 19                                                   (  )NO DATA                                          =
DESIGN FLOW RATE =            ACTUAL CUBIC METERS PER MINUTE          (  )NO DATA                                          =

*************************************************** TEST NUMBER 1 ***************************************************************

                                          ***  TEST METHOD DATA  ***

TEST METHOD(10): EPA METHOD 5 WITH IMPINGERS                         NUMBER OF TRAVERSE POINTS SAMPLED THIS RUN = 012
AVERAGE METER TEMPERATURE = 018 DEG.CELSIUS                          AVERAGE % ISOKINETIC SAMPLING = 108.20 %
HOURS FROM START TO END ANALYSIS =                                   SAMPLING TIME = 120 MINUTES
TOTAL VOLUME SAMPLED = ***** STANDARD CUBIC METERS                   SAMPLING FLOW RATE =  ****** STANDARD CUBIC METERS/MINUTE
```

Figure 2.2.0-a Standard SOTDAT Report

```
                                        *** TEST RESULTS  ***

POLLUTANT(A1101): TOTAL PARTICULATE                    - PHYSICAL STATE(A): TOTAL PARTICULATE
ANALYSIS METHOD(G): GRAVIMETRIC METHOD                EMISSION RATES: 000004.77678 LB/SCC UNIT              NO DATA
CONCENTRATION IN STACK GAS = 228084.00000 UG/SCM DRY                  CORRECTED FOR BLANK?        BELOW DETECTION LIMIT?
SAMPLE TYPE(  ): NO DATA                LOCATION IN TRAIN(TO): TOT. RESULT     TOTAL POLLUTANT MASS AT LOCATION         NO DATA
POLLUTANT CONCENTRATION IN SAMPLE ANALYZED =          NO DATA                        SIZE OF TOTAL SAMPLE =          NO DATA


POLLUTANT(B1101): TOTAL PARTICULATE                    - PHYSICAL STATE(B): FILTERABLE PARTICULATE
ANALYSIS METHOD(G): GRAVIMETRIC METHOD                EMISSION RATES: 000002.30206 LB/SCC UNIT              NO DATA
CONCENTRATION IN STACK GAS = 109920.00000 UG/SCM DRY                  CORRECTED FOR BLANK?        BELOW DETECTION LIMIT?
SAMPLE TYPE(  ): NO DATA                LOCATION IN TRAIN(TO): TOT. RESULT     TOTAL POLLUTANT MASS AT LOCATION         NO DATA
POLLUTANT CONCENTRATION IN SAMPLE ANALYZED =          NO DATA                        SIZE OF TOTAL SAMPLE =          NO DATA

************************************************** TEST NUMBER 2 ***********************************************************

                                        ***  TEST METHOD DATA  ***

TEST METHOD(77): MIDGET IMPINGERS                              NUMBER OF TRAVERSE POINTS SAMPLED THIS RUN = 012
AVERAGE METER TEMPERATURE = 019 DEG.CELSIUS                    AVERAGE % ISOKINETIC SAMPLING = 108.20 %
HOURS FROM START TO END ANALYSIS =                             SAMPLING TIME = 025 MINUTES
TOTAL VOLUME SAMPLED = ***** STANDARD CUBIC METERS             SAMPLING FLOW RATE =  ****** STANDARD CUBIC METERS/MINUTE

                                        *** TEST RESULTS  ***

POLLUTANT(D2401): SULFUR DIOXIDE                       - PHYSICAL STATE(D): GASEOUS
ANALYSIS METHOD(T): TITRIMETRIC                       EMISSION RATES: 000065.52109 LB/SCC UNIT              NO DATA
CONCENTRATION IN STACK GAS = 002472.40000 PPM DRY                     CORRECTED FOR BLANK?        BELOW DETECTION LIMIT?
SAMPLE TYPE(  ): NO DATA                LOCATION IN TRAIN(TO): TOT. RESULT     TOTAL POLLUTANT MASS AT LOCATION         NO DATA
POLLUTANT CONCENTRATION IN SAMPLE ANALYZED =          NO DATA                        SIZE OF TOTAL SAMPLE =          NO DATA

************************************************** TEST NUMBER 3 ***********************************************************

                                        ***  TEST METHOD DATA  ***

TEST METHOD(94): EVACUATED RIGID-WALL GRAB CONTAINER           NUMBER OF TRAVERSE POINTS SAMPLED THIS RUN = 012
AVERAGE METER TEMPERATURE =     DEG.CELSIUS                    AVERAGE % ISOKINETIC SAMPLING = 108.20 %
HOURS FROM START TO END ANALYSIS =                             SAMPLING TIME = 001 MINUTES
TOTAL VOLUME SAMPLED = ***** STANDARD CUBIC METERS             SAMPLING FLOW RATE =  ****** STANDARD CUBIC METERS/MINUTE

                                        *** TEST RESULTS  ***

POLLUTANT(D2603): OXIDES OF NITROGEN                   - PHYSICAL STATE(D): GASEOUS
ANALYSIS METHOD(D): COLORMETRIC METHOD                EMISSION RATES: 000009.80537 LB/SCC UNIT              NO DATA
CONCENTRATION IN STACK GAS = 000370.00000 PPM DRY                     CORRECTED FOR BLANK?        BELOW DETECTION LIMIT?
SAMPLE TYPE(  ): NO DATA                LOCATION IN TRAIN(TO): TOT. RESULT     TOTAL POLLUTANT MASS AT LOCATION         NO DATA
POLLUTANT CONCENTRATION IN SAMPLE ANALYZED =          NO DATA                        SIZE OF TOTAL SAMPLE =          NO DATA
```

Figure 2.2.0-a Standard SOTDAT Report

```
*****************************************************************************
                    ITEM REFERENCED                  COMMENTS *****************
E06 SAMPLING FLOW RATE                   SAMPLING FLOW RATE NOT AVAILABLE FROM OLD SOTDAT DATA  BASE
E07 TOTAL VOLUME SAMPLED                 TOTAL VOLUME SAMPLED NOT AVAILABLE FROM OLD SOTDAT DATABASE
X01 GENERAL COMMENT                      ALL SAMPLES COLLECTED AND ANALYZED BY EPA METHODS.
*****************************************************************************
```

Figure 2.2.0-a Standard SOTDAT Report

Abbreviated SOTDAT Report

The Abbreviated SOTDAT Report consists of the first few lines of identifying information from the Standard Report and a list of the pollutants tested in each test run. This Report was designed to allow users to survey the results of a set of select/sort criteria in condensed form prior to requesting full Standard Reports for desired test runs.

Figure 2.2.0-b is an example of the Abbreviated SOTDAT Report.

```
S O T D A T   P L A N T   N A M E   A N D   A D D R E S S   L I S T I N G        DATE  04/30/81   RECORD NO.  0001
                                FORM NUMBER:  A00007

STATE(36): OHIO                                                  REPORT NO:              RUN DATE: 07/18/72     RUN NO: 00001
COUNTY(0220): ASHTABULA CO                                       REASON TESTED(1): NSPS PREPARATION
AQCR(178): NORTHWEST PENNSYLVANIA-YOUNGSTOWN                     TESTED BY(7): FEDERAL AGENCY CONTRACTOR
PLANT(0014):  UNION CARBIDE, FERROALLOYS DIVISION*ASHTABULA, OHIO  SPONSORING AGENCY/PROGRAM:
NEDS POINT: 04                ZIP CODE:              SOURCE TESTING ORGANIZATION:                                PH:(    )   -
POLLUTANTS TESTED:  A1101G  B1101G

S O T D A T   P L A N T   N A M E   A N D   A D D R E S S   L I S T I N G        DATE  04/30/81   RECORD NO.  0002
                                FORM NUMBER:  A00008

STATE(36): OHIO                                                  REPORT NO:              RUN DATE: 07/19/72     RUN NO: 00002
COUNTY(0220): ASHTABULA CO                                       REASON TESTED(1): NSPS PREPARATION
AQCR(173): NORTHWEST PENNSYLVANIA-YOUNGSTOWN                     TESTED BY(7): FEDERAL AGENCY CONTRACTOR
PLANT(0014):  UNION CARBIDE, FERROALLOYS DIVISION*ASHTABULA, OHIO  SPONSORING AGENCY/PROGRAM:
NEDS POINT: 04                ZIP CODE:              SOURCE TESTING ORGANIZATION:                                PH:(    )   -
POLLUTANTS TESTED:  A1101G  B1101G

S O T D A T   P L A N T   N A M E   A N D   A D D R E S S   L I S T I N G        DATE  04/30/81   RECORD NO.  0003
                                FORM NUMBER:  A00009

STATE(36): OHIO                                                  REPORT NO:              RUN DATE: 07/19/72     RUN NO: 00003
COUNTY(0220): ASHTABULA CO                                       REASON TESTED(1): NSPS PREPARATION
AQCR(178): NORTHWEST PENNSYLVANIA-YOUNGSTOWN                     TESTED BY(7): FEDERAL AGENCY CONTRACTOR
PLANT(0014):  UNION CARBIDE, FERROALLOYS DIVISION*ASHTABULA, OHIO  SPONSORING AGENCY/PROGRAM:
NEDS POINT: 04                ZIP CODE:              SOURCE TESTING ORGANIZATION:                                PH:(    )   -
POLLUTANTS TESTED:  A1101G  B1101G

S O T D A T   P L A N T   N A M E   A N D   A D D R E S S   L I S T I N G        DATE  04/30/81   RECORD NO.  0004
                                FORM NUMBER:  A00010

STATE(36): OHIO                                                  REPORT NO:              RUN DATE: 07/18/72     RUN NO: 00004
COUNTY(0220): ASHTABULA CO                                       REASON TESTED(1): NSPS PREPARATION
AQCR(178): NORTHWEST PENNSYLVANIA-YOUNGSTOWN                     TESTED BY(7): FEDERAL AGENCY CONTRACTOR
PLANT(0014):  UNION CARBIDE, FERROALLOYS DIVISION*ASHTABULA, OHIO  SPONSORING AGENCY/PROGRAM:
NEDS POINT: 04                ZIP CODE:              SOURCE TESTING ORGANIZATION:                                PH:(    )   -
POLLUTANTS TESTED:  A1101G  B1101G

S O T D A T   P L A N T   N A M E   A N D   A D D R E S S   L I S T I N G        DATE  04/30/81   RECORD NO.  0005
                                FORM NUMBER:  A00011

STATE(36): OHIO                                                  REPORT NO:              RUN DATE: 07/19/72     RUN NO: 00005
COUNTY(0220): ASHTABULA CO                                       REASON TESTED(1): NSPS PREPARATION
AQCR(178): NORTHWEST PENNSYLVANIA-YOUNGSTOWN                     TESTED BY(7): FEDERAL AGENCY CONTRACTOR
PLANT(0014):  UNION CARBIDE, FERROALLOYS DIVISION*ASHTABULA, OHIO  SPONSORING AGENCY/PROGRAM:
NEDS POINT: 04                ZIP CODE:              SOURCE TESTING ORGANIZATION:                                PH:(    )   -
POLLUTANTS TESTED:  A1101G  B1101G
```

Figure 2.2.0-b Abbreviated SOTDAT Report

SOTDAT Emission Factor Report

The Emission Factor Report computes an average emission factor (in lbs. per SCC unit) and associated statistics for tests of processes having a specific Source Classification Code and a test result for the desired pollutant. Qualifying test runs are previously selected from SOTDAT using the Select/Sort Program and approved by the user as applicable. The user can also specify weights to be given to specific test runs in computation of the emission factor.

Figure 2.2.0-c is an example of the SOTDAT Emission Factor Report.

```
                    S O T D A T   E M I S S I O N   F A C T O R   R E P O R T          4/30/81    PAGE  1

dADD.P S0001-IN.

 1 POLLUTANT SELECTIONS WERE READ.
 1 POLLUTANT SELECTIONS WERE ACCEPTED.
 0 SELECTIONS WERE IGNORED DUE TO ABSENCE OF POLLUTANT SELECTION SPECIFICATION.
*************************************** SUMMARY OF TEST RESULTS USED IN COMPUTATIONS ********************************
```

NEDS POINT ID ST CNTY PLNT PT	SCC	SCC RATE THIS RUN	AVERAGE STACK GAS FLOW RATE	POLLUTANT	CONCENTRATION IN STACK GAS	EMISSIONS LB/SCC UNIT	FORM NUMBER	WEIGHT
14-4680-0001-	10100202	134.000	12347 SCMM-DRY	A-TSP -G	0.06740 GRAIN/SCF	1.87906	A00087	))
14-4680-0001-	10100202	134.000	11016 SCMM-DRY	A-TSP -G	0.10500 GRAIN/SCF	2.61207	A00088	))
14-4680-0001-	10100202	154.000	13395 SCMM-DRY	A-TSP -G	0.06360 GRAIN/SCF	1.67451	A00091	))
14-4680-0001-	10100202	154.000	13395 SCMM-DRY	A-TSP -G	0.03200 GRAIN/SCF	0.84252	A00091	))
14-4680-0001-	10100202	154.000	11554 SCMM-DRY	A-TSP -G	0.17300 GRAIN/SCF	3.92886	A00092	))
14-4680-0001-	10100202	153.000	12659 SCMM-DRY	A-TSP -G	0.08100 GRAIN/SCF	2.02862	A00097	))

```
*** END OF SOT-SUBFILE.

NOTE:  SCC UNITS USED IN THIS COMPUTATION ARE  TONS BURNED                    ALL RESULTS IN OTHER UNITS ARE REJECTED.
```

Figure 2.2.0-c SOTDAT Emission Factor Report

```
S O T D A T   E M I S S I O N   F A C T O R   R E P O R T          4/30/81    PAGE  2

********************************************************** RESULTS OF EMISSION FACTOR ANALYSIS ***********************************
                                   6 = NUMBER OF TEST RESULTS FOR EMISSION RATE USED IN COMPUTATION
                            2.16120 = ARITHMETIC MEAN OF TEST RESULTS (LB/SCC UNIT)
                            1.03933 = STANDARD DEVIATION OF TEST RESULTS (LB/SCC UNIT)
                            3.92886 = MAXIMUM TEST RESULT (LB/SCC UNIT)
                            0.84252 = MINIMUM TEST RESULT (LB/SCC UNIT)
                            0.98030 = ARITHMETIC MEAN OF TEST RESULTS (KG/SCC UNIT)
                            0.47143 = STANDARD DEVIATION OF TEST RESULTS (KG/SCC UNIT)
                            1.78210 = MAXIMUM TEST RESULT (KG/SCC UNIT)
                            0.38216 = MINIMUM TEST RESULT (KG/SCC UNIT)

                     NO WEIGHTING VALUES WERE INPUT - WEIGHTED COMPUTATIONS NOT PERFORMED.


************************************************************ RUN SUMMARY ***************************************************************
    5 RECORDS WERE READ FROM SOT-SUBFILE.
    0 RECORDS FROM SOT-SUBFILE WERE IGNORED--INCONSISTENT SCC OR NO WEIGHTING CARD.
    5 RECORDS WERE ACCEPTED.
    0 FORM NUMBER WEIGHTING CARDS WERE READ.
    0 FORM NUMBER WEIGHTING CARDS WERE REJECTED.
    0 FORM NUMBER WEIGHTING CARDS WERE ACCEPTED.
    0 FORM NUMBERS WERE NOT FOUND IN SOT-SUBFILE.
    0 FORM NUMBERS WERE FOUND IN SOT-SUBFILE.

*** END OF RUN.
```

Figure 2.2.0-c SOTDAT Emission Factor Report

The Storage and Retrieval of Aerometric Data (SAROAD) system was one of the two original components of AEROS. The SAROAD System was originally designed and utilized to store air quality data collected from the National Air Sampling Network and the Continuous Air Monitoring Program. These sampling networks were established and operated by the Federal air pollution programs before the Environmental Protection Agency was established.

As required by the Clean Air Act and EPA regulations for State Implementation Plans (SIPs), ambient air quality data resulting from air monitoring operations of State, local and federal networks are reported to SAROAD. This reporting began in 1973 and included the reporting of historical data for many States.

In May 1979, new regulations were promulgated by EPA concerning the collection and reporting of ambient air quality data. These regulations were promulgated as a result of recommendations by the Standing Air Monitoring Work Group (SAMWG) for optimization of monitoring networks and better controls on data collection and handling. Also, the Clean Air Act Amendments of 1977 required EPA to established monitoring criteria to be followed uniformly across the Nation.

The revised regulations established different types of sites and varied the reporting requirement for air quality data based on these types. The regulations also defined: minimum requirements for quality assurance, ambient air quality monitoring methodology, network design and siting requirements, and probe siting criteria. The regulations were designed to reduce the volume of data reported while improving the data quality.

The first type of site, SLAMS-State or Local Air Monitoring Station, makes up the monitoring network that is required by the State's implementation plan. Reporting of raw data to SAROAD is not required for these sites, but the submission of an annual summary report is required. The quarterly reporting of data for precision and accuracy for SLAMS is also required. These precision and accuracy data are collected and calculated as part of the quality assurance requirements. The precision and accuracy data will be utilized with air quality data to improve data analysis. Table 2.3.0.a indicates the report programs that automatically list precision and accuracy data for the selected air quality data.

The second type of site, NAMS - National Air Monitoring Station, makes up the monitoring network that must report raw data to SAROAD. This network is a subset of the SLAMS network and includes approximately 1500 site-pollutant reporting units as compared to 5,000 - 7,000 reporting units for the SLAMS sites. These data for NAMS sites are utilized for detailed data analysis and must be easily retrieved from SAROAD. The programs that have been modified for rapid retrieval of NAMS data are indicated in Table 2.3.0.a.

SAROAD System

From the overall system point of view, SAROAD may be thought of as being divided into two major subsystems: the SAROAD site file with its associated information, and the SAROAD Air Quality Data consisting mainly of air quality data of several varieties.

The SAROAD site file contains descriptive information on the sampling site and its environment. This information includes the address of the site; the type of surveillance carried on at the site, whether population-oriented, background, compliance investigation, etc; the station location category, whether center city, industrial or rural, etc.; and the latitude, longitude, and elevation of the sampling device. The UTM coordinates may be given in place of or in addition to the geographic coordinates. Data for approximately 15,000 sites are stored in the SAROAD Site File, of which roughly one-third are currently operational sites. The reasons for storing data from some 10,000 discontinued sites in the SAROAD files have to do with the need for establishing trends in the ambient air quality around the nation and the importance of maintaining as large a population of data as possible for that purpose. In some cases the new site is very close to the old site and the record may be considered to be essentially uninterrupted if other factors, such as type of instrumentation, etc., remain unchanged.

The principal uses of the SAROAD Site File at the present time is to correlate the site location and other identifying characteristics with all of the air quality (AQ) data associated with that site and to edit incoming data. All information on individual sites can be retrieved separately, if desired, on a geographical basis (i.e., by State, AQCR, etc.).

Site numbers for new or previously unreported sites are assigned by the appropriate EPA Regional Office. Before this can be done, however, all of the identifying characters of the site must be completed on the SAROAD site form. No data can be included in the SAROAD files for a site until a site number has been assigned to that site. A complete directory of all site data for SAROAD monitoring sites is published by NADB (see section 5.2.2, below).

The SAROAD Air Quality Data is made up of ambient air quality (AQ) and meteorological data that are collected at monitoring sites and submitted by state and local air pollution control agencies to SAROAD. The AQ data are reported and stored on a site pollutant basis. In addition to the site pollutant codes, other codes utilized to identify the data include: method of sample collection and analysis, sampling interval, reporting units, and the date of observation of the concentration.

The majority of the AQ data is reported for the criteria pollutants: particulate, carbon monoxide, sulfur dioxide, nitrogen dioxide, ozone, and hydrocarbons. The individual raw data values are stored in SAROAD as reported. These raw data values are analyzed by statistical techniques to create a data file containing quarterly and yearly summary statistics. These summary statistics include standard statistics such as means and standard deviations as well as frequency distributions and counts of violations of National Ambient Air Quality Standards (NAAQS).

The formula for the most commonly used statistics are given below, together with the stated criteria for data quantity which must be satisfied before the statistics are considered valid by NADB.

1. Arithmetic Mean $\overline{x} = \frac{\Sigma x}{n}$

2. Arithmetic Standard Deviation $SD = \sqrt{\frac{\Sigma x^2 - \frac{(\Sigma x)^2}{n}}{n-1}}$

3. Geometric Mean = Antilog $\frac{(\Sigma \ln x)}{n}$

4. Geometric Standard Deviation

$$SD_{GEO} = \text{Antilog } (SD_{\log}) = \text{antilog } \sqrt{\frac{\Sigma(\ln x)^2 - \frac{(\Sigma \ln x)^2}{n}}{n-1}}$$

The air quality data criteria are as follows:

1. Minimum summary criteria for continuous sampling (sampling interval less than 24 hours) are:

   a. Data representing quarterly periods must reflect a minimum of 75 percent of the total number of possible observations for the applicable quarter.
   b. Data representing annual periods must reflect a minimum of 75 percent of the total number of possible observations for the applicable year.

2. Minimum summary criteria for noncontinuous sampling (sampling interval of 24 hours or more) are:

   a. Data representing quarterly periods must reflect a minimum of five observations made during the applicable quarter. If no measurements were made during 1 month of the quarter, each of the two remaining months must have no fewer than two observations reported.
   b. Data representing annual periods must reflect 4 quarters of observational data satisfying the individual quarterly criteria.

SAROAD Reports

The SAROAD System generates air quality data reports in three categories:

1. Raw Data Reports
2. Summary Reports
3. Management Reports

The raw data reports list the actual stored data on pollutant concentrations in the ambient atmosphere. They give the geographic location of the observations, as specified by the Site Code; the times and averaging periods of the data; and the method of data collection and analysis. The nine raw data reports described below are:

1. Raw data for less than 24 hour averaging periods (NA219)
2. Raw data for sampling periods equal to or greater than 24 hours (NA207)
3. Standards Listing (NA271)
4. Site Description Inventory (NA272)
5. Raw data in SAROAD format (NA205)
6. Meteorological Raw Data Report and Plot (NA254)
7. Raw data validation report (NA259)
8. Site File Plot (NA260)
9. Precision-Accuracy Report (NAP000)

The summary reports give annual and quarterly summaries and frequency distributions of the air quality data and provide some analysis capabilities. The thirteen summary reports described below are:

1. Yearly Frequency Distribution (NA211)
2. Quarterly Frequency Distribution (NA213)
3. Yearly Report by Quarters (NA212)
4. Standards Violation Summary and Select Card Generation (NA267)
5. Trend Plotting (NA266)
6. Quick Look Report (NA273)
7. Yearly or Quarterly Summary Report (NA217)
8. Summary of Running Averages (NA243)
9. Design Value Plot (NA280)
10. SLAMS Report (NA283)
11. Violation Day Count Report (NA284)
12. Completeness, Precision, and Accuracy Report (NA285)
13. Maximum Value Report (NA286)

The management reports are designed to provide information on the status of the data contained in the SAROAD files, as well as on the activities of the data collection sites. These reports also are to provide inventories of the data available from the SAROAD system. The eight management reports described herein are:

1. Inventory by Site (NA202)
2. Inventory by Pollutant (NA202)
3. Inventory by Pollutant within State (NA202)
4. Summary Report of Valid Data (NA204)
5. Summary Report of Monitoring Activity (NA203)
6. Active Site Report (NA252)
7. Comments Report
8. Summary of Sites Submitting Data (NA215)

Table 2.3.0.a summarizes the retrieval options available for each of the SAROAD reports.

Table 2.3.0.a SUMMARY OF SAROAD RETRIEVALS

Report	Nationwide	State	State/Area	State/Area/Site	County	AQCR	Year	Year/Quarter	Year/Month	Pollutant	Pollutant/Method	Agency/Project	Any Combination of These	Several Combinations of These	Region	NAMS Only Retrieval	Precision/Accuracy Report
Raw Data Reports																	
Raw Data Less Than 24 Hours	X	X	X	X			X		X	X	X	X	X			X	X
Raw Data Listing Greater Than or Equal to 24 Hours	X	X	X	X	X	X	X		X	X	X	X	X			X	X
Standards Reports		X	X	X	X	X	X		X	X	X	X	X			X	X
Site Description Inventory	X	X	X	X	X	X						X	X			X	
Raw Data in SAROAD Format		X	X	X	X	X	X		X	X	X	X		X		X	X
Meteorological Raw Data Report and Plot		X	X	X			X	X	X	X	X	X					
Raw Data Validation Report		X	X	X	X	X	X		X	X	X	X	X				
Site File Plot		X			X	X							X				
Summary Reports																	
Yearly Frequency Distribution	X	X	X	X	X	X	X			X	X	X		X		X	X
Quarterly Frequency Distribution	X	X	X	X	X	X	X	X		X	X	X		X		X	X
Yearly Report by Quarters	X	X	X	X	X	X	X			X	X	X		X		X	X
Standards Violation Summary		X	X	X	X	X	X			X	X	X	X				
Trend Plotting		X	X	X			X		X	X	X	X					
Quick Look Report		X					X		X	X					X	X	X
Yearly or Quarterly Summary Report	X	X					X	X		X						X	X
Summary or Running Averages		X	X	X			X			X	X						
Design Value Plot				X			X				X	X					
SLAMS Report		X					X										
Violation Day County Report	X	X	X	X			X		X	X	X	X		X		X	
Completeness, Precision, and Accuracy Report		X	X	X			X	X		X	X	X				X	
Maximum Value Report	X	X					X	X		X	X				X	X	
Management Reports																	
Inventory by Site	X	X					X			X	X					X	X
Inventory by Pollutant	X	X					X			X	X					X	X
State Inventory by Pollutant	X	X					X			X	X					X	X
Summary Report of Valid Data	X	X	X									X	X				
Summary of Monitoring Activity	X						X	X								X	
Active Site Report		X	X	X	X	X	X			X	X	X		X		X	
Comments Report	X																
Summary of Sites Submitting Data	X	X					X	X							X	X	

RAW DATA LESS THAN 24 HOURS

General Description

This report lists the hourly observations of pollutant concentrations in 24 columns, 1 line per day, 1 month per page. The report may also be used, with suitable modifications in format, for data recorded for 2-, 3-, 4-, 6-, 8-, and 12-hour intervals. The heading of the report contains the name of the pollutant; the pollutant/method code; the units used; the method of collection and analysis; the name of the state; the area; the site name and address; the complete site, agency, and project code; the month and year; and an identifier giving the averaging period of the observational data (for example, "1-hour data listing"). To the left of the 24-column body of the report is a column giving the days of the month; to the right are columns for the daily mean values and the number of observations made each day. Below the row for the last day of the month are three other rows, one for the average values for each hour, one for the numbers of observations made at each hour throughout the month, and one for the maximum value occurring at each hour. In the lower righthand corner are the average value for the entire month, the total number of observations for the month, and the maximum value that occurred in the month. The report is also capable of creating 3-, 8-, 12-, and 24-hour running averages from 1-hour data.

Retrievals Available

The SAROAD system employs a standard selection format for all retrievals for reports using the "SAROAD Standard Format Selection"

procedure. The 1-Hour Data Listing may be retrieved by the following selection keys:

a. Nationwide
b. State
c. State/Area
d. State/Area/Site
e. AQCR
f. Year
g. Year/Month
h. Pollutant
i. Pollutant/Method
j. Agency/Project
k. Any combination of these keys

The multiple items listed above indicate that the retrieval may not be effected for the "Area" key without also specifying the "State" key, and so on.

Sorts Available

There are no optional sorts available. Data are printed in ascending order by site ID and within site by pollutant.

Sample Report

Figure 2.3.1.a shows a sample of this report for carbon monoxide measurements at a site in Toledo, Ohio.

MAY 21, 1981
MAY 19, 1981 DATA BASE VERSION

NATIONAL AEROMETRIC DATA BANK
ENVIRONMENTAL PROTECTION AGENCY

PAGE 1
SELECT CARD 1

CARBON MONOXIDE
4210111
CONCENTRATION IN PARTS PER MILLION
INSTRUMENTAL NONDISPERSIVE INFRA-RED

OHIO
TOLEDO
NO 1 FIRE STATION 545 N HURON
(366600007H09)
REPORTING ORG:
JAN 1977

01-HOUR DATA LISTING

DAY	12 AM	1	2	3	4	5	6	7	8	9	10	11	12 PM	1	2	3	4	5	6	7	8	9	10	11	DAILY MEAN	NO.
01	.8	.8	.8	.8	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.9	.8	.9	.9	.9	1.0	1.0	1.0	1.2	1.5	.8	24
02	1.0	1.0	.8	.8	.9	.9	1.5	1.3	1.0	1.5	1.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.3	24
03	1.2	1.3	1.0	1.0	.8	1.0	1.7	2.5	2.7	2.5		1.8	1.6	1.6	2.4	4.0	3.0	3.3	1.5	1.3	.7	.6	.7	.5	1.7	22
04	.3	.0	.0	.0	.0	.0	.7	1.5	1.6	2.1	2.2	1.1	.9	2.0	1.5	1.6	2.0	2.5	1.7	1.3	1.4	1.5	1.5	1.5	1.2	24
05	1.7	.7	1.0	.6	.6	.6	.8	1.7	3.0	1.5	1.7	1.5	1.1	1.4	1.7	2.0	1.7	5.0	1.5	4.0	1.7	1.5	3.5	4.0	1.9	24
06	5.0	7.5	8.5	6.0	2.0	1.5	1.8	3.0	3.5	2.7	2.0	1.7	2.0	2.0	2.3	3.0	4.0	4.0	2.5	1.7	1.5	1.5	1.5	1.5	3.0	24
07	1.5	.7	.5	.5	.5	.5	1.0	.7	.2	.1	.0	.0	.0	.0	.0	.5	.5	1.0	.5	.0	.0	.0	.7	.5	.4	24
08	.1	.0	.5	.1	.0	.0	.5	.7	.5	.5	.5	.6	.7	.5	.6	.7	.5	.5	.5	.3	.0	.2	.5	.5	.4	24
09	.5	.5	.3	.0	.5	.0	.5	.7	.5	.5	.7	.7	.7	.7	.7	.7	.7	.3	.5	.5	.0	.3	.6	.6	.5	24
10	.5	.5	.5	.4	.3	.7	1.5	1.0	1.1	1.1	1.3	1.2	.8	.9	1.2	1.0	1.6	1.3	.7	.7	.7	.6	.6	.8	.9	24
11	.8	.8	.8	.8	.8	.8	1.8	1.5	2.1	2.4	2.3	1.7	2.1	2.1	2.7	5.0	4.0	4.5	1.7	1.7	1.5	1.5	1.5	1.3	1.9	24
12	1.5	.7	.7	.7	.6	.7	1.5	1.8	1.7	1.5	1.0	1.0	1.1	1.0	1.0	2.5	2.0	2.5	2.0	1.5	1.0	.7	1.5	1.5	1.3	24
13	1.5	.7	.5	.5	.5	.6	2.0	3.0	4.5	2.2	2.0	2.0	2.0	2.0	2.2	2.5	3.5	2.0	1.5	1.0	.9	.6	.7	.9	1.7	24
14	.8	.9	.7	.7	.6	.6	1.7	3.5	3.5	2.1	2.7	2.6	3.0	3.0	5.0	2.7	3.5	1.8	.8	1.1	.8	.7	.5	.6	1.8	24
15	.4	.1	.1	.0	.3	.7	1.0	.7	.6	.7	.7	.7	.7	.7	.8	.8	.7	.5	.5	.3	.2	.3	.7	.7	.5	24
16	.6	.6	.6	.6	.6	.6	.9	.8	.7	.7	.7	.7	.7	.5	.9	.7	.7	.4	.0	.3	.4	.7	1.5	1.3	.7	24
17	.4	.4	.3	.3	.4	.5	1.5	1.5	1.4	1.1	1.5	.9	1.1	.4	1.2	.9	1.1	1.4	.6	1.3	1.2	.9	.4	.6	.9	24
18	.7	.5	.7	.3	.3	.6	1.2	1.4	2.4	2.0	2.1	2.0	1.9	2.4	2.5	2.3	3.5	4.0	1.5	1.7	.3	.5	.6	.5	1.5	24
19	.3	.0	.3	.0	.2	.0	.5	.5	.5	.7	.5	.5	.3	.2	.2	1.4	2.0	1.6	1.0	.7	.7	.6	1.5	1.2	.6	24
20	1.2	.8	.7	.6	.6	.6	2.5	3.5	4.6	3.2	2.5	1.6	1.7	2.0	1.3	4.2	3.0	3.0	1.5	.7	1.0	1.0	1.0	1.3	1.8	24
21	1.5	.8	.9	.8	1.0	1.5	2.0	2.8	3.5	2.6	2.2	1.9	1.5	.9	1.0	1.8	1.8	1.9	1.7	1.5	1.3	1.2	1.2	1.2	1.6	24
22	1.1	1.0	1.2	1.0	.9	1.0	1.7	1.7	1.6	1.5	1.7	1.8	1.3	1.2	1.6	1.5	1.5	1.5	2.0	2.7	2.5	2.7	4.0	4.0	1.8	24
23	3.2	3.5	2.8	1.8	1.8	1.6	1.7	1.7	1.7	1.6	1.6	1.7	1.5	1.6	2.0	2.0	1.8	1.6	1.5	1.7	1.5	1.7	1.7	1.7	1.9	24
24	1.7	1.5	1.5	1.5	1.5	1.5	2.1	2.7	2.5	2.5	2.7	2.1	2.5	2.2	2.7	2.8	3.5	3.5	2.0	1.5	1.0	.5	1.0	.5	2.0	24
25	.5	.5	.5	.5	.5	.5	1.5	1.5	1.9	1.2	.8	.7	.7	.8	.8	1.7	1.7	1.5	.5	.3	.0	.0	.5	.5	.8	24
26	.5	.0	.0	.0	.0	.0	1.5	1.5	2.2	1.9	1.4	1.5	1.4	1.4	1.6	1.5	2.5	1.7	.5	.2	.0	.2	.5	.5	.9	24
27	.5	.3	.2	.3	.3	.5	1.5	1.5	1.2	.7	.5	.4	.3	.3	.7	.5	3.0	2.5	1.5	1.0	.7	.7	.7	.7	.9	24
28	.3	.0	.0	.0	.0	.0	.5	.5	.5	.5	.5	.7	1.5	.7	.7	1.5	.7	.5	.5	.6	.5	.5	.6	.6	.5	24
29	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5	.6	.6	.6	.6	.6	.6	.6	.6	.6	.7	.7	.6	24
30	.7	.7	.7	.7	.7	.7	1.0	.8	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	.7	24
31	.7	.7	.7	.7	.7	.7	1.5	1.5	1.1	.7	.8	.7	.8	.5	.6	2.5	.7	.7	.0	.0	.0	.0	.0	.0	.7	24
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11		
AVG	1.0	.9	.9	.7	.6	.6	1.3	1.6	1.7	1.4	1.3	1.2	1.2	1.2	1.4	1.8	1.9	1.9	1.1	1.1	.8	.8	1.1	1.1	1.2	
NO	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31		743
MAX	5.0	7.5	8.5	6.0	2.0	1.6	2.5	3.5	4.6	3.2	2.7	2.6	3.0	3.0	5.0	5.0	4.0	5.0	2.5	4.0	2.5	2.7	4.0	4.0	8.5	

Figure 2.3.1.a Raw data less than 24 hour report

RAW DATA LISTING GREATER THAN OR EQUAL TO 24 HOURS

General Description

This report lists raw data observations for intervals of 24 hours, 1 week, 1 month, 3 months, 1 year, or composite data. The data report format varies with the sampling interval, but all intervals have the following items in common: (1) sampling interval in the heading, (2) a complete site description following the heading, and (3) the pollutant name, sample collection and analysis names, data reporting units, and the minimum detectable value for the sampling method. The report begins a new page with a change in interval, site, or pollutant.

For 24-hour data, 1 year of data appears per page in 13 columns, the first containing the days of the month and the next twelve, one column for each month of the year. For each month and the year, the number of observations, the maximum value, and the mean are listed. A monthly mean is computed only if at least two observations are present, and the yearly mean is calculated only if the yearly summary criterion is met. The geometric mean is printed for particulates, and the arithmetic mean is printed for all other pollutants.

For the other reporting intervals, multiple years can be listed per page. For these intervals, the items listed include: the year; the month, week, or sampling period, which is dependent on the interval; the data value; and for composite data, the number of samples in the composite.

Retrievals Available

This report may be retrieved by the following selection criteria: nation, state, area, site, agency, project, pollutant, method, interval, begin date, end date, AQCR, and county.

Most combinations of the above selection criteria are valid, but the following combinations are invalid: (1) area or county without state, (2) site without state/area, (3) project without agency, and (4) method without pollutant.

The difference between a state/area and state/county retrieval is important--a state/area selection will give the sites which are in that area (city) while a state/county selection will give all state/area combinations located in that county.

Sorts Available

No optional sorts are available. The standard sort option for the selected data is by interval and by site ID.

Sample Reports

Figure 2.3.1.b shows a report retrieval for 24-hour data and Figure 2.3.1.c shows a report for quarterly composite.

81/05/21

NATIONAL AEROMETRIC DATA BANK
RAW DATA LISTING = 24 HOUR
STATE 01: ALABAMA
YEAR 1974

PAGE: 1

SITECODE: 010020001F01
AGENCY/PROJECT: F01
AGENCY TYPE: STATE
CITY POPULATION: 2,996
AQCR POPULATION: 236,164
EPA-REGION: 4
SUPPORTING AGENCY: ALABAMA AIR POLLUTION CONTROL COMMISSION
COMMENTS: ATOP HENRY CO HOSPITAL

LOCATION: ABBEVILLE
COUNTY (1780): HENRY CO
SITE ADDR: HENRY CO HOSPITAL US HGWY 431
STATION TYPE (33): RURAL - COMMERCIAL
AQCR (006): SOUTHEAST ALABAMA
SMSA (0000): 0 NOT IN A STANDARD METROPOLITAN STATIS

LATITUDE: 31 D. 33 M. 15 S. N
LONGITUDE: 85 D. 15 M. 14 S. W
UTM ZONE: 16
UTM NORTHING: 3492150
UTM EASTING: 00665750
ELEVATION ABOVE GROUND: 016 FT.
ELEVATION ABOVE MSL: 0391 FT.
DIFF. GMT: WEST 06 HOURS

POLLUTANT: SUSPENDED PART. UNITS: UG/CU METER (25 C) MINIMUM DETECTABLE: 1 REPORTING ORG:
COLLECTION & ANALYSIS METHOD: HI-VOL GRAVIMETRIC

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	1	-	-	-	104	-	-	-	-	-	-	-	-
	2	17	-	25	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-	50	24
D	5	-	-	-	-	-	-	-	-	-	40	-	-
	6	-	-	-	-	-	21	-	25	-	-	-	-
A	7	-	-	-	-	-	-	-	-	-	-	-	-
	8	-	-	52	-	-	-	-	-	-	-	-	-
Y	9	-	-	-	-	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	-	-	-	49	123
	11	-	-	-	-	-	-	-	-	47	73	-	-
O	12	-	42	-	-	-	-	-	40	-	-	-	-
	13	26	-	-	-	-	41	121	-	-	-	-	-
F	14	-	-	62	-	-	-	-	-	-	-	-	-
	15	-	-	-	-	-	-	-	-	-	-	-	-
	16	-	-	-	-	-	-	-	-	-	-	31	13
M	17	-	-	-	-	-	-	-	-	44	12	-	-
	18	-	50	-	-	-	38	39	22	-	-	-	-
O	19	-	-	-	-	-	-	-	-	-	-	-	-
	20	33	-	21	-	-	-	-	-	-	-	-	-
N	21	-	-	-	-	-	-	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	-	-	-	14	22
T	23	-	15	-	-	-	-	-	-	-	-	-	-
	24	-	-	-	-	-	-	-	39	-	-	-	-
H	25	-	-	-	-	-	-	37	-	-	-	-	-
	26	-	-	10	-	53	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	-	-	-	36	-
	29	-	-	-	-	-	-	-	-	-	46	-	-
	30	-	-	-	-	-	-	-	27	-	-	-	-
	31	-	-	-	-	-	-	84	-	-	-	-	-
NBR OBS:		3	3	5	1	51	3	4	5	2	4	5	4
MAX VALUE:		33	50	62	104	53	41	121	40	47	73	50	123
GEO MEAN:		25	32	28	-	53	32	62	30	46	36	33	31

NBR OBS: 41 MAX VALUE: 123 MEAN VALUE: 35 IS GEOMETRIC FOR PARTICULATE ARITHMETIC FOR ALL OTHERS

Figure 2.3.1.b Raw data listing, 24 hour report

81/05/21 NATIONAL AEROMETRIC DATA BANK PAGE: 2
RAW DATA LISTING COMPOSITE
STATE 01: ALABAMA

SITECODE: 011860001A01
AGENCY/PROJECT: A01
AGENCY TYPE: EPA/ATMOS. SURV.
CITY POPULATION: 137,802
AQCR POPULATION: 971,433
EPA-REGION: 4
SUPPORTING AGENCY: DEPARTMENT OF PUBLIC HEALTH
COMMENTS:

LOCATION: HUNTSVILLE
COUNTY (2260): MADISON CO
SITE ADDR: ROOF OF HEALTH BLDG 304 EUSTIS AVENUE
STATION TYPE (13): CENTER CITY - COMMERCIAL
AQCR (007): TENNESSEE RIVER VALLEY-CUMBERLAND MOUNTAINS
SMSA (3440): HUNTSVILLE, ALABAMA

LATITUDE: 34 D. 43 M. 50 S. N
LONGITUDE: 086 D. 34 M. 58 S. W
UTM ZONE: 16
UTM NORTHING: 3843041
UTM EASTING: 538198
ELEVATION ABOVE GROUND: 028 FT.
ELEVATION ABOVE MSL: 0605 FT.
DIFF. GMT: WEST 06 HOURS

POLLUTANT: IRON UNITS: UG/CU METER (25 C) MINIMUM DETECTABLE: 0.1 REPORTING ORG:
COLLECTION & ANALYSIS METHOD: HI-VOL EMISSION SPECTRA (LOW TEMP ASH)

QUARTERLY COMPOSITE OF 24-HOUR SAMPLES

YEAR	SMP PERIOD	VALUE	NBR SMP
70	1	0.7	7
	2	0.6	6
	3	0.8	7
	4	0.6	6
71	1	0.8	7
	2	0.7	6
	3	0.6	5
	4	0.7	6
72	1	0.4	
	2	0.8	
	3	0.5	
	4	0.5	

Figure 2.3.1.c Raw data listing, composite report

STANDARD REPORTS

General Description

This series of 11 reports shows, for each pollutant-site combination within the geographical region specified, the number of occasions within the period of time specified when the National Ambient Air Quality Standards (NAAQS) were violated. For those pollutants having both primary and secondary standards, numbers of violations are shown separately for each type of standard. The standard format site description information appears at the top of the sheet with the designation of pollutant-interval combination above it, along with the State Code and name and the valid date of the data. Below the site description data, the main body of the report consists of 28 columns of data (for the monthly reports) or 13 columns of data (for the yearly reports) containing the individual hourly or daily observations for the pollutant in question. Every time that the appropriate standard was exceeded, a symbol (* or +) is placed beside the observation so as to identify the time and date of the violation. For the monthly reports, the number of observations and the mean value are tabulated for each day at the right-hand side of the paper; and the number of observations, maximum value, and arithmetic mean are listed for each hour of the day at the bottom of each column. For yearly reports the same data are provided, but on a monthly basis. Below these figures are given the total number of observations, for the month (or year), the percentage of possible observations, the numbers of times that the respective standards were exceeded, the arithmetic or geometric mean and standard deviation, as appropriate, with accompanying statements as to whether the primary and secondard standards were met or exceeded (for those pollutants having standards based on those parameters), and, along the bottom of the page, the identifications by name of the methods of collection and analysis, together with a statement defining the time used (whether standard or daylight saving).

The following reports are available:

a. Particulate (total suspended particulates)
b. Sulfur dioxide, daily values
c. Sulfur dioxide, hourly values
d. Sulfur dioxide, 24-hour block averages
e. Sulfur dioxide, 3-hour block averages
f. Carbon monoxide, hourly averages
g. Carbon monoxide, 8-hour running averages
h. Total oxidants
i. Ozone
j. Nitrogen dioxide, daily values
k. Nirogen dioxide, hourly values
l. Lead, daily values

Retrievals Available

The reports may be retrieved by the following selection criteria: State, area, site, agency, project, pollutant, method interval, begin date, end date, AQCR, and county.

Sorts Available

There are no optional sorts available.

Sample Report

Figure 2.3.1.d shows a sample yearly report for particulate sampling followed by a sample monthly report for 3-hour averages for sulfur dioxide.

MAY 22 ,1981 P A R T I C U L A T E S PAGE 1
DAILY VALUES ALABAMA
NATIONAL AEROMETRIC DATA BANK STANDARDS REPORT FROM JAN 1979 TO DEC 1979 STATE 01

SITECODE: 013200001
AGENCY/PROJECT: G01
AGENCY TYPE: COUNTY AGENCY
CITY POPULATION: 6,835
AQCR POPULATION: 1,043,529
EPA-REGION: 4
SUPPORTING AGENCY: JEFFERSON COUNTY HEALTH DEPARTMENT
COMMENTS:

LOCATION: TARRANT CITY
COUNTY(1980): JEFFERSON CO
SITE ADDR: 1818 PINSON STREET
STATION TYPE (11): CENTER-CITY-INDUSTRIAL
AQCR (004): METROPOLITAN BIRMINGHAM
SMSA (1000): BIRMINGHAM, ALABAMA

REPORTING ORG:

LATITUDE: N 33 D. 35 M. 03 S.
LONGITUDE: W 086 D. 46 M. 06 S.
UTM ZONE: 16
UTM NORTHING: 3715900 M.
UTM EASTING: 521500 M.
ELEVATION ABOVE GROUND: 6 FT.
ELEVATION ABOVE MSL: 601 FT.
TIME ZONE: WEST 06 HOURS

		JAN 1979		FEB 1979		MAR 1979		APR 1979		MAY 1979		JUN 1979		JUL 1979		AUG 1979		SEP 1979		OCT 1979		NOV 1979		DEC 1979	
	1		M	66	T	77	T		S	146	T	95	F		S		W		S		M	104	T		S
	2		T	99	F	149	F	99	M	237+	W		S		M		T		S	225+	T	33	F		S
D	3	86	W		S		S	58	T		T		S		T	105	F		M	180+	W		S	58	M
	4	116	T		S		S	90	W		F		M		W	147	S		T	229+	T		S	213+	T
A	5	118	F	60	M	69	M	98	T	66	S	95	T		T		S	144	W	93	F		M		W
	6	109	S	164+	T	110	T	121	F		S	189+	W	133	F	62	M		T		S		T		T
Y	7		S	77	W	176+	W		S	74	M	114	T		S		T		F		S	177+	W	74	F
	8	33	M	95	T	140	T		S	171+	T		F		S		W	202+	S		M	158+	T		S
	9	52	T	122	F	104	F	62	M		W		S	69	M	182+	T		S	157+	T	141	F		S
O	10	106	W	104	S		S	79	T		T		S	68	T	233+	F	116	M	96	W		S	124	M
	11	114	T		S		S	120	W	137	F		M	93	W		S	275*	T	89	T		S		T
F	12	131	F	175+	M	107	M	127	T	157+	S	89	T	73	T		S		W		F		M		W
	13	52	S	157+	T	236+	T		F		S	154+	W	104	F		M		T		S		T	64	T
	14		S	383*	W	84	W		S	62	M		T		S		T	55	F		S	90	W	43	F
M	15	51	M	145	T	89	T		S		T		F		S	125	W	111	S		M	153+	T		S
	16	202+	T	143	F	105	F	76	M		W	253+	S		M	135	T		S	128	T	188+	F		S
O	17	109	W	95	S		S	121	T	138	T		S	147	T	156+	F	69	M	162+	W		S		M
	18	104	T		S		S	133	W	176+	F	127	M	165+	W		S		T		T		S		T
N	19	144	F	134	M	102	M	152+	T		S	195+	T	155+	T		S		W		F		M	269*	W
	20	57	S	240+	T	259+	T	166+	F		S		W		F		M	97	T		S	263*	T	264*	T
T	21		S	86	W	188+	W		S		M		T		S	227+	T	133	F		S	268*	W	335*	F
	22	46	M	246+	T	162+	T		S		T	126	F		S	176+	W		S	47	M		T		S
H	23	115	T	65	F	81	F	106	M	91	W	136	S		M	96	T		S	63	T		F		S
	24	61	W		S	146	S	84	T	45	T		S	77	T	58	F		M		W		S		M
	25	143	T		S	77	S	42	W	121	F	66	M	39	W		S		T		T		S		T
	26	138	F	65	M	55	M	71	T		S		T		T		S	229+	W	119	F		M		W
	27		S	115	T	130	T		F		S		W		F		M		T		S	117	T		T
	28		S	162+	W	236+	W		S		M	178+	T	113	S	132	T	54	F		S	68	W		F
	29	42	M			140	T		S		T	152+	F		S		W		S	174+	M		T		S
	30	134	T			113	F		M		W		S		M	92	T		S		T		F		S
	31	111	W			127	S			54	T			159+	T		F				W				M
	#	24		22		25		18		14		14		13		14		11		13		12		9	
	MAX	202		383		259		166		237		253		165		233		275		229		268		335	
	GEO-MEAN	89		121		121		95		107		132		99		127		118		123		123		125	

TOTAL SAMPLES = 189

7 STARRED (*) ITEMS EXCEEDED THE PRIMARY STANDARD OF 260 MICROGRAMS PER CUBIC METER
53 PLUSSED (+) ITEMS EXCEEDED THE SECONDARY STANDARD OF 150 MICROGRAMS PER CUBIC METER
1 DAILY MAXIMUMS EXCEED THE ALERT LEVEL OF 375 MICROGRAMS PER CUBIC METER

GEOMETRIC MEAN = 113 PRIMARY STANDARD OF 75 MICROGRAMS PER CUBIC METER WAS EXCEEDED
GEOMETRIC STANDARD DEVIATION = 1.6 SECONDARY STANDARD OF 60 MICROGRAMS PER CUBIC METER WAS EXCEEDED

COLLECTION METHOD: HI-VOL ANALYSIS METHOD: GRAVIMETRIC ALL TIMES ARE STANDARD TIME

Figure 2.3.1.d Standards report

MAY 22 ,1981 PAGE 2

S U L F U R D I O X I D E
3 HOUR RUNNING AVERAGE
NATIONAL AEROMETRIC DATA BANK STANDARDS REPORT FOR JAN, 1979

ALABAMA
STATE 01

SITECODE: 011920020
AGENCY/PROJECT: N02
AGENCY TYPE: FED NONMILITARY
CITY POPULATION:
AQCR POPULATION: 971,433
EPA-REGION: 4
SUPPORTING AGENCY: TENNESSEE VALLEY AUTHORITY
COMMENTS: ON PROPERTY OF MRS. LOIS DUNN ON TOP OF SAND MTN. 12 FT SO2 STA #
10 8 FT SETTLED PART #10 4 FT SUSPENDED PART #10

LOCATION: JACKSON CO
COUNTY(1920): JACKSON CO
SITE ADDR: 2.0 MILES ESE OF WIDOWS CREEK STEAM PLANT
STATION TYPE (32): RURAL-AGRICULTURAL
AQCR (007): TENNESSEE RIVER VALLEY-CUMBERLAND MOUNTAINS
SMSA (0000): 0 NOT IN A STANDARD METROPOLITAN STATIST

REPORTING ORG:

LATITUDE: N 34 D. 52 M. 38 S.
LONGITUDE: W 85 D. 43 M. 15 S.
UTM ZONE: 16
UTM NORTHING: 3859980 M.
UTM EASTING: 616910 M.
ELEVATION ABOVE GROUND: 12 FT.
ELEVATION ABOVE MSL: 1500 FT.
TIME ZONE: WEST 06 HOURS

	MDNT	1	2	3	4	5	6	7	8	9	10	11	NOON	1	2	3	4	5	6	7	8	9	10	11	#	MAX
01 M			3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	22	3
02 T	3	3	3	3	3	3	3	19	27	44	35	44	44	44	35	26	18	10	3	3	3	10	18	18	24	44
03 W	10	3	3	10	18	26	26	26	26	35	35	35	26	18	10	3	3	3	3	3	3	3	3	3	24	35
04 T	10	10	10	3	10	18	26	26	35	35	35	18	210	333	428	271	148	61	26	18	10	3	3	10	24	428
05 F	18	26	26	26	35	44	52	52	52	52			39	44	52	44	44	44	61	61	61	52	52	52	22	61
06 S	44	35	26	26	18	18	18	26	18	10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	24	44
07 S	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	19	53	87	105	105	24	105
08 M	105	87	79	70	79	79	70	61	44	35	18	18	27	35	35	35	44	52	44	35	26	26	35	44	24	105
09 T	61	61	61	52	52	52	44	44	35	44	35	227	288	306	114	44	26	18	10	3	3	3	3	3	24	306
10 W	3	3	3	10	27	35	35	26	26	26	26	26	87	393	585	681	368	176	10	10	3	3	10	18	24	681
11 T	26	26	26	26	18	10	3	3	3	3	3	10	10	10	19	27	35	26	26	26	35	44	52	52	24	52
12 F	44	35	26	18	18	18	26	26	26	26	26	26	26	26	18	18	18	26	26	26	26	26	26	26	24	44
13 S	26	18	10	3	3	3	3	3	3	3	3	10	36	44	44	18	10	3	3	3	3	3	3	3	24	44
14 S	3	3	3	10	27	44	52	44	35	26	26	26	26	26	18	10	3	10	18	26	26	26	18	10	24	52
15 M	10	10	10	10	18	35	44	52	52	44	35	26	35	52	70	70	52	35	26	26	18	18	18	26	24	70
16 T	26	35	44	52	52	52	52	52	52	52	52	52	52	52	44	44	44	52	52	44	35	26	26	26	24	52
17 W	26	26	26	26	26	26	35	44	52	44	35	26	26	18	10	3	3	3	3	3	3	3	3	3	24	52
18 T	3	3	3	3	3	10	18	26	26	18	10	3	3	3	3	3	3	10	18	26	26	26	26	26	24	26
19 F	35	35	35	26	18	18	27	35	35	26	26	35	44	44	35	26	18	10	10	18	26	26	26	18	24	44
20 S	18	10	10	3	3	3	3	3	3	3	3	10	10	10	3	3	3	3	3	3	3	3	3	3	24	18
21 S	3	3	3	3	3	10	18	26	26	26	26	26	26	18	10	3	10	18	26	26	26	26	26	26	24	26
22 M	26	26	26	26	26	26	26	26	26	26	26	35	44	52	52	61	51	61	44	44	44	44	35	26	24	61
23 T	26	26	26	35	44	52	52	44	35	26	26	35	35	35	26	26	26	44	44	36	10	3	3	3	24	52
24 W	3	3	3	3	3	3	3	3	10	18	26	18	10	3	3	3	3	3	3	3	3	3	3	3	24	26
25 T	3	10	18	26	26	26	26	35	96	96	87	26	26	26	26	26	26	26	26	26	26	26	26	26	24	96
26 F	35	35	35	114	122	131	52	52	52	44	35	35	44	44	35	26	26	26	26	26	26	26	26	35	24	131
27 S	44	52	52	61	70	79	70	61	44	35	26	26	26	18	10	3	3	3	3	3	3	3	3	3	24	79
28 S	3	10	18	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	24	26
29 M	26	18	18	18	26	35	35	35	26	35	35	35	26	26	18	10	3	3	3	3	10	10	10	10	24	35
30 T	18	35	35	35	26	26	26	26	26	26	35	52	96	419	585	560	306	271	288	253	114	70	35	26	24	585
31 W	26	18	18	18	26	26	26	35	44	44	44	44	52	52	52	52	52	52	52	44	35	26	35	44	24	52
#	30	30	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	31	31		
MAX	105	87	79	114	122	131	70	61	96	96	87	227	288	419	585	681	368	271	288	253	114	87	105	105		

TOTAL SAMPLES = 740
% OF POSSIBLE OBSERVATIONS = 99.4

PLUSSED (+) ITEMS EXCEEDED THE SECONDARY STANDARD OF 1.300 MICROGRAMS PER CUBIC METER

SECONDARY NON-OVERLAPPING VIOLATIONS

COLLECTION METHOD: INSTRUMENTAL
ANALYSIS METHOD: COULOMETRIC
ALL TIMES ARE STANDARD TIME

Figure 2.3.1.d (continued) Standards report

SITE DESCRIPTION INVENTORY

General Description

This report lists, in a standard site description format, information concerning the environment and operating characteristics of the given sampling site or sites. The site descriptive information is arranged in three blocks across the page, each block containing six to eight lines of information. The various codes as set forth in Volume V, AEROS Manual of Codes, are provided for the various station parameters and each is defined by name. These codes include those for the State, area, agency/project, EPA Region, county, station type, AQCR, SMSA, and UTM zone. The actual numerical values are also provided for the city and AQCR populations, as well as for various geographic parameters including the latitude and longitude of the sampling site, its UTM grid coordinates, the elevation of the sampling probe above the ground and above MSL, and the time differential between local standard time and GMT. In addition, the name of the location is given, along with the name of the supporting agency and any comments that may be appropriate.

Retrievals Available

The site description data can be retrieved on a State, area, site, agency, project, AQCR, county, only NAMS sites, and only SLAMS sites.

Sorts Available

The report can be sorted by State, area, site, agency, project, county, and AQCR.

Sample Report

Figure 2.3.1.e shows a "Site Description Inventory" for two sites in the State of Rhode Island.

```
RUN DATE:810406                    NATIONAL AEROMETRIC DATA BANK                                  PAGE:41-    1
                                        SITE FILE LISTING
STATE (41) RHODE ISLAND

SITE CODE: 410040001F01          LOCATION: BRISTOL                                    LATITUDE: 41 D. 40 M. 26 S. N
AGENCY/PROJECT: F01              COUNTY (0060): BRISTOL CO                            LONGITUDE:  71 D. 16 M. 18 S. W
AGENCY TYPE: STATE               SITE ADDR: REYNOLDS ELEMENTARY SCHOOL                UTM ZONE: 19
CITY POPULATION:      17,860     STATION TYPE (22): SUBURBAN - RESIDENTIAL            UTM NORTHING: 4615800 METERS
AQCR POPULATION:  1,645,380      AQCR (120): METROPOLITAN PROVIDENCE                  UTM EASTING:   310900 METERS
EPA REGION:  1                   SMSA (6480): PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS. ELEVATION ABOVE GROUND:  40 FT.
POLL/SITE TYPE/EQUIP CODE: TSP- -     SO2- -     CO- -     OX- -     NO2- -     HC- -     PB- -  ELEVATION ABOVE MSL   :   90 FT.
SUPPORT AGENCY: RHODE ISLAND DEPARTMENT OF HEALTH                                     DIFF.GMT: WEST 05 HOURS
COMMENTS:                                                                             RECORD LAST UPDATED:   /  /

SITE CODE: 410065001F01          LOCATION: BURRILLVILLE                               LATITUDE: 41 D. 58 M.  9 S. N
AGENCY/PROJECT: F01              COUNTY (0320): PROVIDENCE CO                         LONGITUDE:  71 D. 39 M. 48 S. W
AGENCY TYPE: STATE               SITE ADDR: BURRILLVILLE HIGH SCHOOL                  UTM ZONE: 19
CITY POPULATION:      10,087     STATION TYPE (22): SUBURBAN - RESIDENTIAL            UTM NORTHING: 4649500 METERS
AQCR POPULATION:  1,645,380      AQCR (120): METROPOLITAN PROVIDENCE                  UTM EASTING:   279300 METERS
EPA REGION:  1                   SMSA (6480): PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS. ELEVATION ABOVE GROUND:  20 FT.
POLL/SITE TYPE/EQUIP CODE: TSP- -     SO2- -     CO- -     OX- -     NO2- -     HC- -     PB- -  ELEVATION ABOVE MSL   :  370 FT.
SUPPORT AGENCY: RHODE ISLAND DEPARTMENT OF HEALTH                                     DIFF.GMT: WEST 05 HOURS
COMMENTS:                                                                             RECORD LAST UPDATED:   /  /

SITE CODE: 410090001F01          LOCATION: CHARLESTOWN                                LATITUDE: 41 D. 22 M.  3 S. N
AGENCY/PROJECT: F01              COUNTY (0380): WASHINGTON CO                         LONGITUDE:  71 D. 39 M. 37 S. W
AGENCY TYPE: STATE               SITE ADDR: NAVAL AIR STATION                         UTM ZONE: 19
CITY POPULATION:       2,863     STATION TYPE (22): SUBURBAN - RESIDENTIAL            UTM NORTHING: 4582700 METERS
AQCR POPULATION:  1,645,380      AQCR (120): METROPOLITAN PROVIDENCE                  UTM EASTING:   277500 METERS
EPA REGION:  1                   SMSA (0000): 0 NOT IN A STANDARD METROPOLITAN STATIST ELEVATION ABOVE GROUND:  60 FT.
POLL/SITE TYPE/EQUIP CODE: TSP- -     SO2- -     CO- -     OX- -     NO2- -     HC- -     PB- -  ELEVATION ABOVE MSL   :   70 FT.
SUPPORT AGENCY: RHODE ISLAND DEPARTMENT OF HEALTH                                     DIFF.GMT: WEST 05 HOURS
COMMENTS: DISCONTINUED, 4/28/73                                                       RECORD LAST UPDATED:   /  /

SITE CODE: 410090002F02          LOCATION: CHARLESTOWN                                LATITUDE: 41 D. 25 M. 59 S. N
AGENCY/PROJECT: F02              COUNTY (0380): WASHINGTON CO                         LONGITUDE: 071 D. 40 M. 47 S. W
AGENCY TYPE: STATE               SITE ADDR: UNITED NEUCLEAR                           UTM ZONE: 19
CITY POPULATION:       2,863     STATION TYPE (34): RURAL - INDUSTRIAL                UTM NORTHING: 4590100 METERS
AQCR POPULATION:  1,645,380      AQCR (120): METROPOLITAN PROVIDENCE                  UTM EASTING:   276100 METERS
EPA REGION:  1                   SMSA (0000): 0 NOT IN A STANDARD METROPOLITAN STATIST ELEVATION ABOVE GROUND:      FT.
POLL/SITE TYPE/EQUIP CODE: TSP- -     SO2- -     CO- -     OX- -     NO2- -     HC- -     PB- -  ELEVATION ABOVE MSL   :   65 FT.
SUPPORT AGENCY: R.I. STATE DEPT OF HEALTH, DIV. OF AIR POLLUTION CONTROL              DIFF.GMT: WEST 05 HOURS
COMMENTS:                                                                             RECORD LAST UPDATED: 05/15/78

****     SITE TYPE CODES  :  1 = NATIONAL AIR MONITORING SITE    2 = STATE AND LOCAL AIR MONITORING SITE    3 = ALL OTHERS      ****
```

Figure 2.3.1.e Site Description Inventory Report

RAW DATA IN SAROAD FORMAT

General Description

The report creates cards or magnetic tape of the raw data input to the computer in the same form as prepared for input. Figures 2.3.1.f, 2.3.1.g, and 2.3.1.h show the input data formats used for the SAROAD programs.

Retrievals Available

There are several key items upon which retrieval may be made by using the SAROAD Standard Format Selection procedure, including: state, area, site, agency type, AQCR, project classification, pollutant type, method of collection and analysis, sampling interval, and starting and ending dates. Certain combinations of selection keys are prohibited. For example, a site key may be entered only if an area key is also entered, and an area key may be entered only if a state key is also entered. Similarly, a project classification code may be included only if an agency type is also specified, and a method of collection and analysis may be specified only if a pollutant type is also specified. All other combinations may be considered as valid retrieval requests. The period of interest is specified by year and month for the starting and ending dates; for example, "7302 7304" or "6801 7212" would be valid ways of specifying the desired retrieval period. Codes for the various retrieval items are given in Volume V of the AEROS Manual.

Sorts Available

There are no sort options available.

Sample Report

Figures 2.3.1.f through 2.3.1.h give the type and sequencing of data contained in the report. The output is available in the form of punched cards, or on magnetic tape, or both.

LESS THAN 24-HOUR SAMPLING INTERVAL

[1] (1)

Agency

City Name

Site Address

Project

ENVIRONMENTAL PROTECTION AGENCY
National Aerometric Data Bank
P. O. Box 12055
Research Triangle Park
North Carolina 27711

Parameter observed

Method

Time interval of obs.

Units of obs.

State (2 3) Area (4 5 6 7) Site (8 9 10)

Agency (11) Project (12 13) Time (14) Year (15 16) Month (17 18)

Parameter code (23 24 25 26 27) Method (28 29) Units (30 31) DP (32)

Day (19 20)	St Hr (21 22)	Rdg 1 (33 34 35 36)	Rdg 2 (37 38 39 40)	Rdg 3 (41 42 43 44)	Rdg 4 (45 46 47 48)	Rdg 5 (49 50 51 52)	Rdg 6 (53 54 55 56)	Rdg 7 (57 58 59 60)	Rdg 8 (61 62 63 64)	Rdg 9 (65 66 67 68)	Rdg 10 (69 70 71 72)	Rdg 11 (73 74 75 76)	Rdg 12 (77 78 79 80)

Figure 2.3.1.f. SAROAD Hourly Data Form

ENVIRONMENTAL PROTECTION AGENCY
National Aerometric Data Bank
P.O. Box 12055
Research Triangle Park, N.C. 27711

24-HOUR OR GREATER SAMPLING INTERVAL

2 (1)

Agency

City Name

Site Address

Project

Time Interval

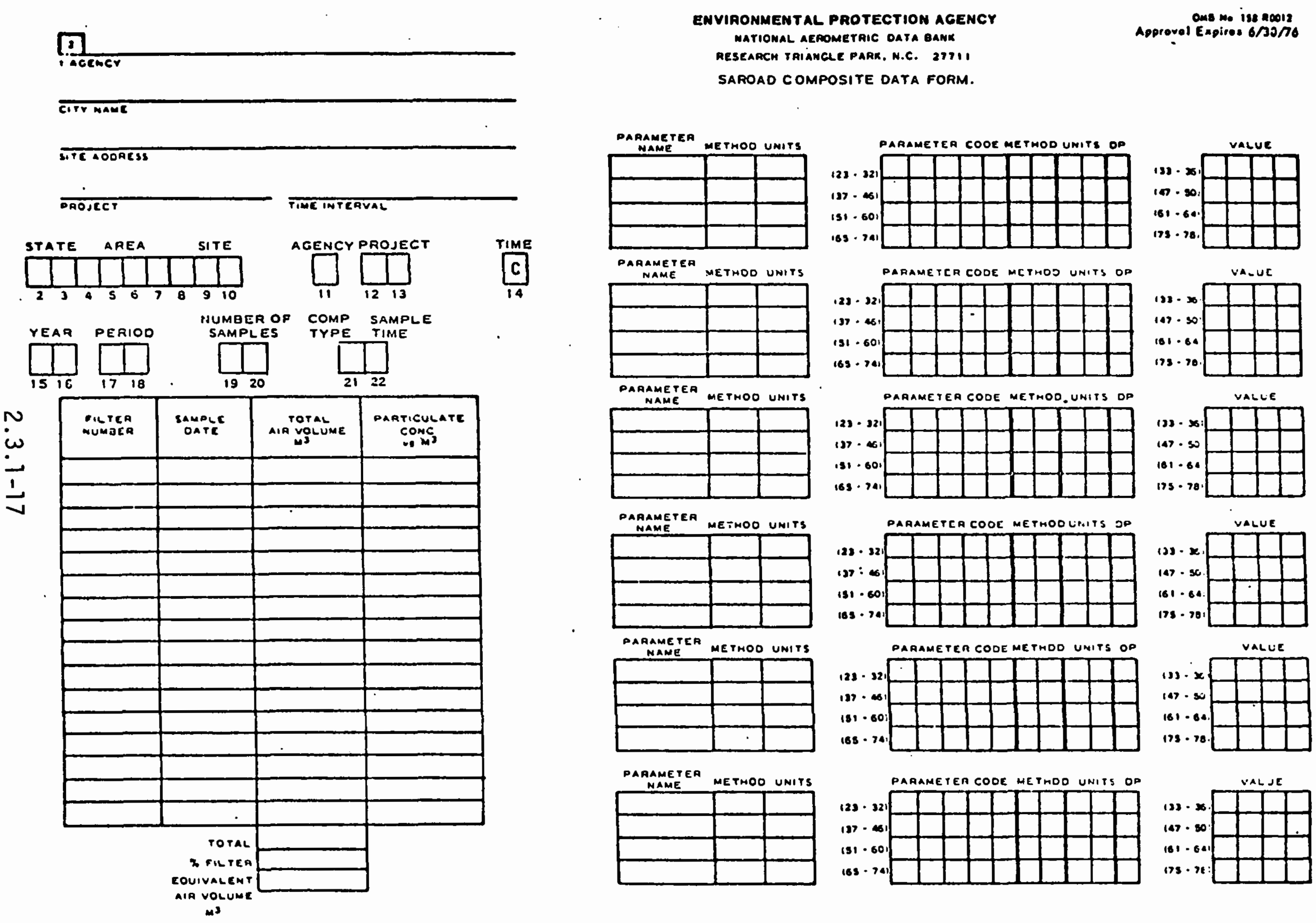
State (2 3) Area (4 5 6) Site (7 8 9 10)

Agency (11) Project (12 13) Time (14) Year (15 16) Month (17 18)

Name PARAMETER Code (23 24 25 26 27)	Method (28 29)	Units (30 31)	DP (32)
Name PARAMETER Code (37 38 39 40 41)	Method (42 43)	Units (44 45)	DP (46)
Name PARAMETER Code (51 52 53 54 55)	Method (56 57)	Units (58 59)	DP (60)
Name PARAMETER Code (65 66 67 68 69)	Method (70 71)	Units (72 73)	DP (74)

Day (19 20)	St Hr (21 22)	(33 34 35 36)	(47 48 49 50)	(61 62 63 64)	(75 76 77 78)
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
DP →		4 3 2 1 0	4 3 2 1 0	4 3 2 1 0	4 3 2 1 0

Figure 2.3.1.g. SAROAD Daily Data Form



ENVIRONMENTAL PROTECTION AGENCY
NATIONAL AEROMETRIC DATA BANK
RESEARCH TRIANGLE PARK, N.C. 27711
SAROAD COMPOSITE DATA FORM.

OMB No 158 R0012
Approval Expires 6/30/76

3 1 AGENCY

CITY NAME

SITE ADDRESS

PROJECT

TIME INTERVAL

STATE AREA SITE 2 3 4 5 6 7 8 9 10

AGENCY 11

PROJECT 12 13

TIME C 14

YEAR 15 16

PERIOD 17 18

NUMBER OF SAMPLES 19 20

COMP TYPE 21

SAMPLE TIME 22

FILTER NUMBER	SAMPLE DATE	TOTAL AIR VOLUME M^3	PARTICULATE CONC $\mu g\ M^3$
	TOTAL		
	% FILTER		
	EQUIVALENT AIR VOLUME M^3		

PARAMETER NAME METHOD UNITS
PARAMETER CODE METHOD UNITS DP
(23 - 32)
(37 - 46)
(51 - 60)
(65 - 74)
VALUE
(33 - 36)
(47 - 50)
(61 - 64)
(75 - 78)

PARAMETER NAME METHOD UNITS
PARAMETER CODE METHOD UNITS DP
(23 - 32)
(37 - 46)
(51 - 60)
(65 - 74)
VALUE
(33 - 36)
(47 - 50)
(61 - 64)
(75 - 78)

PARAMETER NAME METHOD UNITS
PARAMETER CODE METHOD UNITS DP
(23 - 32)
(37 - 46)
(51 - 60)
(65 - 74)
VALUE
(33 - 36)
(47 - 50)
(61 - 64)
(75 - 78)

PARAMETER NAME METHOD UNITS
PARAMETER CODE METHOD UNITS DP
(23 - 32)
(37 - 46)
(51 - 60)
(65 - 74)
VALUE
(33 - 36)
(47 - 50)
(61 - 64)
(75 - 78)

PARAMETER NAME METHOD UNITS
PARAMETER CODE METHOD UNITS DP
(23 - 32)
(37 - 46)
(51 - 60)
(65 - 74)
VALUE
(33 - 36)
(47 - 50)
(61 - 64)
(75 - 78)

PARAMETER NAME METHOD UNITS
PARAMETER CODE METHOD UNITS DP
(23 - 32)
(37 - 46)
(51 - 60)
(65 - 74)
VALUE
(33 - 36)
(47 - 50)
(61 - 64)
(75 - 78)

Figure 2.3.1.h. SAROAD Composite Data Form

METEOROLOGICAL RAW DATA REPORT AND PLOT

General Description

This report creates two unique print formats and a plot of meteorological data. The first print format lists the site description at the top of the page, then the parameter-method-unit names, and the raw data values for one month. Each line contains up to 24 raw data values, the mean, and number of observations for each day. This line is repeated for each day in the month. At the bottom of the page, the minimum, maximum, average, and number of observations are given for each hour of the day for that month.

This second printout repeats the site description at the top and the parameter-method-unit names and lists the minimum, the hour of the minimum, the maximum, the hour of the maximum, the mean, and the number of observations for each day of the month.

The plot of the meteorological data is created on CALCOMP plotter or a TEXTRONIX terminal. A separate plot is created for each month of data. The daily minimums, maximums, and means for a specific parameter for each day of the month are plotted with descriptive information on the site and parameter. The plot is a separate report and may be omitted if only the raw data listing is required.

Retrievals Available

The meteorological raw data reports and plots may be retrieved by state, area, site, agency, project, pollutant (only 6XXXX) method units, start and end date, and any appropriate combination of the above.

For the plots, the minimum scale value and a delta value may be specified by the user, or, if omitted, they are calculated by the program. The user can also specify what values (daily minimum, maximum, and/or mean) are plotted.

Sorts Available

No optional Sorts are available for this report. The report is printed according to the order on the file:

state/area/site/agency/project/pollutant/year/month

Sample Report

Figures 2.3.1-i, j, k, show examples for wind speed for a site in Mobile, Alabama, for January 1973.

RUN DATE: APR 09, 1981

NATIONAL AEROMETRIC DATA BANK
MONTHLY METEOROLOGICAL DATA REPORT
FOR JAN 1973

PAGE: 1

SITECODE: 012380008
AGENCY/PROJECT: G01
AGENCY TYPE: COUNTY
CITY POPULATION: 190,026
AQCR POPULATION: 2,100,946
EPA-REGION: 4
SUPPORTING AGENCY: MOBILE COUNTY BOARD OF HEALTH
COMMENTS: SAMPLERS ON PLATFORM FOR UNIFORM WIND DISTRIBUTION NEAR HEAVILY INDUSTRIALIZED AREA

LOCATION: MOBILE
COUNTY (24000): MOBILE CO
SITE ADDR: WKRG TRANSMITTING SITE TELEGRAPH ROAD
STATION TYPE (11): CENTER CITY - INDUSTRIAL
AQCR (005): MOBILE-PENSACOLA-PANAMA CITY-SOUTHERN MISSISSIPPI
SMSA (5160): MOBILE, ALABAMA

LATITUDE: 30 D. 43 M. 11 S. N
LONGITUDE: 088 D. 03 M. 32 S. W
UTM ZONE: 16
UTM NORTHING: 3398870
UTM EASTING: 00393610
ELEVATION ABOVE GROUND: 010 FT.
ELEVATION ABOVE MSL: 0016 FT.
DIFF. GMT: WEST 06 HOURS

PARAMETER: WIND SPEED

METHOD: INSTRUMENTAL
SPOT READING

UNITS: MILES/HOUR

TIME

DAY ***	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	MEAN	NUM OBS
01	3.0	3.0	3.5	4.5	5.0	4.0	4.0	4.0	4.0	4.5	4.0	4.5	4.5	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	4.0	24
02	3.0	2.5	3.0	4.0	3.5	4.0	4.0	3.5	4.0	3.5	4.0	4.0	4.0	3.5	3.5	3.5	3.5	2.5	3.0	2.0	.0	2.5	.0	2.0	3.0	24
03	2.0	1.5	1.5	2.0	2.5	3.0	3.0	2.0	3.0	3.5	3.0	3.0	2.0	1.0	2.0	1.5	2.0	2.0	.0	.0	.0	.0	.0	.0	1.7	24
04	.0	.0	1.5	1.5	.0	2.0	3.0	3.5	3.5	3.5	3.0	3.0	3.0	3.0	2.0	2.0	2.0	3.0	3.0	4.0	3.0	2.0	3.0	3.0	2.4	24
05	2.0	3.0	3.0	3.0	.0	.0	.0	2.0	2.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	24
06	.0	.0	.0	.0	3.0	4.0	3.0	2.5	3.5	3.5	4.0	3.5	3.5	3.5	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	.0	3.0	24
07	3.5	1.5	4.5	3.5	3.0	3.0	3.5	3.0	4.0	3.0	3.0	3.0	2.5	2.5	2.5	3.5	3.0	3.0	3.0	.0	.0	3.0	4.0	3.0	3.0	24
08	2.0	4.0	3.0	4.0	4.0	4.0	4.0	4.5	6.0	5.0	5.0			5.0	5.5	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.5	22
09	4.0	4.0	3.0	3.5	4.0	4.0	3.0	4.0	4.0	4.0	3.5	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.0	3.0	3.0	3.7	24
10	3.0	.0	3.0	3.0	3.0	2.5	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.5	3.0	3.0	3.0	2.0	2.8	24
11	3.0	2.5	2.5	2.0	3.0	3.0	3.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	3.5	3.5	4.0	4.0	4.0	4.0	5.0	5.0	3.8	24
12	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	3.5	3.0	2.0	2.0	2.0	1.5	1.0	1.0	1.5	3.5	24
13	1.5	1.5	.0	1.5	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.0	.0	.0	.0	1.1	24
14	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	3.0	2.0	1.5	1.5	1.5	1.5	.0	.0	.0	.0	.0	.0	.0	.6	24
15	.0	.0	.0	.0	1.5	2.0	3.0	3.0	4.0	4.0	4.0	3.5	3.5	3.0	2.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	24
16	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	2.5	2.0	1.5	1.5	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	24
17	.0	.0	.0	.0	.0	.0	2.5	.0	.0	.0	2.0	2.0	3.0	2.5	3.0	3.0	3.0	3.0	2.0	2.0	2.0	1.0	.0	1.0	1.3	24
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	2.0	2.0	1.5	1.5	1.5	1.5	2.0	1.5	1.5	2.0	2.0	3.0	3.0	3.0	1.2	24
19	2.5	2.0	2.5	2.0	.0	2.0	2.0	3.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	.0	.0	.0	.0	.0	.0	.0	.0	1.7	24
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	3.0	2.0	3.0	2.5	2.5	2.5	2.5	3.0	3.0	3.0	4.0	4.0	1.6	24
21	3.5	4.0	4.0	4.0	5.0	6.0	6.0	6.0	5.0	4.5	4.0	5.0	3.0	3.0	2.5	2.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	1.0	3.5	24
22	1.0	1.0	.0	.0	.0	.0	.0	.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	2.5	2.0	1.5	1.0	.0	.0	.0	.0	.0	1.2	24
23	.0	.0	.0	.0	.0	.0	.0	3.5	3.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	.0	.0	.0	.0	.0	.0	3.0	3.0	1.4	24
24	3.5	4.0	4.0	4.0	3.0	3.0	2.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	1.5	.0	.0	.0	.0	.0	2.4	24
25	.0	.0	.0	.0	.0	.0	.0	2.0	3.0	3.0	2.0	2.5	3.0	3.0	2.0	2.0	2.0	2.5	2.0	2.0	3.0	3.0	3.5	4.0	1.9	24
26	4.0	4.0	3.0	3.0	2.0	2.0	2.0	1.5	1.5	3.0	4.0	5.0	4.0	3.5	3.5	3.0	3.0	2.0	1.5	1.5	2.0	2.0	2.0	.0	2.6	24
27	.0	.0	.0	.0	.0	.0	.0	.0	1.0	3.0	2.5			2.0	2.0	1.0	1.0	2.0	2.0	2.0	2.5	2.0	2.0	2.5	1.2	22
28	3.0	2.0	2.0	.0	.0	3.0	3.0	3.5	4.0	.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0	3.0	3.0	3.5	3.5	3.0	2.8	24
29	3.0	3.5	3.5	3.5	3.5	3.5	3.0	3.5	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.0	2.0	2.0	1.0	.0	.0	.0	.0	2.4	24
30	.0	.0	.0	.0	.0	.0	1.0	1.0	2.0	2.0	1.0	2.5	2.5	3.0	3.0	1.5	1.0	.0	1.5	1.5	1.5	1.5	.0	.0	1.1	24
31	.0	.0	.0	.0	.0	.0	.0	1.5	1.5	1.5	.0	2.0	2.5	3.0	3.0	3.0	3.0	3.5	3.5	3.5	4.0	4.0	2.5	3.0	1.9	24
MIN	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
MAX	5.0	5.0	5.0	5.0	5.0	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	5.5	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	5.0		
AVG	1.7	1.7	1.7	1.7	1.6	2.0	2.1	2.4	2.7	2.8	2.9	3.1	3.0	2.8	2.7	2.6	2.3	2.1	2.0	1.8	1.7	1.8	1.8	1.7		
OBS	31	31	31	31	31	31	31	31	31	31	31	29	29	31	31	31	31	31	31	31	31	31	31	31		

Figure 2.3.1.i Meteorological Raw Data Report

RUN DATE: APR 09, 1981 NATIONAL AEROMETRIC DATA BANK PAGE: 2

MONTHLY METEOROLOGICAL DATA REPORT
FOR JAN 1973

SITECODE: 012380008
AGENCY/PROJECT: G01
AGENCY TYPE: COUNTY
CITY POPULATION: 190,026
AQCR POPULATION: 2,100,846
EPA-REGION: 4
SUPPORTING AGENCY: MOBILE COUNTY BOARD OF HEALTH
COMMENTS: SAMPLERS ON PLATFORM FOR UNIFORM WIND DISTRIBUTION NEAR HEAVILY INDUSTRIALIZED AREA

LOCATION: MOBILE
COUNTY (2400): MOBILE CO
SITE ADDR: WKRG TRANSMITTING SITE TELEGRAPH ROAD
STATION TYPE (11): CENTER CITY - INDUSTRIAL
AQCR (005): MOBILE-PENSACOLA-PANAMA CITY-SOUTHERN MISSISSIPPI
SMSA (5160): MOBILE, ALABAMA

LATITUDE: 30 D. 43 M. 11 S. N
LONGITUDE: 088 D. 03 M. 32 S. W
UTM ZONE: 16
UTM NORTHING: 3398870
UTM EASTING: 00398610
ELEVATION ABOVE GROUND: 010 FT.
ELEVATION ABOVE MSL: 0016 FT.
DIFF. GMT: WEST 06 HOURS

PARAMETER: WIND SPEED
METHOD: INSTRUMENTAL
SPOT READING
UNITS: MILES/HOUR

DAY	MIN	HR. OF MIN	MAX	HR. OF MAX	MEAN	NUM OBS
1	3.0	00	5.0	04	4.0	24
2	.0	00	4.0	03	2.0	24
3	.0	15	3.5	09	1.7	24
4	.0	00	4.0	19	2.4	24
5	.0	04	3.0	01	.7	24
6	.0	00	5.0	15	3.0	24
7	.0	19	4.5	01	3.0	24
8	2.0	00	6.0	03	4.5	22
9	3.0	00	4.0	00	3.7	24
10	.0	01	3.0	00	2.8	24
11	2.0	03	5.0	09	3.8	24
12	1.0	21	5.0	00	3.5	24
13	.0	02	2.0	07	1.1	24
14	.0	00	3.0	10	.6	24
15	.0	00	4.0	08	1.5	24
16	.0	00	2.5	10	.5	24
17	.0	00	3.0	12	1.3	24
18	.0	00	3.0	21	1.2	24
19	.0	04	4.0	09	1.7	24
20	.0	00	4.0	22	1.6	24
21	1.0	23	6.0	05	3.5	24
22	.0	02	3.0	10	1.2	24
23	.0	00	4.0	09	1.4	24
24	.0	19	4.0	01	2.4	24
25	.0	00	4.0	23	1.9	24
26	.0	23	5.0	11	2.6	24
27	.0	00	3.0	09	1.2	22
28	.0	03	4.0	08	2.8	24
29	.0	20	3.5	01	2.4	24
30	.0	00	3.0	13	1.1	24
31	.0	00	4.0	20	1.9	24

Figure 2.3.1.j Meteorological Raw Data Report

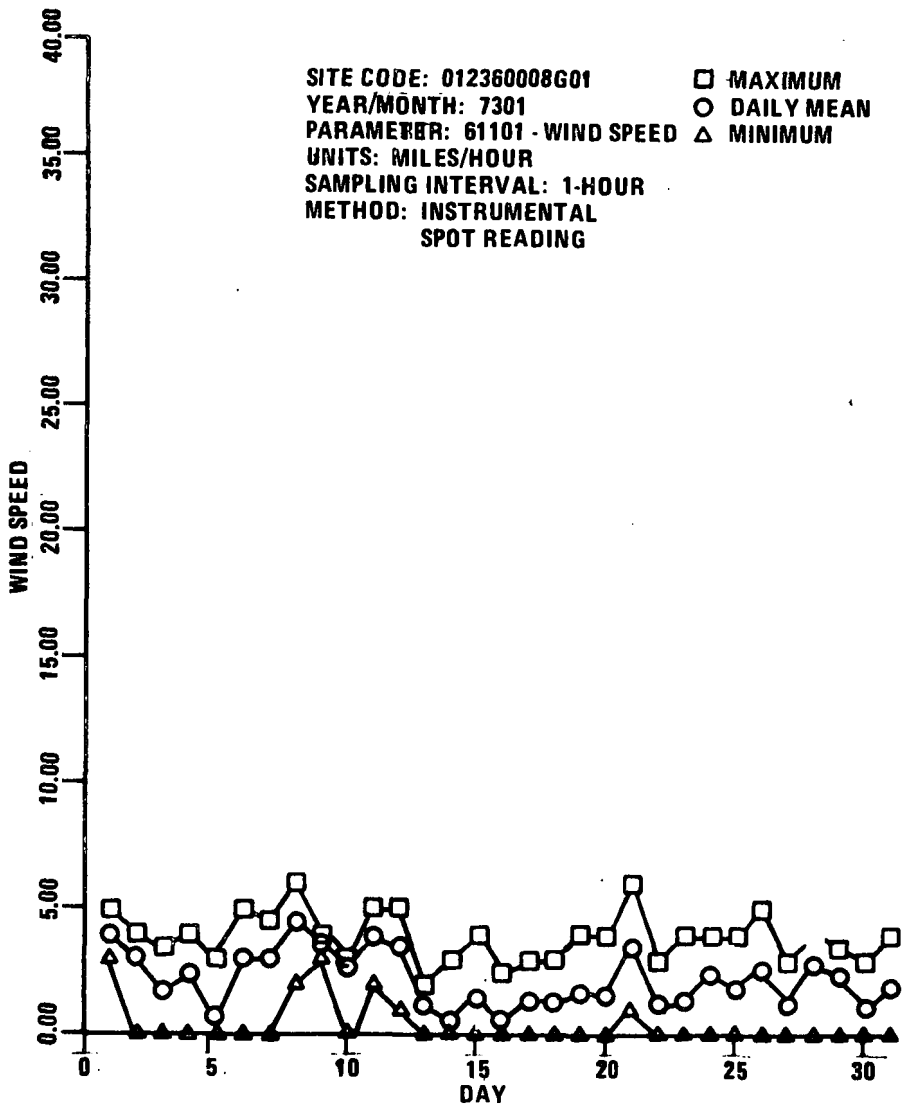


Figure 2.3.1-k. Meteorological raw data plot.

RAW DATA VALIDATION REPORT

General Description

This report produces a validation by exception report of raw data values that are outside a range that is specified by the user for any pollutant. This report should be utilized to screen raw data to identify possible anomalous data values.

The report includes a standard site description as the heading and also indicates the start and end dates for the data validation. The data reports list the pollutant-method codes and names, the sampling interval, the units name, the minimum and maximum values that were utilized for validation, the actual data values that were outside the validation range, the date and start hour for the values, and for monthly data, the number of observations for that month.

The user must specify the pollutant and the range utilized for validation as well as the retrieval desired.

Retrievals Available

The raw data validation report may be retrieved by State, area, site, agency, project, AQCR, county, pollutant, method, start and end date, or any valid combination of the above. The pollutant and the exception range must be specified.

Sorts Available

This report may be sorted in ascending or descending order by the following options: State, area, site, agency, project, AQCR, county, pollutant, method, interval, units, year, month, day, hour, and pollutant value.

Sample Report

Figure 2.3.1.1 is an example of the report for a site in California for ozone.

DATE RUN 4/07/81 NATIONAL AEROMETRIC DATA BANK PAGE 1
VALIDATION BY EXCEPTION

SITECODE 052680001
AGENCY/PROJECT: I01
AGENCY TYPE: DISTRICT
CITY POPULATION: 20,673
AQCR POPULATION: 9,806,000
EPA REGION: 9
SUPPORTING AGENCY: SOUTH COAST AQMD
COMMENTS: ARB 36-170 START 6-73 KAISER STEEL 2 MI S W

LOCATION: FONTANA
COUNTY (6700):SAN BERNARDINO CO
SITE ADDR: 14838 FOOTHILL BLVD
STATION TYPE: RURAL - INDUSTRIAL
AQCR (024): METROPOLITAN LOS ANGELES
SMSA (6780): RIVERSIDE-SAN BERNARDINO ONTAREIO, CALIF

LATITUDE: 34 D. 06 M. 22 S. N
LONGITUDE:117D. 28 M. 52 S. W
UTM ZONE: 11
UTM NORTHING: 3773850
UTM EASTING: 00455635
ELEVATION ABOVE GROUND: 020 FT.
ELEVATION ABOVE MSL: 1265 FT.
DIFF. GMT: WEST 08 HOURS

POLLUTANT POLLUTANT-METHOD METHOD INTERVAL AND UNITS	VALIDATION VALUES MINIMUM	 MAXIMUM	EXCEPTION VALUE	OBS TIME YY-MM-DD-HH	NUMBER OF OBSERVATION
OZONE	0.0000	0.3900	0.420	79-09-12-15	
44201-14			0.400	79-09-18-14	
INSTRUMENTAL ULTRA VIOLET			0.420	79-09-18-15	

Figure 2.3.1.1 Raw data validation report

SITE PLOT PROGRAM

General Description

This program produces a plot of site locations on a longitude-latitude coordinate system on a TEXTRONIX terminal or a CALCOMP plotter. It also provides a control card listing and lists the sites which were not plotted due to missing data. The area is specified by up to 99 points which are accepted in order to form a polygon. Standard identifying information on the plot includes a request or supplied title, the State, county, and/or AQCR numbers and names for the area, the number of sites in the area, the number of sites plotted, and the number of points in the polygon. A scaling factor provided by the user determines the size of the rectangular grids on the plot. The size of specified area determines the length in degrees-minutes-seconds of the sides of the grid square. All sites which are selected are plotted in the rectangular grid, and the users-supplied points are used to draw the polygon on the grid. Each selected site is marked with an "X" and labeled, AA, AB, AC, ..., BA, BB, ..., . A cross reference table containing the codes for the label, state, area, site, agency, project, county, and AQCR is printed beside the plot.

Retrievals Available

The plot is generated for a geographical area specified by an valid combination of the following attributes: (1) State, (2) AQCR, (3) State-county, (4) State-AQCR, and (5) State-county-AQCR. In addition to the geographical area, the requestor must specify the latitude-longitude coordinates for the points of the polygon, a scaling factor for the plot,

and a title for the plot. The scaling factor can vary from 1.0 to 10.0, and the product of the scaling factor for latitude or longitude times 7" is the length of the latitudinal or longitudinal axis.

Sorts Available

No sort options are available as each set of retrieval cards produces only one plot. Several sets of retrieval cards may be submitted in one complete request in the order desired.

Sample Report

Figure 2.3.1.m represents a plot for 43 sites selected by State-county for Jackson County, Alabama. A scaling factor of 1.0 was utilized for this plot.

OPTION?

GEOGRAPHIC AREA :

STATE : 01 (ALABAMA)
COUNTY : 1920 (JACKSON CO)
NO OF SITES FOUND IN THIS AREA : 43

NO OF SITES (X) PLOTTED IN THIS RECTANGULAR AREA : 43

NO OF POINTS (O) IN THE POLYGON : 4

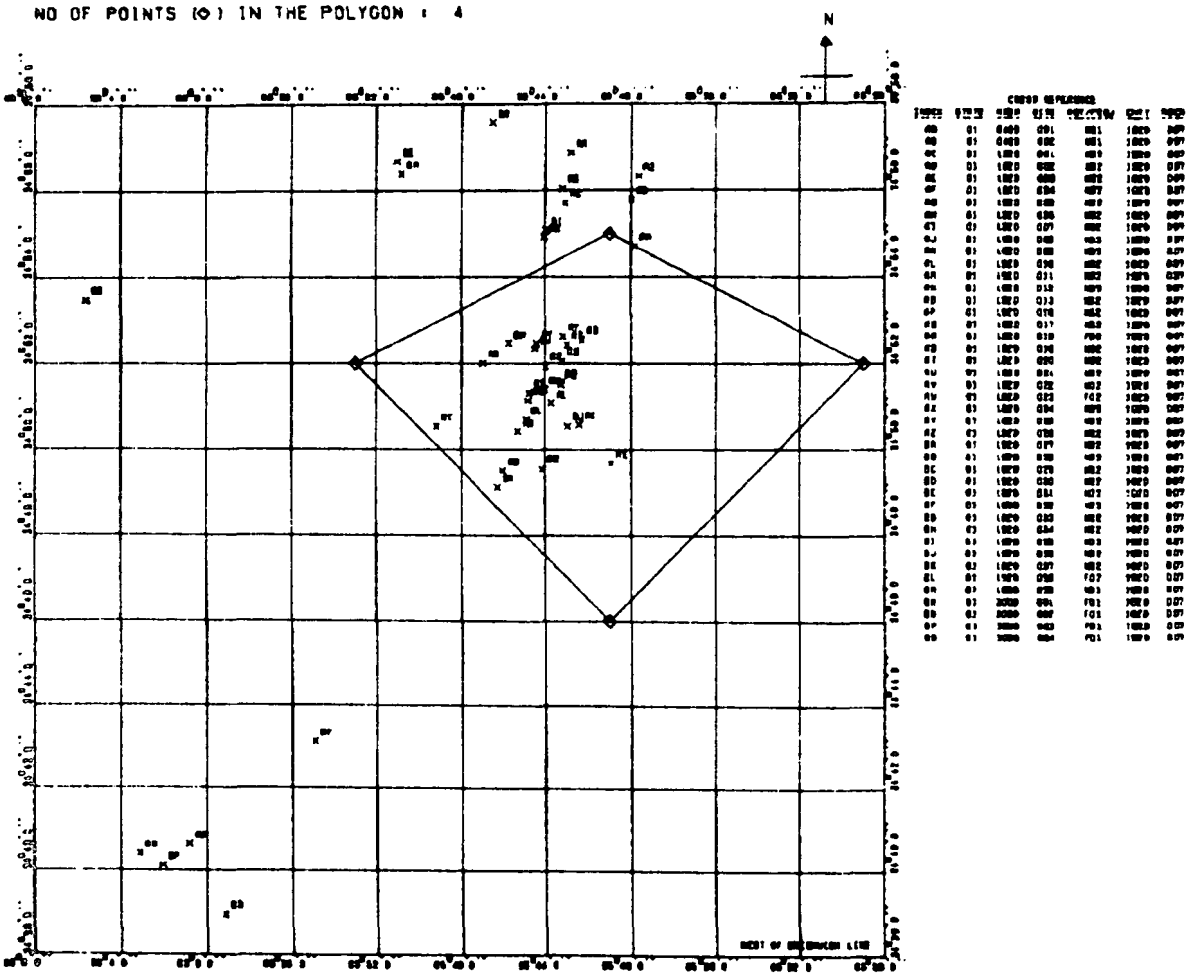


Figure 2.3.1-m Site Plot for Jackson County, Alabama

PRECISION ACCURACY REPORT

General Description

As mentioned in Section 2.3.0, the revised regulations, 40 CFR, Part 58, Appendix A - Quality Assurance Requirements for State and Local Air Monitoring Stations, require a minimum quality assurance program for all SLAMS. One function of the quality assurance program is the assessment of the quality of the monitoring data by estimating their precision and accuracy.

Appendix A describes in detail the procedures that reporting organizations must follow to collect, calculate, and report precision and accuracy data. These data are collected by reporting organizations and reported on a quarterly basis to EMSL. Since these data are calculated on a reporting organization rather than a site basis, a cross reference between individual sites and reporting organizations is necessary to utilize the precision and accuracy data with air quality data.

Also, since the precision and accuracy data is utilized with air quality data, the precision-accuracy report is not retrieved as a separate report from the air quality data. The only change to the air quality reports is the addition of the reporting organization code at the site-pollutant-year level.

The precision and accuracy report lists the program number that created the report, the State name, and reporting organization name in the heading. Different page formats are printed for automated analyzers and manual methods.

The report formats produce a one line listing for each quarter for all data retrieved that corresponds to the air quality data. This data line is divided into three sections; data key, precision data, and accuracy data. Within each section all variables that were reported as defined in Appendix A are listed under the appropriate heading. A year-to-date record is also displayed with '5' as the quarter number. This year-to-date record is calculated by averaging the quarterly values for most variables except the following that are totals: number of samples from colocated sites < limits, number of valid colocated data pairs, number of audits, number of precision checks, number of audits of levels 1-3, and number of audits of level 4.

Retrievals Available

This report is generated for total suspended sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, and lead. This report is generated only by the specific report programs listed in Table 2.3.0.a.

Sorts Available

No optional sorts are available. For a given retrieval the data are sorted in ascending sequence by state/reporting organization/interval/pollutant/year/quarter.

Sample Report

Figure 2.3.1.n shows the two report formats for precision and accuracy data.

HAWAII
STATE OF HAWAII, DEPT. OF HEALTH
AUTOMATED ANALYZERS

NATIONAL AEROMETRIC DATA BANK
ENVIRONMENTAL PROTECTION AGENCY
SAROAD/PRECISION-ACCURACY REPORT

PAGE 1
MAY 21, 1981
NA273/NAP000

PRECISION-ACCURACY DATA KEY						PRECISION DATA				ACCURACY DATA											
RG	ST	RO	TYP	POLL	YR-Q	# OF ANLYZRS	PRECIS CHECKS	PROB LIM LO	PROB LIM UP	SOURCE AUD	GAS	TRACE ABLTY	# AUDITS L1-3	# AUDITS L4	PROB LIM LO-L1	PROB LIM UP	PROB LIM LO-L2	PROB LIM UP	PROB LIM LO-L3	PROB LIM UP	PROB LIM LO-L4	PROB LIM UP
09	12	120	C	44201	80-3	001	0008	-16	+15			E	009		-10	+04	-07	+04	-06	+06	-09	+06
******* OZONE *******					80-4	001	0004	-05	+14			D	007	006	-14	+15	-10	+09	-12	+13	-09	+12
					80-5	001	0012	-10	+14				0016	0006	-12	+09	-08	+06	-09	+09	-09	+09

Figure 2.3.1.n Precision and accuracy report

HAWAII
STATE OF HAWAII, DEPT. OF HEALTH
MANUAL METHODS

NATIONAL AEROMETRIC DATA BANK
ENVIRONMENTAL PROTECTION AGENCY
SAROAD/PRECISION-ACCURACY REPORT

PAGE 2
MAY 21, 1981
NA273/MAP000

PRECISION-ACCURACY DATA KEY		PRECISION DATA						ACCURACY DATA						
RG ST RO TYP POLL	YR-Q	# OF SAMPLRS	COLLOC SITES	PROB LIM LO	PROB LIM UP	COLL SAMP BELOW LIM	VAL COLL DATA PRS	# AUDITS LEV 1-3	PROB LIM LO-L1-UP		PROB LIM LO-L2-UP		PROB LIM LO-L3-UP	
09 12 120 I 11101	80-1	11	1	-09	+08	0		012			-05	+09		
**** PARTICULATE ****	80-3	13	2	-07	+09	0		013			-08	+06		
	80-4	13	2	-08	+14	0	26	013			-06	+07		
	80-5	12	1	-08	+10	0	26	0038			-06	+07		
09 12 120 I 42401	80-1	8	2	-27	+14	24		015	-13	+11	-07	+09	-12	+14
** SULFUR DIOXIDE ***	80-3	8	2	-47	+03	16		016	-04	+05	-02	+03	-02	+02
	80-4	8	2	-70	+56	23	27	015	-02	+05	-00	+01	-00	+01
	80-5	8	2	-48	+24	63	27	0046	-06	+07	-03	+04	-04	+05

Figure 2.3.1.n (continued) Precision and accuracy report

YEARLY FREQUENCY DISTRIBUTION

GENERAL DESCRIPTION

This report lists the site description and annual summary information for all data that satisfy the retrieval criteria. The site description is repeated at the top of each page, followed by the data. The site description gives the geographical information necessary to locate the site and is separated from the data by a data heading. Below the data heading, the codes and names are given for the pollutant, the sampling and analysis methods, the sampling interval, and the standard units in which the data are printed. The data items include: the year of the data; the percent of observations for continuous data; the number of observations; the number of primary and secondary violations of the NAAQS's; the minimum detectable for the sampling method; the minimum, maximum and second maximum observations; the 10, 30, 50, 70, 90, 95, and 99 percentiles; the arithmetic mean; the geometric mean; and the geometric standard deviation. The number of violations of the NAAQS's represents the number of violations of the short term standards. For the running averages, the number of violations are for non-overlapping running averages.

The retrieval and print options which are based on summary criteria are: (1) print all data which meet other selection criteria but do not print the means and standard deviation when summary criteria are not met (default), (2) print all data which meet other selection criteria and

flag the statistics when summary criteria are not met, (3) print only data which meet summary criteria, or (4) print only data which fail the summary criteria.

RETRIEVALS AVAILABLE

The report is generated from data which satisfy the following selection criteria: nation, state, area, site, agency, project, pollutant, method, interval,begin year, end year, AQCR, and county.

Most combinations of the above selection criteria are valid but the following combinations are invalid: (1) area or county without state, (2) site without state/area, (3) project without agency, and (4) method without pollutant.

The difference between a state/area and a state/county retrieval is important--a state/area selection will only give the sites which are in that area (city) while a state/county selection will give all state/area combinations located in that county.

SORTS AVAILABLE

This report may be sorted in ascending (default) or descending order by the following options: state, area, site, agency, project, AQCR, pollutant, method, units, interval, year, pollutant value, and county code. For this report, the pollutant value sort is on the yearly

maximum observed value. Any number of sorts can be specified in any desired order, but certain sort combinations may produce a confusing report.

SAMPLE REPORT

Figure 2.3.2.a shows a Yearly Frequency Distribution Report for particulate, carbon monoxide, sulfur dioxide for a site in Providence, Rhode Island.

05-21-81 NATIONAL AEROMETRIC DATA BANK PAGE 41-0001
YEARLY FREQUENCY DISTRIBUTION
STATE (41): RHODE ISLAND

SITECODE: 410300005F01
AGENCY/PROJECT: F01
AGENCY TYPE: STATE
CITY POPULATION: 179,213
AQCR POPULATION: 1,645,380
EPA-REGION: 1
SUPPORTING AGENCY: RHODE ISLAND DEPARTMENT OF HEALTH
COMMENTS: PROVIDENCE STATION B

LOCATION: PROVIDENCE
COUNTY (0320): PROVIDENCE CO
SITE ADDR: STATE OFFICE BUILDING
STATION TYPE (11): CENTER CITY - INDUSTRIAL
AQCR (120): METROPOLITAN PROVIDENCE
SMSA (6480): PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS

LATITUDE: 41 D. 49 M. 54 S. N
LONGITUDE: 71 D. 24 M. 56 S. W
UTM ZONE: 19
UTM NORTHING: 4633700
UTM EASTING: 00299400
ELEVATION ABOVE GROUND: 050 FT.
ELEVATION ABOVE MSL: 0100 FT.
DIFF. GMT: WEST 05 HOURS

POLLUTANT NAME / POLLUTANT-METHOD-INTERVAL-UNITS CODE	METHOD OF COLLECTION AND ANALYSIS	INTERVAL	STANDARD UNITS

YR	REP ORG	% OBS	# OBS	#EXCURSIONS PRI	#EXCURSIONS SEC	MIN DETEC	MIN OBS	10	30	50	70	90	95	99	MAX OBS	2ND MAX	ARIT MEAN	GEOM MEAN	GEOM STD DEV
PARTICULATE								HI-VOL GRAVIMETRIC							24-HOUR		UG/CU METER (25 C)		
11101-91-7-01																			
73			51	0	0	1.	21.	33.	40.	46.	64.	107.	130.	138.	138.	137.	58.	52.	1.6
74			41	0	2	1.	23.	37.	51.	61.	82.	103.	142.	157.	157.	155.	70.	63.	1.6
75			54	0	0	1.	32.	35.	43.	57.	67.	97.	102.	121.	121.	114.	60.	57.	1.4
76			50	0	0	1.	27.	37.	47.	53.	64.	85.	117.	129.	129.	120.	60.	56.	1.4
CARBON MONOXIDE								INSTRUMENTAL NONDISPERSIVE INFRA-RED							1-HOUR		MG/CU METER (25 C)		
42101-11-1-05																			
73		47	4126	0	0	0.6	0.3	0.6	1.2	1.7	2.9	4.0	5.2	6.9	19.6	13.8	2.3*	1.9*	1.90*
CARBON MONOXIDE								INSTRUMENTAL NONDISPERSIVE INFRA-RED							8-HR-AVG		MG/CU METER (25 C)		
42101-11-2-05																			
73			4098	0	0	0.6	0.6	0.9	1.4	2.0	2.7	3.9	4.7	6.1	9.1	8.2			
SULFUR DIOXIDE								INSTRUMENTAL WEST-GAEKE COLORIMETRIC							1-HOUR		UG/CU METER (25 C)		
42401-11-1-01																			
73		85	7471	0	0	26.	13.	13.	39.	66.	118.	216.	288.	524.	956.	956.	98.	59.	2.9
74		84	7349	0	0	26.	13.	13.	13.	39.	74.	170.	242.	406.	968.	939.	68.	38.	2.9
75		24	2134	0	0	26.	13.	13.	45.	70.	108.	168.	212.	311.	417.	390.	85.*	65.*	2.3*
SULFUR DIOXIDE								INSTRUMENTAL WEST-GAEKE COLORIMETRIC							24-HR-AVG		UG/CU METER (25 C)		
42401-11-X-01																			
73			6960	8	0	26.	13.	28.	53.	78.	115.	195.	246.	401.	634.	538.			
74			7111	1	0	26.	13.	14.	26.	44.	77.	150.	212.	322.	414.	358.			
75			2117	0	0	26.	13.	34.	61.	86.	106.	150.	167.	195.	222.	204.			

"*" DENOTES A VALUE DERIVED FROM DATA WHICH DO NOT MEET SAROAD SUMMARIZATION CRITERIA OF OAQPS GUIDELINE 1.2-040, VOL 3, SEC 2.3.0

Figure 2.3.2.a Yearly frequency distribution report

QUARTERLY FREQUENCY DISTRIBUTION

GENERAL DESCRIPTION

This report lists the site description and quarterly summary information for all data that satisfy the retrieval criteria. The site description is repeated at the top of each page, followed by the data. The site description gives the geographical information necessary to locate the site and is separated from the data by a data heading. Below the data heading, the codes and names are given for the pollutant, the sampling and analysis methods, the sampling interval, and the standard units in which the data are printed. The data items include: the year/quarter of the data; the percent of observations for continuous data; the number of observations; the number of primary and secondary violations of the NAAQS's, the minimum detectable for the sampling method; the minimum, maximum, and second maximum observations; the 10, 30, 50, 70, 90, 95, and 99 percentiles; the arithmetic mean; the geometric mean; and the geometric standard deviation. The number of violations of the NAAQS's represents the number of violations of the short term standards, and for the running averages, the number of violations are for non-overlapping running averages.

The retrieval and print options which are based on summary criteria are: (1) print all data which meet other selection criteria but do not print the means and standard deviation when summary criteria are not met (default), (2) print all data which meet other selection criteria and

flag the statistics when summary criteria are not met, (3) print only data which meet summary criteria, or (4) print only data which fail the summary criteria.

RETRIEVALS AVAILABLE

The report is generated from data which satisfy the following selection criteria: nation, state, area, site, agency, project, pollutant, method, interval, begin year-quarter, end year-quarter, AQCR and county.

Most combinations of the above selection criteria are valid but the following combinations are invalid: (1) area or county without state, (2) site without state/area, (3) project without agency, and (4) method without pollutant.

The difference between a state/area and a state/county retrieval is important--a state/area selection will only give the sites which are in that area (city) while a state/county selection will give all state/area combinations located in that county.

SORTS AVAILABLE

This report may be sorted in ascending (default) or descending order by the following options: state, area, site, agency, project, AQCR, pollutant, method, units, interval, year, quarter, pollutant

value, and county code. For this report, the pollutant value sort is on the quarterly maximum observed value. Any number of sorts can be specified in any desired order, but certain sort combinations would produce a confusing report.

SAMPLE REPORT

Figure 2.3.2.6 shows a Quarterly Frequency Distribution Report for particulate and carbon monoxide for a site in Providence, Rhode Island.

05-21-81 NATIONAL AEROMETRIC DATA BANK PAGE 41-0001
QUARTERLY FREQUENCY DISTRIBUTION
STATE (41): RHODE ISLAND

SITECODE: 410300005F01
AGENCY/PROJECT: F01
AGENCY TYPE: STATE
CITY POPULATION: 179,213
AQCR POPULATION: 1,645,380
EPA-REGION: 1
SUPPORTING AGENCY: RHODE ISLAND DEPARTMENT OF HEALTH
COMMENTS: PROVIDENCE STATION B

LOCATION: PROVIDENCE
COUNTY (0320): PROVIDENCE CO
SITE ADDR: STATE OFFICE BUILDING
STATION TYPE (11): CENTER CITY - INDUSTRIAL
AQCR (120): METROPOLITAN PROVIDENCE
SMSA (6480): PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS

LATITUDE: 41 D. 49 M. 54 S. N
LONGITUDE: 71 D. 24 M. 56 S. W
UTM ZONE: 19
UTM NORTHING: 4633700
UTM EASTING: 00299400
ELEVATION ABOVE GROUND: 050 FT.
ELEVATION ABOVE MSL: 0100 FT.
DIFF. GMT: WEST 05 HOURS

POLLUTANT NAME / POLLUTANT-METHOD-INTERVAL-UNITS CODE / YR-QT	REP ORG	% OBS	# OBS	EXCURSIONS PRI	EXCURSIONS SEC	MIN DETEC	MIN OBS	METHOD OF COLLECTION AND ANALYSIS / PERCENTILES 10	30	50	70	90	95	99	INTERVAL / MAX OBS	2ND MAX	ARIT MEAN	GEOM MEAN	GEOM STD DEV	STANDARD UNITS
PARTICULATE								HI-VOL GRAVIMETRIC							24-HOUR					UG/CU METER (25 C)
11101-91-7-01																				
73-01		16	0	0	1.	21.	42.	48.	51.	98.	122.	137.	137.		137.	122.	72.	64.	1.7	
73-02		14	0	0	1.	28.	32.	37.	43.	46.	69.	107.	107.		107.	69.	48.	45.	1.4	
73-03		13	0	0	1.	21.	33.	39.	43.	68.	130.	138.	138.		138.	130.	58.	51.	1.7	
73-04		8	0	0	1.	32.	32.	37.	38.	59.	71.	71.	71.		71.	64.	47.	46.	1.4	
CARBON MONOXIDE								INSTRUMENTAL NONDISPERSIVE INFRA-RED							1-HOUR					MG/CU METER (25 C)
42101-11-1-05																				
73-01	93	1998	0	0	0.6	0.6	0.6	1.7	2.3	2.9	4.6	5.8	7.5		19.6	13.8	2.5	2.1	1.94	
73-02	97	2128	0	0	0.6	0.3	0.6	1.2	1.7	2.3	3.5	4.6	5.8		10.4	9.2	2.0	1.7	1.83	
CARBON MONOXIDE								IHSTRUMENTAL NONDISPERSIVE INFRA-RED							8-HR-AVG					MG/CU METER (25 C)
42101-11-Z-05																				
73-01		1982	0	0	0.6	0.6	1.0	1.7	2.4	3.1	4.3	5.2	6.6		9.1	8.2				
73-02		2114	0	0	0.6	0.6	0.9	1.3	1.7	2.3	3.6	4.2	5.5		6.9	6.1				
73-03		2	0	0	0.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3		2.3	0.0				

Figure 2.3.2.b Quarterly frequency distribution report

YEARLY REPORT BY QUARTERS

General Description

This report lists the site description and selected summary information for the year and for the individual quarters. The site description is repeated at the top of each page, followed by the data heading and data for each pollutant-year selected. The site description gives the geographical information necessary to locate the site. Below the data heading, the codes and names are given for the pollutant, the sampling and analysis methods, the sampling interval, and the standard units in which the data are printed. The data items include: the year of the data; the percent of observations for continuous data; the minimum detectable limit for the method; the arithmetic mean, arithmetic standard deviation, minimum observation, and maximum observation for the year; and the number of observations and arithmetic mean for each quarter.

The retrieval and print options, which are based on summary criteria, are: (1) print all data which meet other selection criteria but do not print quarterly and yearly statistics which do not meet the summary criteria, (2) print all data which meet other selection criteria and flag the statistics when summary criteria are not met, or (3) print only data which fail the summary criteria with flags on the data.

Retrievals Available

The report may be retrieved based on the following selection criteria: nation, state, area, site, agency, project, pollutant, method, interval, begin year, end year, AQCR, and county.

Most of the combinations of the above selection criteria are valid but the following selections are invalid: (1) area or county without state, (2) site without state/area, (3) project without agency, and (4) method without pollutant.

Sorts Available

This report may be sorted in ascending (default) or descending order by the following options: state, area, site, agency, project, AQCR, pollutant, method, units, interval, year, pollutant value, and county code. For this report, the pollutant value sort is on the yearly maximum observed value. Any number of sort options can be specified in any desired order but certain sort combinations would produce a confusing report.

Sample Report

Figure 2.3.2.c shows a Yearly Report by Quarters for particulate, carbon monoxide, sulfur dioxide, and ozone for a site in Providence, Rhode Island.

81-05-22 NATIONAL AEROMETRIC DATA BANK PAGE 41-0001
YEARLY REPORT BY QUARTERS
STATE (41): RHODE ISLAND

SITECODE: 410300005
AGENCY/PROJECT: F01
AGENCY TYPE: STATE
CITY POPULATION: 179,213
AQCR POPULATION: 1,645,380
EPA-REGION: 1
SUPPORTING AGENCY: RHODE ISLAND DEPARTMENT OF HEALTH
COMMENTS: PROVIDENCE STATION B

LOCATION: PROVIDENCE
COUNTY (0320): PROVIDENCE CO
SITE ADDR: STATE OFFICE BUILDING
STATION TYPE (11): CENTER CITY - INDUSTRIAL
AQCR (120): METROPOLITAN PROVIDENCE
SMSA (6480): PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS

LATITUDE: 41 D. 49 M. 54 S. N
LONGITUDE: 71 D. 24 M. 56 S. W
UTM ZONE: 19
UTM NORTHING: 4633700
UTM EASTING: 00299400
ELEVATION ABOVE GROUND: 050 FT.
ELEVATION ABOVE MSL: 0100 FT.
DIFF. GMT: WEST 05 HOURS

YEAR	POLLUTANT / POLL-METH CODE / METHOD / INTERVAL & UNITS	REP ORG	% OBS	MIN DETEC LEVEL	YEARLY ARITHMETIC MEAN	YEARLY ARITHMETIC STD DEV	EXTREMES MIN OBS	EXTREMES MAX OBS	1ST QUARTER NUM OBS	1ST QUARTER ARIT MEAN	2ND QUARTER NUM OBS	2ND QUARTER ARIT MEAN	3RD QUARTER NUM OBS	3RD QUARTER ARIT MEAN	4TH QUARTER NUM OBS	4TH QUARTER ARIT MEAN
72	PARTICULATE 1110191 HI-VOL GRAVIMETRIC 24-HOUR UG/CU METER (25 C)			1.	64	34.	15.	322.	78	85	90	60	90	56	81	56
73	PARTICULATE 1110191 HI-VOL GRAVIMETRIC 24-HOUR UG/CU METER (25 C)			1.	58	30.	21.	138.	16	72	14	48	13	58	8	47
74	PARTICULATE 1110191 HI-VOL GRAVIMETRIC 24-HOUR UG/CU METER (25 C)			1.	70	32.	23.	157.	8	85	9	72	11	70	13	58
72	CARBON MONOXIDE 4210111 INSTRUMENTAL NONDISPERSIVE INFRA-RED 1-HOUR MG/CU METER (25 C)		93	0.6	2.	1.8	0.6	17.8	1962	3.	1806	2.	2193	2.	2208	2.
73	CARBON MONOXIDE 4210111 INSTRUMENTAL NONDISPERSIVE INFRA-RED 1-HOUR MG/CU METER (25 C)		47	0.6	2.*	1.4*	0.3	19.6	1998	2.	2128	2.				
72	SULFUR DIOXIDE 4240111 INSTRUMENTAL WEST-GAEKE COLORIMETRIC 1-HOUR UG/CU METER (25 C)		86	26.	59	71.	13.	746.	1989	82	1589	38*	1974	25	2033	86
73	SULFUR DIOXIDE 4240111 INSTRUMENTAL WEST-GAEKE COLORIMETRIC 1-HOUR UG/CU METER (25 C)		85	26.	98	104.	13.	956.	1682	126	1982	65	1930	71	1877	136

"*" DENOTES A VALUE DERIVED FROM DATA WHICH DO NOT MEET SAROAD SUMMARIZATION CRITERIA OF OAQPS GUIDELINE 1.2-040, VOL 3, SEC 2.3.0

Figure 2.3.2.c Yearly report by quarters

STANDARD VIOLATION SUMMARY AND SELECT CARD GENERATION

General Description

This report produces a list of site-pollutants that have reported violations of a National Ambient Air Quality Standard (NAAQS) and punches a standard SAROAD select card to retrieve these data from the summary files or the raw data files. The program selects the data from the summary files that meet the selection criteria, checks the annual mean for long term standards or the short term violation counts, and lists the site-pollutant-years that violated the standard. The list begins a new page for each state; lists the site code, agency/project codes, pollutant-method codes, interval codes, and year; and gives the total number of violations by State.

Retrievals Available

The report is generated from data that satisfy the following selection criteria: State, area, site, agency, project, pollutant, method, interval, begin year, end year, AQCR, and county.

Sorts Available

The standard sort order for this report is: State, area, site, agency, project, pollutant, method, interval, and year.

Sample Report

Figure 2.3.2.d is an example of the report for particulate for Alaska for 1976.

81/04/09 N A T I O N A L A E R O M E T R I C D A T A B A N K PAGE 1

ITEM EXCEEDING NATIONAL AMBIENT AIR QUALITY STANDARDS

STATE--SITE CODE	AG/ PRJ	POL-MTH CODE	INT CODE	YEAR
020040003	P01	1110191	7	76
020040005	L01	1110191	7	76
020040006	L01	1110191	7	76
020040009	I01	1110191	7	76
020060004	I03	1110191	7	76
020160001	P01	1110191	7	76
020160002	D05	1110191	7	76
020160010	F01	1110191	7	76
020160011	G01	1110191	7	76
020180004	G03	1110191	7	76
020180007	G02	1110191	7	76
020195001	F02	1110191	7	76
020200002	F01	1110191	7	76
020230001	I01	1110191	7	76
020230002	I01	1110191	7	76
020240002	I01	1110191	7	76
020280002	F02	1110191	7	76
020380002	F03	1110191	7	76
020480001	F01	1110191	7	76

TOTAL NUMBER ITEMS EXCEEDING STANDARD 19

@BREPT PRINT$

Figure 2.3.2.d Standards Violation Summary

TREND PLOTTING

General Description

This report produces a listing of data and/or a plot of the specific data for one of five possible options. The possible options include: (1) highest 8-hour CO average/week/year, (2) highest 24-hour SO_2 average/week/year, (3) monthly average for any pollutant, (4) yearly average for any pollutant, and (5) percent of days/time period that the station is in violation of the 24-hour SO_2 standard.

Based on the report option and select cards, the program retrieves the data, performs necessary calculations, produces the data listing, and produces a plot or stores the plot for future printing. The data listing includes a heading that specifies option utilized; pollutant, method, and interval names; the units of measure; and a data listing that contains the State name, site code, site location, and actual air quality data that varies for each option. For option 3, the data listing would include the monthly average.

The plot is produced by a standard 132 character line printer and includes a heading with the same information as the heading for the data report and a plot. The plot is created utilizing concentration as the x-axis and date as the y-axis. The number of years per page is based on the option selected. The concentration is automatically scaled utilizing the range of pollutant concentrations.

Retrievals Available

The report may be retrieved on the following selection criteria: option, State, area, site, agency/project code, pollutant code, method code, interval code, begin date, and end date.

Sorts Available

The report is sorted so that all data listings are printed and then all plots are printed. Within data listings and plots the standard sort sequence is: select card/pollutant/method/interval/State/area/site/agency/project/date. A page break occurs at select card/pollutant/method/interval levels.

Sample Report

Figure 2.3.2.e is an example of data report for option 3 and Figure 2.3.2.f is an example of the plot for option 3.

RUN DATE: 05/06/81 TREND REPORT FOR SULFUR DIOXIDE PAGE 1

METHOD: INSTRUMENTAL COULOMETRIC UNITS: UG/CU METER (25 C)

PRI. STD./SEC. STD. 9999.899/9999.899

MONTHLY AVERAGE FOR 1-HOUR

STATE NAME	SITE CODE	SITE LOCATION	YEAR 19--	MON	NO. OF VALID VALUES	NO. OF VALUE EXCEEDING STANDARDS PRI.	SEC.	HIGHEST 1-HOUR VALUE	SECOND HIGHEST 1-HOUR VALUE	MONTHLY ARITH. MEAN
ARIZONA	03 0300001 F02	GILA CO	75	JAN	710	0	0	3500	2550	95
				FEB	637	0	0	3140	2045	86
				MAR	722	0	0	3250	2620	76
				APR	592	0	0	1450	1125	47
				MAY	735	0	0	3000	2200	92
				JUN	671	0	0	3175	2575	69
				JUL	529	0	0	3750	2475	-
				AUG	726	0	0	4525	3475	117
				SEP	553	0	0	3550	3125	137
				OCT	515	0	0	5100	4300	-
				NOV	688	0	0	3350	2175	112
				DEC	632	0	0	2250	1900	100
			76	JAN	692	0	0	3200	3075	148
				FEB	576	0	0	3000	1550	72
				MAR	730	0	0	2575	1525	70
				APR	717	0	0	2850	2625	52
				MAY	737	0	0	3425	2525	5[illegible]
				JUN	689	0	0	2550	2550	1[illegible]
				JUL	743	0	0	3450	2500	1[illegible]
				AUG	739	0	0	1950	1900	18[illegible]
				SEP	716	0	0	2450	2000	80
				OCT	417	0	0	3600	1800	-
				NOV	710	0	0	5225	4875	182
				DEC	535	0	0	4575	4025	-

Figure 2.3.2.e Trend Plot Data Listing

```
                                    TREND PLOT FOR SULFUR DIOXIDE                                                    PAGE    1
          METHOD: INSTRUMENTAL  COULOMETRIC                                UNITS: UG/CU METER (25 C)
                                                                           PRIMARY/SECONDARY STD: ******/******
                                    MONTHLY AVERAGE FOR  1-HOUR
STATE NAME: ARIZONA                 SITE CODE: 030300001F02      SITE LOCATION: GILA CO

          YR/MO    0.      200.      400.      600.      800.      1000.     1200.     1400.     1600.     1800.     2000.
          7501.   I00000****I*********I*********I*********I*********I*********I*********I*********I*********I*********I
             2.   IMMMO                                                                                                  I
             3.   IMMMM                                                                                                  I
             4.   IMO                                                                                                    I
             5.   IMMMMM                                                                                                 I
             6.   IMMO                                                                                                   I
             7.   I                                                                                                      I
             8.   IMMMMMM                                                                                                I
             9.   IMMMMMMM                                                                                               I
            10.   I                                                                                                      I
            11.   IMMMMMM                                                                                                I
            12.   IMMMMO                                                                                                 I
          7601.   IMMMMMMO                                                                                               I
             2.   IMMMM                                                                                                  I
             3.   IMMO                                                                                                   I
             4.   IMMM                                                                                                   I
             5.   IMMM                                                                                                   I
             6.   IMMMMO                                                                                                 I
             7.   IMMMMMM                                                                                                I
             8.   IMMMMMMMMO                                                                                              I
             9.   IMMMO                                                                                                  I
            10.   I                                                                                                      I
            11.   IMMMMMMMMO                                                                                              I
          7612.   I*********I*********I*********I*********I*********I*********I*********I*********I*********I*********I
          YR/MO    0.      200.      400.      600.      800.      1000.     1200.     1400.     1600.     1800.     2000.

$Z:EOF
$EOF IGNORED - IN CONTROL MODE

$FREE  NA266-PLOT.

$BRKPT  PRINT*
```

Figure 2.3.2.f Trend Plot of Monthly Averages

QUICK LOOK REPORT

General Description

This report lists a one line summary for each site pollutant year combination that satisfies the retrieval criteria. Each page begins with header information that includes the pollutant name, the state, the years selected, and the list of collection and analysis methods. The content of the one line summary varies for each pollutant and is designed to list the annual summary statistics that relate to the National Ambient Air Quality Standards. All summary lines contain the 12-digit site ID, city and county names where the site is located, the site address, the year for the data, and the number of observations. The summary statistics for particulates include: maximum and second maximum 24-hour values, the number of values > 260 and > 150, the arithmetic mean, geometric mean, and geometric standard deviation.

Retrievals Available

The reports are generated for total suspended particulate, sulfur dioxide, carbon monoxide, hydrocarbons, nitrogen dioxide, oxidants, and ozone. Other selection criteria include: EPA Regional Office, State, begin year and end year.

Sorts Available

No optional sorts are available. The data are sorted in ascending order first by the 12-digit site ID and then by year for each site.

Sample Report

Figure 2.3.2.g is an example of the report for particulate, and Figure 2.3.2.h is an example of the report for sulfur dioxide.

05/21/81 NATIONAL AEROMETRIC DATA BANK PAGE 1

QUICK LOOK REPORT

SUSPENDED PARTICULATE MATTER (UG/M3) ALABAMA 78-78

METHOD: GRAVIMETRIC, 24-HOUR HI-VOLUME FILTER SAMPLE-91

SITE ID	LOCATION	COUNTY	ADDRESS	YR	REP ORG	#OBS	MAX 24-HR 1ST	MAX 24-HR 2ND	OBS> 260	OBS> 150	ARIT MEAN	GEO MEAN	GSD
010060001F01	ALEXANDER CITY	TALLAPOOSA CO	ALEX CITY JR COL	78		51	85	79			42	38	1.5
010100001F01	ANDALUSIA	COVINGTON CO	300 WEST WATSON	78		47	102	100			51	47	1.6
010120001F01	ANNISTON	CALHOUN CO	309 E 8TH ST	78		52	134	133			71	65	1.6
010120002F01	ANNISTON	CALHOUN CO	BLUE MTN POST OF	78		49	135	120			56	50	1.6
010160001G01	ATHENS	LIMESTONE CO	ELM STREET	78		59	154	151		2	65	56	1.8
010160003G01	ATHENS	LIMESTONE CO	HOBBS STREET	78		60	156	139		1	61	53	1.9
010250003F01	BALDWIN CO	BALDWIN CO	RACINE&MICHICAN	78		18	100	83			51?	45?	1.8
010340001G01	BESSEMER	JEFFERSON CO	1800 FIRST AVE	78		72	204	195		14	106	97	1.6
010380003G01	BIRMINGHAM	JEFFERSON CO	UAB, NASN	78		47	235	179		3	89	82	1.5
010380005G02	BIRMINGHAM	JEFFERSON CO	2817 30TH AVE N	78		321	453	450	30	131	150	130	1.7
010380010G01	BIRMINGHAM	JEFFERSON CO	WOODLAWN, 2ND AV	78		56	229	192		3	88	81	1.5
010380011G01	BIRMINGHAM	JEFFERSON CO	WEST END, STEINE	78		50	246	181		4	85	76	1.6
010380012G01	BIRMINGHAM	JEFFERSON CO	DOWNTOWN, POST O	78		314	247	233		31	99	92	1.5
010380021G02	BIRMINGHAM	JEFFERSON CO	ENSLEY, 19TH STR	78		52	192	133		1	84	79	1.5
010380022G02	BIRMINGHAM	JEFFERSON CO	EAST THOMAS, WER	78		84	244	225		9	83	70	1.8
010440001F01	BREWTON	ESCAMBIA CO	204 SEWELL ST	78		51	117	82			47	43	1.6
010460001N01	BRIDGEPORT	JACKSON CO		78		14	106	91			57?	54?	1.4
010570002G01	CENTER POINT	JEFFERSON CO	942 HUFFMAN ROAD	78		50	238	175		2	70	64	1.5
010620002G01	CHICKASAW	MOBILE CO	YOUNCE HARDWARE	78		60	128	125			66	60	1.6
010640002F01	CHILDERSBURG	TALLADEGA CO	COMMUNITY CENTER	78		53	169	120		1	65	57	1.7
010680001F02	CHOCTAW CO	CHOCTAW CO	PENNINDTON,ALA.	78		43	79	75			40	37	1.5
010700002F03	CLANTON	CHILTON CO	1ST AVE & 5TH AV	78		48	91	86			55	51	1.5
010800027N02	COLBERT CO	COLBERT CO	TVA	78		61	114	87			46	42	1.6
010800037N02	COLBERT CO	COLBERT CO	TVA NO 10	78		61	125	74			40	36	1.6
010800039N02	COLBERT CO	COLBERT CO	COLBERT CO.,ALA.	78		59	125	120			51	47	1.6
010920002G01	CULLMAN	CULLMAN CO	ROOF OF CITY HAL	78		47	141	127			66	60	1.6
011040003G01	DECATUR	MORGAN CO	HIGHWAY 20 WEST	78		53	174	166		3	66	59	1.6
011040007G02	DECATUR	MORGAN CO	FIRE STA #2	78		59	132	105			60	55	1.5
011040008G01	DECATUR	MORGAN CO		78		51	210	144		1	74?	66?	1.6
011060002F01	DEMOPOLIS	MARENGO CO	S CEDAR ST	78		35	125	103			63?	58?	1.5
011080002F02	DOTHAN	HOUSTON CO		78		45	139	118			62	57	1.6
011220001F01	EUFAULA	BARBOUR CO	HOLIDAY INN	78		56	156	123		1	52	48	1.5
011260001F01	EVERGREEN	CONECUH CO	CO HEALTH DEPT	78		54	79	54			36	33	1.6
011300003G02	FAIRFIELD	JEFFERSON CO	FAIRFIELD, PFD	78		272	242	208		7	84	78	1.5
011400003F01	FLORENCE	LAUDERDALE CO	610 W COLLEGE ST	78		67	157	147		1	70?	64?	1.5
011440002F01	FORT PAYNE	DE KALB CO		78		56	135	127			65	58	1.6
011480001F01	GADSDEN	ETOWAH CO	109 S.8TH	78		88	165	132		1	62	57	1.5
011480002F01	GADSDEN	ETOWAH CO	FIRE DEPT GOLDEN	78		3	37	27			27?	26?	1.5
011480003F02	GADSDEN	ETOWAH CO	WALNUT PARK FIRE	78		96	199	192		6	85	77	1.6

? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Figure 2.3.2.g Quick look report

05/21/81 NATIONAL AEROMETRIC DATA BANK PAGE 4
QUICK LOOK REPORT

SULFUR DIOXIDE (UG/M3) ALABAMA 78-78

METHODS: HOURLY VALUES WEST-GAEKE COLORIMETRIC-11, CONDUCTIMETRIC-13, COULOMETRIC-14, FLAME PHOTOMETRIC-16, HYDROGEN PEROXIDE NAOH TITRATION-18, CATALYST FLAME PHOTOMETRIC-19, PULSED FLUORESCENT-20, SECOND DERIVATIVE SPECTROSCOPY-21, CONDUCTANCE ASARCO-22, ULTRA VIOLET STIMULATED FLUORESCENCE-23.SEQUENTIAL CONDUCTIMETRIC-33.
24-HOUR GAS BUBBLERS PARAROSANILINE-SULFAMIC ACID-91, PARAROSANILINE SULFAMIC ACID TEMPERATURE CONTROLLED-97

SITE ID	LOCATION	COUNTY	ADDRESS	YR	REP ORG	#OBS	MAX 24-HR 1ST	MAX 24-HR 2ND	OBS> 365	MAX 3-HR 1ST	MAX 3-HR 2ND	OBS> 1300	MAX 1-HR 1ST	MAX 1-HR 2ND	ARIT MEAN	MTH
010380005G02	BIRMINGHAM	JEFFERSON CO	2817 30TH AVE N	78		19	55	42							28?	91
010380012G01	BIRMINGHAM	JEFFERSON CO	DOWNTOWN, POST O	78		19	47	45							22?	91
010680001F02	CHOCTAW CO	CHOCTAW CO	PENNINDTON,ALA.	78		2	10	8							9?	91
010800027N02	COLBERT CO	COLBERT CO	TVA	78		8733	224	171		900	594		1441	891	16	14
010800035N02	COLBERT CO	COLBERT CO	TVA	78		8722	218	176		1057	664		1520	1048	14	14
010300036N02	COLBERT CO	COLBERT CO	TVA NO 9	78		8712	206	186		1083	1013		2253	1651	25	14
010800037N02	COLBERT CO	COLBERT CO	TVA NO 10	78		8736	213	190		926	856		1127	1074	18	14
010800039N02	COLBERT CO	COLBERT CO	COLBERT CO..ALA.	78		8606	259	249		1703	1397	2	2148	1546	23	14
011040007G02	DECATUR	MORGAN CO	FIRE STA #2	78		6737	151	141		301	297		459	328	29	14
011080002F02	DOTHAN	HOUSTON CO		78		2	18	5							12?	91
011160002J02	ENTERPRISE	COFFEE CO	RT.1 BOX 94	78		30	20	3							3?	97
011300003G02	FAIRFIELD	JEFFERSON CO	FAIRFIELD, PFD	78		4516	89	70		273	190		341	312	15?	14
011300003G02	FAIRFIELD	JEFFERSON CO	FAIRFIELD, PFD	78		18	47	42							14?	91
011860006H01	HUNTSVILLE	MADISON CO	NOAA STATION (JE	78		8	13	13							5?	91
011860014H01	HUNTSVILLE	MADISON CO	AIR POLLUTION CO	78		18	45	21							7?	91
011860016H01	HUNTSVILLE	MADISON CO	VAN BRAUN CIVIC	78		3	13	5							7?	91
011920002N02	JACKSON CO	JACKSON CO	TVA	78		2676	174	173		1100	576		1651	1179	20?	14
011920004N02	JACKSON CO	JACKSON CO	TVA	78		2677	136	123		891	777		1703	1048	17?	14
011920006N02	JACKSON CO	JACKSON CO	TVA	78		2682	196	136		786	594		1127	891	13?	14
011920019N02	JACKSON CO	JACKSON CO	TVA	78		2674	117	105		664	620		1048	734	13?	14
011920020N02	JACKSON CO	JACKSON CO	TVA	78		2650	257	127		1074	603		1205	1153	14?	14
011920021N02	JACKSON CO	JACKSON CO	TVA	78		2692	152	125		777	655		943	812	14?	14
011920023F02	JACKSON CO	JACKSON CO	RT 2 BOX 332A (F	78		2987	194	160		786	576		1179	812	36?	14
011920026N02	JACKSON CO	JACKSON CO	TVA	78		2647	343	303		1266	930		2044	1624	16?	14
011920027N02	JACKSON CO	JACKSON CO	TVA	78		2677	105	101		533	507		1179	838	12?	14
011920028N02	JACKSON CO	JACKSON CO	TVA	78		2438	81	76		297	227		341	288	11?	14
011920029N02	JACKSON CO	JACKSON CO	TVA	78		2560	62	61		253	236		367	288	8?	14
011920031N02	JACKSON CO	JACKSON CO	TVA	78		2610	191	163		1022	480		1572	1310	11?	14
011920035N02	JACKSON CO	JACKSON CO	JACKSON CO. ,ALA	78		2671	99	71		638	402		891	629	11?	14
011920036N02	JACKSON CO	JACKSON CO	JACKSON , ALA.	78		2653	138	130		707	629		1022	865	11?	14
011920037N02	JACKSON CO	JACKSON CO	JACKSON CO., ALA	78		2675	121	80		358	358		603	524	10?	14
011920038F02	JACKSON CO	JACKSON CO	FLATROCK	78		3342	314	264		1284	969		1755	1703	41?	14
012080001N02	LAUDERDALE CO	LAUDERDALE CO	TVA NO 1	78		8709	486	401	2	1179	1153		2122	2070	25	14
012080005N02	LAUDERDALE CO	LAUDERDALE CO	TVA	78		8735	166	103		943	550		1231	996	15	14
012080006N02	LAUDERDALE CO	LAUDERDALE CO	TVA	78		8734	156	103		681	594		1389	891	16	14
012080007N02	LAUDERDALE CO	LAUDERDALE CO	TVA NO 7	78		8714	310	254		1057	821		1572	1493	24	14
012380008G02	MOBILE	MOBILE CO		78		7347	93	83		190	169		262	223	14	14
012400024G02	MOBILE CO	MOBILE CO	SALEO-CAINS SERV	78		7351	228	221		1776	1322	2	2154	1776	38	14
012400025G02	MOBILE CO	MOBILE CO	THEODORE IND PK	78		6546	58	49		131	121		183	136	7?	14

? INDICATES THAT THE MEAN DOES NOT SATISFY SUMMARY CRITERIA

Figure 2.3.2.h Quick look report

YEARLY OR QUARTERLY SUMMARY REPORT

General Description

This report lists yearly or quarterly summary information for all data that satisfy the retrieval criteria. The data are listed by pollutant method with each page containing data for a separate State and time period. Within State, the data are listed by AQCR and within AQCR by site. For each site, the data items include: city name; site code; agency project code; the number of observations; the minimum and maximum observations; the 10, 30, 50, 70, 90, 95, 99 percentiles; the arithmetic mean and standard deviation; and the geometric mean and standard deviation.

Retrievals Available

The report is produced utilizing the following selection criteria: (1) pollutant, (2) year or quarter and (3) geographically for the nation or individual States.

Sorts Available

The standard sort is: pollutant, State, AQCR, and site.

Sample Report

Figure 2.3.2.i shows the yearly summary report for particulate for 1978 for Alabama.

81/06/15 NATIONAL AEROMETRIC DATA BANK PAGE 1

POLLUTANT: PARTICULATE

METHOD: HI-VOL GRAVIMETRIC INTERVAL: 24-HOUR UNITS: UG/CU METER (25 C)

STATE (01): ALABAMA

YEAR: 1978

AQCR NUMBER AND NAME / AREA SITE NO	AG/ PROJ	REP ORG	NO OBS	MIN OBS	PERCENTILES 10	30	50	70	90	95	99	MAX OBS	ARITHMETIC MEAN	STD DEV	GEOMETRIC MEAN	STD DEV
001 ALABAMA AND TOMBIGBEE RIVERS																
CHOCTAW CO																
001	F02		43	16.	23.	30.	37.	49.	60.	64.	79.	79.	40.	15.28	37.13	1.48
DEMOPOLIS																
002	F01		35	26.	32.	44.	64.	77.	96.	103.	125.	125.				
EVERGREEN																
001	F01		54	6.	20.	29.	35.	43.	53.	54.	79.	79.	36.	13.35	33.33	1.56
SELMA																
002	F01		14	13.	20.	37.	44.	52.	109.	123.	123.	123.				
002 COLUMBUS-PHENIX CITY																
MONTGOMERY																
007	F01		39	8.	14.	33.	49.	66.	77.	80.	92.	92.	49.	22.87	41.88	1.88
008	F01		37	11.	25.	45.	55.	68.	104.	107.	128.	128.	57.	27.55	50.37	1.71
009	F01		42	18.	34.	45.	52.	66.	81.	97.	195.	195.	58.	29.00	52.33	1.55
OPELIKA																
001	F01		58	12.	21.	33.	43.	53.	70.	86.	101.	101.	44.	19.60	39.91	1.61
PHENIX CITY																
001	F01		50	20.	31.	47.	58.	77.	87.	94.	117.	117.	62.	22.23	57.75	1.49
TROY																
002	F01		12	24.	32.	41.	58.	82.	85.	87.	87.	87.				
003 EAST ALABAMA																
ALEXANDER CITY																
001	F01		51	12.	22.	32.	40.	50.	60.	75.	85.	85.	42.	16.93	38.27	1.54
ANNISTON																
001	F01		52	16.	37.	54.	66.	87.	108.	123.	134.	134.	71.	28.33	64.88	1.56
002	F01		49	14.	29.	36.	51.	68.	85.	102.	135.	135.	56.	25.97	49.84	1.63
CHILDERSBURG																
002	F01		53	17.	29.	44.	61.	78.	102.	117.	169.	169.	65.	30.76	57.48	1.67
GADSDEN																
001	F01		88	18.	34.	45.	58.	75.	92.	97.	165.	165.	62.	24.74	57.36	1.50
002	F01		3	17.	17.	17.	27.	37.	37.	37.	37.	37.				
003	F02		96	21.	43.	56.	81.	103.	134.	160.	199.	199.	85.	38.01	77.13	1.60
005	F02		95	21.	35.	48.	67.	87.	118.	136.	176.	176.	72.	32.92	65.12	1.61
TALLADEGA																
002	F01		27	20.	34.	52.	68.	96.	139.	142.	144.	144.				
004 METROPOLITAN BIRMINGHAM																
BESSEMER																
001	G01		72	28.	54.	76.	103.	123.	167.	185.	204.	204.	106.	43.14	97.20	1.56
BIRMINGHAM																
003	G01		47	32.	46.	70.	85.	95.	147.	174.	235.	235.	89.	40.29	81.67	1.53
005	G02		321	27.	64.	100.	134.	176.	256.	319.	386.	453.	150.	80.56	130.17	1.71
010	G01		56	37.	42.	66.	85.	100.	132.	168.	229.	229.	88.	37.63	81.04	1.51
011	G01		50	27.	44.	61.	71.	97.	141.	165.	246.	246.	85.	42.14	76.50	1.59
012	G01		314	30.	58.	79.	92.	111.	150.	166.	212.	247.	99.	37.09	92.45	1.45

Figure 2.3.2.i Yearly summary report

SUMMARY OF RUNNING AVERAGES

General Description

This report utilizes raw data to compute running averages that can vary from a 4 to a 24 hour averaging period and lists from 2 to 20 maximum running averages as well as producing summary statistics. The report lists the site identification code, the year, the pollutant, up to 20 maximum values ranked in decreasing order, the end hour of the average, and the summary statistics for the running averages such as: number, minimum, percentiles such as 10, 20, 30...90,95,99, maximum, arithmetic mean and standard deviation, and geometric mean and standard deviation.

Retrievals Available

The report is generated based on following selection criteria: (1) averaging period (4 to 24 hours), (2) number of maximum averages (2 to 20), and (3) State, area, site, pollutant, method, begin year, and end year.

Sorts Available

This report contains no optional sort capabilities.

Sample Report

Figure 2.3.2.j shows this report for nitrogen dioxide for a site in Alabama.

*****THE TOP 20 MAXIMUM RUNNING 04 HR. AVERAGE AND THEIR RANK FOR A GIVEN SITE, POLLUTANT, AND YEAR*****

ALABAMA
HUNTSVILLE
011860014H01

YEAR=1976

4260214071
NITROGEN DIOXIDE
INSTRUMENTAL CHEMILUMINESCENCE
UG/CU METER (25 C)

RANK	DAY	MONTH	HOUR	MAXIMUM VALUE
01	05	APR	22	311.
02	05	APR	23	285.
03	06	APR	00	259.
04	05	APR	21	237.
05	06	APR	01	229.
06	06	APR	02	195.
07	06	APR	08	189.
08	06	APR	03	183.
09	06	APR	09	180.
10	06	APR	07	180.
11	06	APR	04	169.
12	05	APR	20	168.
13	06	APR	05	160.
14	18	SEP	00	158.
15	07	MAR	22	158.
16	06	APR	06	158.
17	17	SEP	23	156.
18	07	MAR	23	154.
19	07	MAR	21	152.
20	08	MAR	00	150.

NUM	MIN	10	20	30	40	50	60	70	80	90	95	99	MAX	ARITHMETIC MEAN	ARITHMETIC STDEV	GEOMETRIC MEAN	GEOMETRIC STDEV
6225.	5.	6.	11.	15.	19.	25.	31.	41.	54.	74.	92.	128.	311.	34.	29.	23.58	2.20

Figure 2.3.2.j Summary of running averages

DESIGN VALUE PLOT

General Description

This interactive program retrieves raw data values as selected to create a plot on a TEKTRONIX graphics terminal. For interval 7, the daily values are utilized, and for intervals 1, X, Y, and 2, the daily maximum values of only valid days are utilized. After retrieval, the daily values or maximums are converted to standard units and ranked from smallest to largest. From this ranking of values, the probability that an observation is less than or equal to concentration C is calculated. This probability is F(x). The report produces a plot with concentration C as the scale on the x-axis and 1-F(x) as the scale on the y-axis. This plot is utilized to determine the design value for a given site.

Retrievals Available

The report will retrieve data and create a plot whenever the complete key is specified. This complete key includes: state, area, site, agency, project, pollutant, method, interval, start year, and end year.

Sorts Available

This report contains no option sort capabilities.

Sample Report

Figure 2.3.2.k demonstrates a plot for one site pollutant.

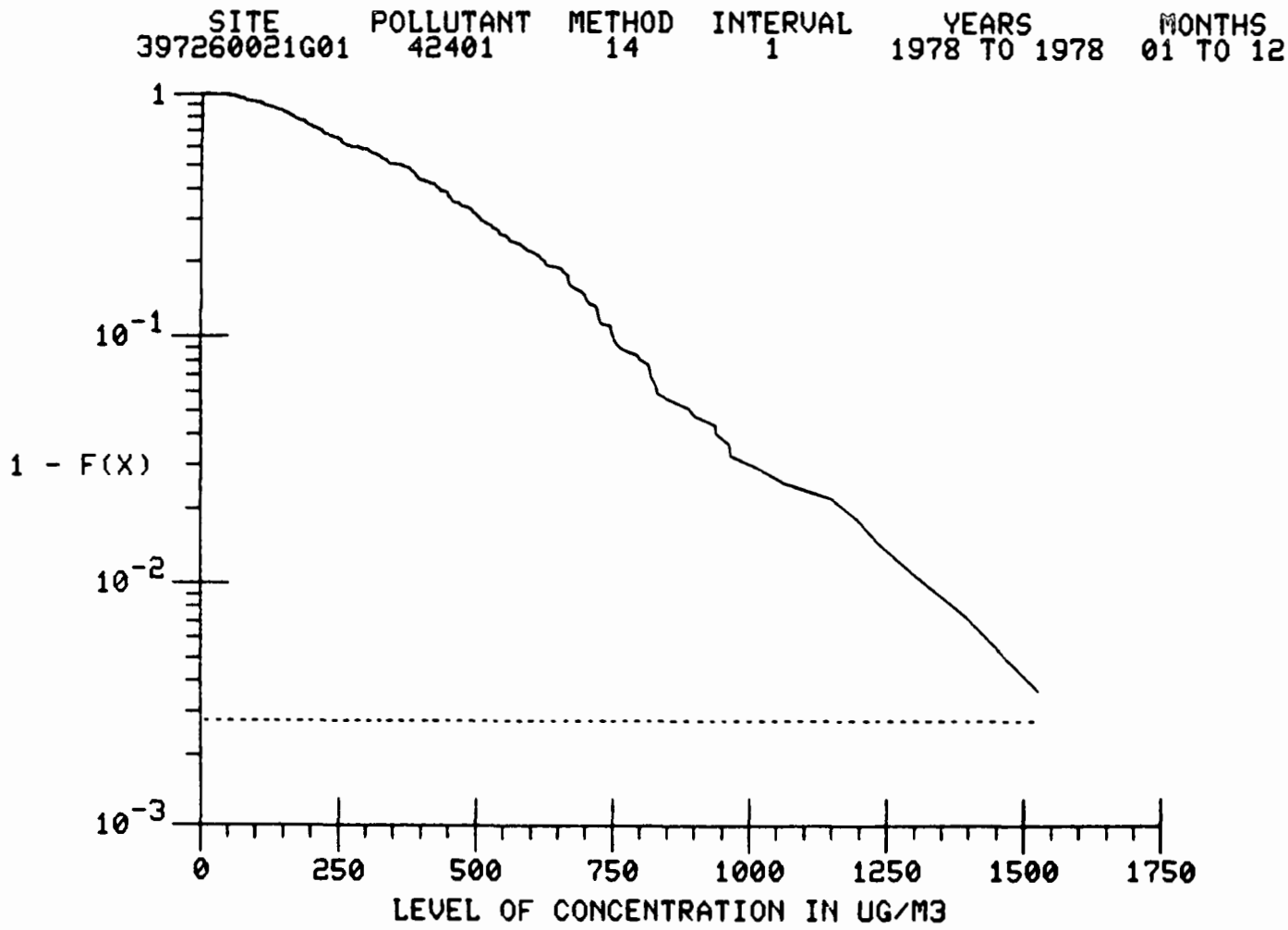


Figure 2.3.2.k Design Value Plot

SLAMS REPORT

General Description

As mentioned in Section 2.3.0, the SLAMS (State and Local Air Monitoring Station) Report is required as a result of the revised regulations for ambient air quality data. In 40 CFR, Part 58, Appendix F - Annual SLAMS Air Quality Information, this report is required to be submitted by State or local agencies to EPA by July 1 of each year for data collected during the period January 1 to December 31 of the previous year. Since many states elected to continue to report raw data for SLAMS, this report was developed to permit States to obtain a SLAMS report from SAROAD, approve it, and submit it as required. This capability will reduce the State reporting burden and produce a uniform SLAMS report for many states.

The SLAMS Report is generated from data on both the raw data files and the summary file. The report produces unique report formats for each criteria pollutant. The report formats for all pollutants have data items in common such as: site address, city name, county name, reporting organization, method of collection, number of observation, arithmetic or geometric means, and number of short term violations. These data values are included as one print format. Two other print formats are included. The first includes the number of observations in each of eight concentration intervals which are pollutant specific. The last format includes the yearly summary of precision and accuracy data based on a reporting organization level.

Retrievals Available

The report is generated for total suspended particulate, sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, and lead for a specific State and calendar year.

Sorts Available

No optional sorts are available. For a given state, data are sorted by pollutants, within pollutant by county, and within county by city.

Sample Report

Figure 2.3.2.1 shows the two report formats for total suspended particulate.

DATE: JUNE 12, 1981

STATE AND LOCAL AIR MONITORING REPORT
CREATED FROM NATIONAL AEROMETRIC DATA BANK

PAGE 2

SUSPENDED PARTICULATE UG/M3 CALIFORNIA 1980

METHOD: GRAVIMETRIC, 24-HOUR HI-VOLUME FILTER SAMPLE-91

SITE CODE AND ADDRESS	METH	REP ORG	NUMBER 24-HR OBS.	ANNUAL GEOMETRIC MEAN	24-HR VALUES > 260	24-HR VALUES > 150	24-HR VALUES 1ST MAX DATE	24-HR VALUES 2ND MAX DATE
FRESNO CO								
052800241I01 NORTH EAST COR SHAW AND MAPLE FRESNO	91		11	161?	3	6	356 12/17	277 11/29
052820002I01 OAKLAND & LASSEN 5 PTS (UC W SIDE FLD STA FRESNO CO	91		13	172?	3	8	364 11/29	343 10/24
HUMBOLDT CO								
052430002F01 825 6TH ST EUREKA	91		61	52			131 10/30	121 12/11
IMPERIAL CO								
050840001I01 815 MAIN ST. BRAWLEY CA. BRAWLEY	91		39	181	6	27	407 01/04	400 02/27
051000001I01 MARY AVE. & 5TH ST. CALEXICO, CA. CALEXICO	91		43	153	5	27	315 02/03	311 11/05
KERN CO								
050520003I01 1700 FLOWER ST. BOX 997 BAKERSFIELD CA. BAKERSFIELD	91		41	136?	5	17	434 12/17	343 12/11
051295001I01 POWERLINE RC RIDGECREST CHINA LAKE	91		55	66	2	4	526 03/22	271 03/24
053480001I03 NEAR CORNER OF CORCORAN & GARCES RDS KERN CO	91		49	76	1	8	278 11/29	260 12/17

Figure 2.3.2.1 SLAMS rep

DATE: JUNE 12, 1981

STATE AND LOCAL AIR MONITORING REPORT
CREATED FROM NATIONAL AEROMETRIC DATA BANK

PAGE 2

SUSPENDED PARTICULATE UG/M3 CALIFORNIA 1980

METHOD: GRAVIMETRIC, 24-HOUR HI-VOLUME FILTER SAMPLE-91

SITE CODE AND ADDRESS	METH	REP ORG	NUMBER OF 24-HOUR CONCENTRATIONS IN RANGES: 0 TO 65	66 TO 130	131 TO 195	196 TO 260	261 TO 325	326 TO 390	391 TO 455	OVER 455
FRESNO CO										
052800241I01 NORTH EAST COR SHAW AND MAPLE FRESNO	91			5	1	2	2	1		
052820002I01 OAKLAND & LASSEN S.PTS (UC W SIDE FLD STA FRESNO CO	91		1	3	3	3	1	2		
HUMBOLDT CO										
052480002F01 825 6TH ST EUREKA	91		42	18	1					
IMPERIAL CO										
050840001I01 815 MAIN ST. BRAWLEY CA. BRAWLEY	91			10	13	10	3	1	2	
051000001I01 MARY AVE. & 5TH ST. CALEXICO, CA. CALEXICO	91			11	18	9	5			
KERN CO										
050520003I01 1700 FLOWER ST. BOX 997 BAKERSFIELD CA. BAKERSFIELD	91		3	16	13	4	3	1	1	
051295001I01 POWERLINE RC RIDGECREST CHINA LAKE	91		24	27	2		1			1
053480001I03 NEAR CORNER OF CORCORAN & GARCES RDS KERN CO	91		16	22	8	2	1			

Figure 2.3.2.1 (continued) SLAMS report

VIOLATION DAY COUNT REPORT

General Description

This report lists short term standard violations at the individual sites and a summary of the violations for all selected sites for each year. The valid pollutants for this report include particulate, ozone, oxidant, carbon monoxide (1-hour and 8-hour running averages), and sulfur dioxide (24-hour, 3-hour block averages, and 24-hour block average). This report is limited to one pollutant per run with any number of years and all geographical selections except AQCR and county.

The individual site summary lists the pollutant, method, interval, units, and year for any site selected that has violations for the standard specified. For each violation, the report lists the date of violation, maximum value for the day, hour of occurance of maximum values, and the number of violations during the violation day. For hourly data, this is the number of hourly violations. The yearly site summary includes the number of violation days, number of valid days monitored, and the maximum value for the site.

The summary of violations for all selected sites is done by year for all years selected. This report lists the pollutant, method, interval, reporting units and year in the heading. The detailed report lists the date of violation, site identification for the highest violation for the day, site location name, the number of selected sites with violations on that date, the maximum value, and the hour of the maximum value. The final summary is the total number of violation days for the data selected.

Retrievals Available

The report may be retrieved based on the following selection criteria: nation, state, area, site, agency, project, pollutant, method, interval, begin date, and end date. Each retrieval is limited to one pollutant interval combination. This pollutant interval combination must be specified. The valid combinations are: 11101-7, 42401-7, 42401-X, 42401-Y, 44101-1, 44201-1, 42101-1, and 42101-Z.

Sorts Available

The order of the report is automatically controlled by the program. The report is sorted by year and within year the site level information is sorted by site code. After the site level information is printed, the yearly summary for all sites is printed.

Sample Report

Figure 2.3.2.m shows the site summary for a particulate site in Alaska in 1980. Figure 2.3.2.n shows the summary for particulate sites in Alaska in 1980.

PAGE : 6

NATIONAL AEROPETRIC DATA BANK

DATE: 10/29/81

SARDAD VIOLATION DAY COUNT REPORT

POLLUTANT: TOTAL SUSPENDED PARTICULAIES INTERVAL: 24 - HR

UNITS: MICROGRAMS PER CUBIC METER

POLLUTANT	METHOD	INTERVAL	YEAR	SITE	AREA	DATE OF VIOLATION	MAXIMUM VALUE	NUMBER OF VIOLATIONS PRIMARY	NUMBER OF VIOLATIONS SECONDARY
11101	91	7	80	02006C004I03	ANCHORAGE ED	04/09/80	183		1
						04/15/80	202		1
						04/21/80	169		1
						05/09/80	220		1
						08/25/80	202		1
						09/06/80	169		1
						10/12/80	155		1
						11/11/80	155		1

SUMMARY FOR SITE 02006C004I03 YEAR 80
****

TOTAL NUMBER OF VIOLATION DAYS	8
TOTAL NUMBER OF PRIMARY VIOLATIONS	0
TOTAL NUMBER OF SECONDARY VIOLATIONS	8
MAXIMUM VALUE FOR SITE	220

2.3.2.m Violation day count report

PAGE : 11 NATIONAL AEROMETRIC DATA BANK DATE: 10/29/81

SARDAD VIOLATION DAY COUNT REPORT

POLLUTANT: TOTAL SUSPENDED PARTICULATES INTERVAL: 24 - HR UNITS: MICROGRAMS PER CUBIC METER

YEARLY SUMMARY FOR YEAR 1980

DATE OF VIOLATION	SITE WITH HIGHEST VIOLATION	AREA	NUMBER OF SITES WITH VIOLATION DAY	MAXIMUM VALUE
04/03/80	020160015G01	FAIRBANKS	2	188
04/08/80	020160015G01	FAIRBANKS	1	176
04/09/80	020040005I01	ANCHORAGE	5	292
04/15/80	020060004I03	ANCHORAGE ED	3	202
04/21/80	020040003I01	ANCHORAGE	4	287
05/09/80	020040003I01	ANCHORAGE	5	392
05/15/80	020040020I01	ANCHORAGE	1	215
08/25/80	020060004I03	ANCHORAGE ED	1	202
09/06/80	020060004I03	ANCHORAGE ED	1	169
09/12/80	020160015G01	FAIRBANKS	1	326
10/12/80	020060004I03	ANCHORAGE ED	1	155
10/18/80	020160016G01	FAIRBANKS	5	526
10/24/80	020160016G01	FAIRBANKS	3	456
11/11/80	020040005I01	ANCHORAGE	5	264

****
TOTAL NUMBER OF VIOLATION DAYS 18
****

2.3.2.n Violation day count report

COMPLETENESS, PRECISION, AND ACCURACY REPORT

General Description

This report lists specific data items from the SAROAD site file, the NAMS site file, the air quality summary file, and the precision and accuracy data files for any selected site. The valid pollutants for this report include particulate, lead, carbon monoxide (1-hour and 8-hour running averages), sulfur dioxide (1-hour, 24-hour, 3-hour block averages, and 24-hour block averages), and ozone. The report lists data only for sites that are flagged as NAMS or SLAMS on the SAROAD site file.

The report lists the pollutant, sampling interval and state name in the heading. Whenever one of these changes, a new page begins. For a selected site-pollutant, the information retrieved from the SAROAD site file includes the monitor address, the city name, the county name, and the Standard Metropolitan Statistical Area (SMSA) Code. The information retrieved from the NAMS site file includes the urban area code and urban area name. The information retrieved from the air quality summary file is on a quarterly or yearly basis and includes the method code, the maximum value, the number of values greater than the primary and secondary standards, the number of values (number of valid days for ozone), and the percent of data reported. For 24-hour data, the percent of data reported is based on 15 values per quarter and 60 per year. The percent of data reported is not computed for running average records since this is a function of the completeness of the 1-hour data utilized to compute them. The information retrieved from the precision and accuracy data files is on a quarterly or yearly basis and includes the Reporting Organization Code, the lower and upper probability limits for precision, and the lower and upper probability limits for accuracy for level 2.

Retrievals Available

The report may be retrieved based on the following selection critria: site type (NAMS, SLAMS, or both), yearly or quarterly data, state, area, site, agency, project, pollutant, method, interval, begin date, and end date.

Sorts Available

The order of the report is always by interval and pollutant. After this sort, one of the following four sorts is performed: (1) state, area, site, agency, project, method, date; (2) state, county, area, site, agency, project, method, date; (3) urban area, state, area, site, agency, project, method, date; or (4) SMSA, state, county, area, site, agency, project, method, date.

Sample Report

Figure 2.3.2.0 shows the quarterly option for particulate for NAMS sites in Illinois sorted by urban area.

24-HOUR DATA *** NAMS ONLY ***
SUSPENDED PARTICULATE
ILLINOIS

NATIONAL AEROMETRIC DATA BANK
ENVIRONMENTAL PROTECTION AGENCY
SAROAD COMPLETENESS-PRECISION-ACCURACY

PAGE 1
NOV 19, 1981

URBAN CODE URBAN AREA
SMSA COUNTY CITY
SAROAD ID MONITOR ADDRESS

YEAR	QTR	METH	REP ORG	MAX VALUE (UG/M3)	VALS > STANDARD PRIMARY	VALS > STANDARD SECONDARY	COMPLETENESS VALS.	COMPLETENESS %	PROBABILITY LIMITS PRECISION LOWER	PRECISION UPPER	ACCURACY LOWER	ACCURACY UPPER
# 3 CHICAGO, ILL.-NORTHWESTERN IND.												
1600 COOK CO CHICAGO												
141220014H01 FARR DORMITORY 3300 S MICHIGAN AVE												
1981	1	91	002	162		1	8	53				
1981	2	91	002	134			13	87	-06	+16	-10	+00
1600 COOK CO CHICAGO												
141220022H01 WASHINGTON HIGH SCHOOL 3500 E 114TH ST												
1981	1	91	002	224		5	15	100				
1981	2	91	002	254		6	15	100	-08	+16	-10	+00
1600 COOK CO CHICAGO												
141220047H01 140 LAFAYEE												
1981	1	91	002	114			15	100				
1981	2	91	002	115			5	33	-08	+16	-10	+00
1600 DU PAGE CO ELMHURST												
142300001F01 POLICE STATION 118 SCHILLER												
1981	1	91	001	82			12	80	-17	+20	-15	+08
1981	2	91	001	137			13	87	-14	+26	-15	+18
1600 COOK CO LYONS												
144460001G01 4043 JOLIET AVE.												
1981	2	91	003	161		2	5	33	-26	+05		
5 SITES FOR URBAN AREA 3												
# 10 ST. LOUIS, MO.-ILL.												
7140 ST CLAIR CO EAST ST LOUIS												
141120010F01 13TH & TUDOR PAPS SITE												
1981	1	91	001	231		5	15	100	-17	+20	-15	+08
1981	2	91	001	237		1	15	100	-14	+26	-15	+18

2.3.2.o Completeness, precision and accuracy report

MAXIMUM VALUE REPORT

General Description

This report lists the five maximum values for each quarter or the ten maximum values for each year for the site-pollutants selected. In addition to the maximum values, the program will optionally list the date and time of occurrence for the maximum values. This report will only select data for pollutants that have ambient air quality standards, and the maximum values relate directly to the form of the standard. For example, for ozone, the maximum values represent valid daily maximum values that are utilized to compare to the standard rather than hourly maximums.

In addition to the maximum values, the report lists the number of observations, the number of values exceeding the standard, and probability limits for precision and accuracy data. This report also allows the user to vary the magnitude of the national ambient air quality standard utilized to count exceedances.

This report is designed for displaying maximum values for validation. For this reason only one year of data can be retrieved per report.

Retrievals Available

This report is generated from data that satisfy the following selection criteria: (1) geographical selection limited to the Nation, EPA Region, or individual States; (2) pollutant selection limited to particulate, 24-hour; carbon monoxide - 1-hour and 8-hour daily maximum;

sulfur dioxide - 1-hour, 24-hour, 24-hour average,and 3-hour average; nitrogen dioxide - 1-hour and 24-hour; ozone - 1-hour daily maximum; and lead - 24-hour and composite; and (3) time selection limited to one year of data and the yearly or quarterly report.

Sorts Available

This report utilizes the standard sort (State, area, site, agency, project) for the default and permits a sort by county as the only option.

Sample Report

Figure 2.3.2.p shows a quarterly maximum value report for 1981 for ozone for several sites in Connecticut.

OZONE
CONNECTICUT

ENVIRONMENTAL PROTECTION AGENCY
QUARTERLY SAROAD MAXIMUM VALUES REPORT, 1981

STANDARD USED .12 PPM

PAGE 1
JUL 08, 1982

SITE CODE	CITY NAME / COUNTY NAME	METH	QTR	MAXIMUM VALUES 1-HOUR DALY MAX 1	2	3	4	5	NUM OBS	NUM EXC	PROBABILITY LIMITS PRECISION LOW	PRECISION UPP	ACCURACY LOW	ACCURACY UPP
070060123F01	BRIDGEPORT	11	2	0.155	0.150	0.136	0.125	0.116	90	4	-12	+07	-11	+10
	FAIRFIELD CO			05/25 13	05/30 12	06/21 15	05/26 16	06/16 12						
			3	0.151	0.142	0.139	0.138	0.135	88	5	-16	+10	-11	+09
				07/08 12	08/09 15	08/01 14	07/13 12	08/02 13						
			4	0.035	0.015	0.015	0.014		4		-10	+15		
				10/04 14	10/01 01	10/02 15	10/03 14							
070175123F01	DANBURY	11	2	0.274	0.185	0.163	0.134	0.122	76	4	-12	+07	-11	+10
	FAIRFIELD CO			06/16 14	05/30 16	06/21 16	06/15 17	05/27 14						
			3	0.189	0.169	0.144	0.135	0.133	92	7	-16	+10	-11	+09
				08/09 16	07/12 16	08/01 17	07/19 17	09/06 15						
			4	0.018					1		-10	+15		
				10/01 12										
070220003F01	EAST HARTFORD	11	2	0.188	0.128	0.125	0.124	0.099	91	3	-12	+07	-11	+10
	HARTFORD CO			05/30 16	06/16 15	05/25 14	06/21 18	05/27 13						
			3	0.150	0.136	0.133	0.118	0.115	82	3	-16	+10	-11	+09
				07/18 15	08/09 17	08/01 16	08/11 13	08/02 19						
			4	0.071	0.052	0.048	0.046	0.045	77		-10	+15		
				11/15 18	10/22 13	11/02 12	11/19 03	11/16 00						
070330004F01	GREENWICH	11	2	0.244	0.168	0.158	0.155	0.150	61	6				
	FAIRFIELD CO			06/16 13	06/15 15	05/30 14	06/29 17	06/21 14						
			3	0.175	0.165	0.155	0.142	0.135	78	7				
				07/18 13	07/12 13	08/01 16	08/09 15	07/13 12						
070330017F05	GREENWICH	11	2	0.175	0.160	0.160	0.157	0.146	58	7				
	FAIRFIELD CO			05/30 13	06/16 14	06/21 14	05/25 12	05/26 13						
			3	0.174	0.169	0.163	0.154	0.151	73	12				
				07/18 12	08/09 14	08/04 16	08/01 14	07/19 17						
070350005F01	GROTON	11	2	0.149	0.128	0.128	0.125	0.122	53	4				
	NEW LONDON CO			06/04 14	05/25 13	05/26 13	06/21 18	06/12 17						
			3	0.235	0.174	0.167	0.157	0.152	82	9				
				07/13 15	07/08 14	07/21 12	09/12 15	07/09 13						

2.3.2.p Quarterly Maximum Value Report

INVENTORY BY SITE

General Description

This report lists, for each state specified, 11 columns of information with one line of data for each unique combination of the following data elements:

a. Site Code (9-digit numeric)
b. Agency/Project Codes (1 alpha, 2 numeric)
c. Location Name (alpha)
d. Pollutant Name (alpha)
e. Pollutant/Method Codes (7 digit numeric combined code)
f. Interval Code (1 numeric)
g. Units Code (2-digit numeric)
h. Year (4-digit number)
i. Number of Observations (numeric)
j. Maximum Observations (numeric)
k. Arithmetic Mean (numeric)

Meanings of all of the above codes are given in Volume V of the AEROS manual.

The data parameters that establish or specify a line of printout constitute the first eight columns of the report page, or items a through h in the above enumeration of the data elements. The arithmetic mean is given for all data with an asterisk marking the values that were obtained from data not meeting minimum summary criteria (see Section 2.3.0).

Retrievals Available

Selections are limited to nationwide, EPA region, or state geographical parameters.

Sorts Available

The data are sorted by Site ID, then by pollutant type within Site. No sort options are available for this report.

Sample Report

Figure 2.3.3.a shows a portion or a retrieval for the State of Rhode Island.

Remarks

The Inventory by Site lists for each site the number of years for which data are available for each pollutant. For each year, the number or observations and the maximum observed value are printed out. Because this report is sorted by pollutant within Site ID Number, it is most useful when information on a particular site or sites is desired.

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INVENTORY BY SITE
RHODE ISLAND

SITE CODE	AQ/ PRJ	LOCATION NAME	POLLUTANT NAME	POL-MTH CODE	INT CODE	UNIT CODE	YR	RPT ORG	NUM OBS	MAX OBS	ARITH MEAN	
410040001	F01	BRISTOL	PARTICULATE	1110191	7	01	75		21	67.	43.	*
			SULFUR DIOXIDE	4240191	7	01	75		20	90.	35.	*
			NITROGEN DIOXIDE	4260284	7	01	75		21	66.	34.	*
410065001	F01	BURRILLVILLE	PARTICULATE	1110191	7	01	75		19	135.	43.	*
			SULFATE ION	1240392	7	01	75		3	16.0	13.7	*
			SULFUR DIOXIDE	4240191	7	01	75		19	9.	4.	*
			NITROGEN DIOXIDE	4260284	7	01	75		19	48.	9.	*
410090002	F02	CHARLESTOWN	ALPHA (GROSS)	1130191	7	30	76		49	.0081	.0019	
					7	30	77		37	.0045	.0008	*
					7	30	78		53	.0033	.0006	
					7	30	79		47	.0009	.0004	*
					7	30	80		55	.0030	.0005	
410100001	F01	CRANSTON	PARTICULATE	1110191	7	01	75		51	119.	56.	
					7	01	76		57	136.	58.	
					7	01	77		59	120.	55.	
					7	01	78		47	122.	55.	
					7	01	79		54	103.	49.	
					7	01	80		57	124.	57.	
			SULFUR DIOXIDE	4240191	7	01	75		53	62.	14.	
					7	01	76		53	46.	11.	
					7	01	77		28	33.	7.	*
			NITROGEN DIOXIDE	4260284	7	01	75		56	61.	26.	
					7	01	76		8	54.	22.	*
410100002	F01	CRANSTON	PARTICULATE	1110191	7	01	75		51	91.	49.	
					7	01	76		8	70.	43.	*
					7	01	80		8	107.	55.	*
			SULFUR DIOXIDE	4240191	7	01	75		49	110.	31.	
					7	01	76		6	48.	31.	*
			NITROGEN DIOXIDE	4260284	7	01	75		49	86.	41.	
					7	01	76		6	54.	40.	*
410100003	F01	CRANSTON	PARTICULATE	1110191	7	01	79		5	67.	46.	*
					7	01	80		53	110.	52.	
			LEAD	1212892	7	01	79		6	1.230	.702	*
					7	01	80		58	1.670	.495	
410120001	A01	EAST PROVIDENCE	ARSENIC	1210398	7	01	78		19	.0332	.0098	*
			BERYLLIUM	1210590	7	03	77		20	.30	.30	*
					7	03	78		19	.17	.08	*
					7	03	79		2	.17	.17	*
			BERYLLIUM	1210595	C	03	75		3	.1	.1	*
					C	03	76		4	.1	.1	
			CADMIUM	1211090	7	01	77		20	.003	.002	*
					7	01	78		19	.004	.001	*
					7	01	79		2	.003	.002	*
			CADMIUM	1211095	C	01	75		3	.009	.004	*
					C	01	76		4	.001	.001	
			CHROMIUM	1211295	C	01	75		3	.008	.006	*
					C	01	76		4	.003	.003	
			CHROMIUM	1211298	7	01	78		19	.0167	.0118	*

"*" DENOTES A VALUE DERIVED FROM DATA WHICH DO NOT MEET SAROAD SUMMARIZATION CRITERIA OF OAQPS GUIDELINE 1.2-040, VOL 3, SEC 2.3.0

Figure 2.3.3.a Inventory by site report

INVENTORY BY POLLUTANT

General Description

The format of the output is, in part, identical to that of the Inventory by Site Report. Both reports contain a total of 11 columns of data and the six righthand columns contain the same types of information; that is, Interval Code, Units Code, Year, Number of Observations, the Maximum Observation, and the Arithmetic Mean. The lefthand side of the report essentially reverses the order of presentation of the data, because this report is by pollutant rather than by site. Thus, the valid date of the information still appears in the upper lefthand corner of the page, but the heading reads "Inventory by Pollutant" rather than "Inventory by Site," and the next line contains the name of the pollutant instead of the name of the state. (See the following report writeup for an exception to this.) In both reports, the page number appears in the upper righthand corner. In this report, the five lefthand columns contain, respectively, the Pollutant/Method Code, the Pollutant Name, the Site Code, the Agency/Project Code, and the Location Name.

Retrievals Available

Selection by nation, EPA region, state, and by pollutant is possible.

Sorts Available

The data are sorted by pollutant, then by state and area. No other sort options are available.

Sample Report

Figure 2.3.3.b shows a portion of the inventory report for particulate measurements in Chicago, Illinois.

Remarks

The Inventory by Pollutant lists, for each pollutant-method combination, the number of years for which data are available for each sampling site. For each year, the number of observations and the maximum value observed are printed out. Because this report is sorted by site ID code within pollutant type, it is most useful when information on a particular pollutant or pollutant-method combination is desired.

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POL-MTH CODE	POLLUTANT NAME	SITE CODE	AG/ PRJ	LOCATION NAME	INT CODE	UNIT CODE	YR	RPT ORG	NUM OBS	MAX OBS	ARITH MEAN	
1110191	PARTICULATE	140060001	F01	ADDISON	7	01	75		49	165.	74.	
					7	01	76		54	268.	64.	
					7	01	77		56	112.	53.	
					7	01	78		53	126.	63.	
					7	01	79		58	167.	67.	
					7	01	80		55	118.	63.	
		140160004	F01	ALTON	7	01	75		59	216.	86.	
					7	01	76		58	218.	90.	
					7	01	77		54	196.	88.	
					7	01	78		59	153.	82.	
					7	01	79		57	212.	88.	
					7	01	80		54	160.	87.	
		140160005	F01	ALTON	7	01	75		59	147.	75.	
					7	01	76		61	177.	78.	
					7	01	77		1	47.	47.	*
		140160006	F01	ALTON	7	01	77		46	173.	78.	
					7	01	78		55	170.	75.	
					7	01	79		58	181.	84.	
		140200001	G01	ARLINGTON HEIGHTS	7	01	75		120	173.	78.	
					7	01	76		113	290.	74.	
					7	01	77		115	168.	68.	
					7	01	78		115	105.	69.	
					7	01	79		55	229.	85.	
					7	01	80		56	123.	73.	
		140320001	F01	BELLEVILLE	7	01	75		58	135.	68.	
					7	01	76		59	255.	83.	
					7	01	77		22	102.	82.	*
					7	01	78		60	169.	77.	
					7	01	79		61	153.	72.	
					7	01	80		45	140.	82.	*
		140380001	F01	BENSENVILLE	7	01	75		60	357.	108.	
					7	01	76		57	437.	132.	
					7	01	77		56	267.	101.	
					7	01	78		49	109.	85.	
					7	01	79		39	200.	108.	*
					7	01	80		52	207.	84.	
		140380002	F01	BENSENVILLE	7	01	75		60	153.	62.	
					7	01	76		55	123.	62.	
					7	01	77		59	159.	70.	
					7	01	78		33	187.	65.	*
					7	01	79		36	143.	73.	*
		140480001	F01	BLOOMINGTON	7	01	75		59	174.	68.	
					7	01	76		61	290.	83.	
					7	01	77		50	212.	79.	
					7	01	78		32	273.	92.	
					7	01	79		3	107.	96.	*
					7	01	80		4	131.	68.	*
		140500001	G01	BLUE ISLAND	7	01	75		121	220.	101.	

"*" DENOTES A VALUE DERIVED FROM DATA WHICH DO NOT MEET SAROAD SUMMARIZATION CRITERIA OF OAQPS GUIDELINE 1.2-040, VOL 3, SEC 2.3.0

Figure 2.3.3.b Inventory by pollutant report

STATE INVENTORY BY POLLUTANT

General Description

This report is identical to the last described report except that it is for a single state. Accordingly, the title line reflects this difference and the name of the state appears in the heading; otherwise the same format is used as for the Inventory by Pollutant Report.

Retrievals Available

Same as for the Inventory by Pollutant Report.

Sorts Available

The data are sorted by state, then by pollutant area. No other sort options are available.

Sample Report

Figure 2.3.3.c shows a portion of the inventory report for particulates measured in Chicago, Illinois.

Remarks

The content and format of this report are identical to those for the preceding report except that the data are for a single state only. Therefore, this report is of greatest value when information on a certain pollutant or pollutants is desired for a single state.

05-21-81 NATIONAL AEROMETRIC DATA BANK PAGE 14-0001
STATE INVENTORY BY POLLUTANT
ILLINOIS

POL-MTH CODE	POLLUTANT NAME	SITE CODE	AG/ PRJ	LOCATION NAME	INT CODE	UNIT CODE	YR	RPT ORG	NUM OBS	MAX OBS	ARITH MEAN	
1110191	PARTICULATE	140060001	F01	ADDISON	7	01	75		49	165.	74.	
					7	01	76		54	260.	64.	
					7	01	77		56	112.	50.	
					7	01	78		53	126.	63.	
					7	01	79		53	157.	67.	
					7	01	80		55	118.	63.	
		140160004	F01	ALTON	7	01	75		59	215.	86.	
					7	01	76		58	218.	90.	
					7	01	77		54	196.	88.	
					7	01	78		59	153.	82.	
					7	01	79		57	212.	80.	
					7	01	80		54	160.	87.	
		140160005	F01	ALTON	7	01	75		59	147.	75.	
					7	01	76		61	177.	78.	
					7	01	77		1	47.	47.	*
		140160006	F01	ALTON	7	01	77		46	173.	78.	
					7	01	78		55	170.	75.	
					7	01	79		58	181.	84.	
		140200001	G01	ARLINGTON HEIGHTS	7	01	75		120	173.	78.	
					7	01	76		113	290.	74.	
					7	01	77		115	168.	68.	
					7	01	78		115	185.	69.	
					7	01	79		55	229.	85.	
					7	01	80		56	123.	73.	
		140320001	F01	BELLEVILLE	7	01	75		58	135.	68.	
					7	01	76		59	255.	83.	
					7	01	77		22	102.	82.	*
					7	01	78		60	169.	77.	
					7	01	79		61	158.	72.	
					7	01	80		45	140.	82.	*
		140380001	F01	BENSENVILLE	7	01	75		60	357.	108.	
					7	01	76		57	437.	132.	
					7	01	77		56	257.	101.	
					7	01	78		49	109.	85.	
					7	01	79		39	200.	108.	*
					7	01	80		52	207.	84.	
		140380002	F01	BENSENVILLE	7	01	75		50	153.	62.	
					7	01	76		55	123.	62.	
					7	01	77		59	159.	70.	
					7	01	78		33	127.	65.	*
					7	01	79		36	143.	73.	*
		140480001	F01	BLOOMINGTON	7	01	75		59	174.	68.	
					7	01	76		61	290.	83.	
					7	01	77		50	212.	79.	
					7	01	78		32	273.	92.	
					7	01	79		3	107.	96.	*
					7	01	80		4	131.	68.	*
		140500001	G01	BLUE ISLAND	7	01	75		121	223.	101.	

"*" DENOTES A VALUE DERIVED FROM DATA WHICH DO NOT MEET SAROAD SUMMARIZATION CRITERIA OF OAQPS GUIDELINE 1.2-040, VOL 3, SEC 2.3.0

Figure 2.3.3.c State inventory by pollutant

SUMMARY REPORT OF VALID DATA

General Description

This report uses information in the Quarterly Summary File to produce a tabulation by State, AQCR, and Area (County or City) of coded information, one line for each Site-Pollutant combination, indicating the quantity of data reported for particulates, sulfur dioxide, NO_x, CO, HC, OX, and TOX. The time period of interest, which is specified by the user, can be from 1 to 5 years. For each quarter or the year or years for which data were requested, a column of coded data appears. The codes, together with their meanings, are as follows:

a. "0" means "No Data"
b. "1" means "Data do not meet Summary Criteria"
c. "2" means "Data do meet Summary Criteria"

The "SITE" and "POLLUTANT" columns contain codes for Agency Type and Project Classification (under "SITE") and for Method of Collection and Analysis and Time Interval (or Period of Observation) (under "POLLUTANT"). The meanings for these codes are given in Volume V of the AEROS Manual.

Retrievals Available

Retrieval may be by the entire nation, for a single state, or by area (that is, city or county), site, agency, or project classification, or any combination of these. If no particular item is specified in one or more of the selection fields, all of the possible items in that field or fields will be retrieved.

Sorts Available

The standard sorting hierarchy is by state, AQCR, area, site number, agency type, project classification code, pollutant type, method code, and time interval, all in ascending numerical or alphabetical order. No options for alternative sorting sequences are available to the user.

Sample Report

Figure 2.3.3.d shows a sample of the "Summary Report of Valid Data" for the State of Rhode Island.

05-13-75

PAGE 1

:0=NO DATA :
:1=DATA DO NOT MEET SUMMARY CRITERIA:
:2=DATA DO MEET SUMMARY CRITERIA * :

SUMMARY REPORT OF VALID DATA
NATIONAL AEROMETRIC DATA BANK
STATE (41): RHODE ISLAND

AQCR	AREA	SITE AG/PROJ CODE	POLLUTANT METH/INT CODE	1970 I	1970 II	1970 III	1970 IV	1971 I	1971 II	1971 III	1971 IV	1972 I	1972 II	1972 III	1972 IV	1973 I	1973 II	1973 III	1973 IV	1974 I	1974 II	1974 III	1974 IV	TOTAL
120	BRISTOL	001/F01	TSP-91/7	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	0	14
120	BURRILVILLE	001/F01	TSP-91/7	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	0	14
120	CHARLESTOWN	001/F01	TSP-91/7	0	0	0	0	2	2	2	2	2	2	2	2	2	1	0	0	0	0	0	0	9
120	CHARLESTOWN	001/F01	SO2-91/7	0	0	0	0	0	0	2	2	2	2	2	2	2	1	0	0	0	0	0	0	7
120	CHARLESTOWN	001/f01	NO2-91/7	0	0	0	0	0	0	2	2	2	2	2	2	2	1	0	0	0	0	0	0	7
120	CRANSTON	001/F01	TSP-9177	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	0	12
120	CRANSTON	001/F01	SO2-91/7	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	0	14
120	CRANSTON	001/F01	NO2-84/7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	1	0	2
120	CRANSTON	001/F01	NO2-91/7	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	11

Figure 2.3.3.d. Summary Report of Valid Data

SUMMARY OF MONITORING ACTIVITY

General Description

This report uses information in the Quarterly Summary File to produce a tabulation by state and AQCR for the selected pollutants of the numbers of sites meeting the summary criteria for the quarter selected for study. (The minimum summary criteria are defined in Section 2.3.0.) The result is a nationwide report sorted by AQCR within states for all 55 "states". Each state has its own page in the report, with each AQCR within the state occupying one line of data. There is also a "Total" line at the bottom of each page, but no grand total; that is, only the totals for each state are given.

For each of the pollutant-sampling period combinations, three columns of data are given; these columns are headed "REQ", "PRO", and "RPT", meaning, respectively, "Required by EPA", "Proposed in the State Implementation Plan (SIP) for 1974", and "Reporting to the National Aerometric Data Bank - Based on Quarter X of 197X Data". In the example, the seven possible pollutant-averaging period combinations are:

a. "TSP" (Total Suspended Particulates)
b. "SO2-DAILY"
c. "SO2-HOURLY"
d. "NO2-DAILY"
e. "NO2-HOURLY"
f. "CO-HOURLY"
g. "OX-HOURLY"

Retrievals Available

The report is available only on a nationwide basis at present. The time period is specified by Year and Quarter; for example, 7301, 7404, etc. The

data satisfying the summary criteria are tallied by monitoring site for a single quarter of the given calendar year. If data for more than one quarter are needed, a separate run must be made for each quarter.

Sorts Available

As stated above, the report is sorted by state and AQCR. This is accomplished under program control, and no other sorts may be specified by the user.

Sample Report

Figure 2.3.3.e shows a portion of this summary report for the State of Arkansas.

01-16-75

SUMMARY OF MONITORING ACTIVITY
NATIONAL AEROMETRIC DATA BANK
STATE (04) : ARKANSAS

PAGE 4

AQCR	TSP			SO2-DAILY			SO2-HOURLY			NO2-DAILY			NO2-HOURLY			CO-HOURLY			OX-HOURLY		
	REQ	PRO	RPT	REQ	PRO	RPT	REQ	PRO	RPT	REQ	PRO	RPT	REQ	PRO	RPT	REQ	PRO	RPT	REQ	PRO	RPT
016	3	10	12	1	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
017	2	3	3	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
018	1	3	6	0	1	3	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0
TOTAL	9	29	49	4	6	10	0	0	0	1	1	11	0	0	0	0	0	0	0	0	0

REQ = REQUIRED BY EPA
PRO = PROPOSED IN STATE IMPLEMENTATION PLAN FOR 1974
RPT = REPORTING TO NATIONAL AEROMETRIC DATA BANK - BASED ON QUARTER 1 OF 1972

Figure 2.3.3.e. Summary of Monitoring Activity Report

ACTIVE SITE REPORT

General Description

This report consists of a sorted inventory of sites that have reported SAROAD data during a specified time interval. The report is made up of a series of subreports, one for each site, each of which contains a description of the site and summaries of the pollutants measured, methods used, time intervals, units, and numbers of observations reported. Because both retrieval and sorting are under the control of the user, the entries for each site may be different in content and arrangement, although provision may be made for only one type of sorting hierarchy in a single run.

Retrievals Available

There are 10 key items upon which retrieval may be made in this report. These retrieval items are: state, area, site, agency type, project classification, pollutant type, method of collection and analysis, sampling interval, AQCR, and starting and ending dates. Certain combinations of selection keys are prohibited. For example, a site key may be entered only if an area key is also entered, and an area key may be entered only if a state key is also entered. Similarly, a project classification code may be included only if an agency type is also specified, and a method of collection and analysis may be specified only if a pollutant type is also specified. All other combinations may be considered as valid retrievals. The period of interest is specified by year and quarter for the starting and ending dates; for example, "7302 7304" or "6801 7204" would be valid ways of specifying the desired retrieval period. Codes for the various retrieval items are given in Volume V of the AEROS Manual.

Sorts Available

The selected sites may be sorted in a variety of ways before the report is printed out. The six possible codes available for use are:

a. Ascending key STATE
b. Ascending key AREA
c. Ascending key SITE
d. Ascending key AGENCY
e. Ascending key PROJECT
f. Ascending key AQCR

The sort codes may be entered in any order, and the order determines the sorting hierarchy; that is, the first code entered will determine the primary sort, the second one will determine the secondary sort, and so on. There are only two restrictions on the use of the sort codes: at least one sort code must be specified, and each sort code may appear only once for a given run.

Sample Report

Figure 2.3.3.f shows a portion of the inventory report for the State of Rhode Island.

DATE: MAY 07, 1975 NATIONAL AEROMETRIC DATA BANK PAGE: 0007

INVENTORY OF SITES REPORTING DATA DURING 1ST QUARTER, 1974 THRU 4TH QUARTER, 1974

STATE(41): RHODE ISLAND

SITECODE:	410300005F01	LATITUDE(D.M.S.):	41 49 54 N	EPA REGION:	01	UTM ZONE:	19
SITE ADDRESS:	STATE OFFICE BUILDING	LONGITUDE(D.M.S.):	71 24 56 W	ELEV ABOVE GROUND:	0050	UTM NORTHING:	4633700
CITY OR AREA:	PROVIDENCE	CITY POPULATION:	179,213	ELEV ABOVE MSL:	0100	UTM EASTING:	00299400
COUNTY(0320):	PROVIDENCE CO	AQCR POPULATION:	1,645,380	TIME ZONE(REF GMT):	WEST 05 HOURS		
STATION TYPE:	CENTER CITY - INDUSTRIAL	AQCR(120):	METROPOLITAN PROVIDENCE				
AGENCY TYPE:	STATE	SMSA(6480):	PROVIDENCE-PAWTUCKET-WARWICK, R.I.-MASS.				
SUPP. AGENCY:	RHODE ISLAND DEPARTMENT OF HEALTH						
COMMENT:	PROVIDENCE STATION B						

POL/MTH/INT	POLLUTANT NAME	METHOD OF COLLECTION AND ANALYSIS	INTERVAL	UNITS	# OBS
11101/91/7	PARTICULATE	HI-VOL GRAVIMETRIC	24-HOUR	UG/CU METER (25 C)	14
11201/81/2	SOILING INDEX (TRANSMISSION)	TAPE SAMPLER TRANSMITTANCE	2-HOUR	COHS/1,000 LINEAR FT	3030
42401/11/1	SULFUR DIOXIDE	INSTRUMENTAL WEST-GAEKE COLORIMETRIC	1-HOUR	UG/CU METER (25 C)	4212
42401/91/7	SULFUR DIOXIDE	GAS BUBBLER PARAROSANILINE-SULFAMIC ACID	24-HOUR	UG/CU METER (25 C)	18
42602/12/1	NITROGEN DIOXIDE	INSTRUMENTAL COLORIMETRIC-GRIESS-SALTZMAN	1-HOUR	UG/CU METER (25 C)	1677
44201/11/1	OZONE	INSTRUMENTAL CHEMILUMINESCENCE	1-HOUR	UG/CU METER (25 C)	3004

Figure 2.3.3.f. Active Site Report

COMMENTS REPORT

General Description

The SAROAD comments report is a listing of a file containing general information of possible interest to SAROAD users. This report is useful to provide users with information concerning data problems caused by calibration errors and when they were corrected, or information on problems concerning all data for specific agencies, methods, or years.

This file is maintained by National Air Data Branch from information provided by Monitoring and Reports Branch of MDAD. The information is supplied to the Monitoring and Reports Branch by the Environmental Monitoring and Support Laboratory, Regional Offices and State or local agencies.

An example of a typical comment might be:

"All NO_2 air quality data collected prior to January 1, 1980, in California has a variable positive bias ranging from 0-20 percent. Users should take this potential bias into account in making judgements about NO_2 levels in California. For more information about this problem, contact Mr. Crowe at the ARB."

Retrieval Procedure

The comments report should be provided to each data user with his data request. This can be accomplished by adding the following card to execution deck for each request.

```
@PRT,S  NADB*AERO-MESSAGE.SRD-COMMENTS.
```

Sample Report

Figure 2.3.3.g shows the information contained in the current comments file.

```
NADB*AERO-MESSAGE(1).SRD-COMMENTS
     1      MESSAGE 1
     2        CALIFORNIA OZONE-OXIDANT DATA:  8/8/79
     3          ALL OZONE AND OXIDANT AIR QUALITY FOR CALIFORNIA EXCEPT LOS ANGELES
     4      COUNTY REPORTED TO AND STORED IN SAROAD FROM 1963-JUNE 1, 1975 WERE BIASED
     5      AS A RESULT OF A CALIBRATION PROCEDURE.  THESE DATA HAVE BEEN CORRECTED IN
     6      SAROAD BY MULTIPLYING THE DATA FOR SAN DIEGO COUNTY BY 0.85 AND BY
     7      MULTIPLYING THE DATA FOR ALL OTHER COUNTIES BUT SAN DIEGO AND LOS ANGELES
     8      BY 0.80.  THE CORRECTIONS WERE COMPLETE FOR THE 1975 DATA AS OF APRIL 9,
     9      1979 AND WERE COMPLETE FOR THE 1963-74 DATA AS OF MAY 3, 1979.
    10      .
    11      MESSAGE 2.
    12        CALIFORNIA NITROGEN DIOXIDE DATA:  8/8/79
    13          ALL NO2 AIR QUALITY DATA COLLECTED PRIOR TO JANUARY 1, 1980, IN
    14      CALIFORNIA HAVE A POSITIVE BIAS OF 15 PERCENT.  USERS SHOULD MULTIPLY BY
    15      0.85 BEFORE MAKING JUDGEMENTS ABOUT NO2 LEVELS IN CALIFORNIA.  ALL
    16      NO2 DATA THAT HAVE THIS BIAS WILL BE CORRECTED BY REGION IX IN 1980
    17      AFTER ALL 1979 DATA HAVE BEEN SUBMITTED TO SAROAD.  FOR MORE
    18      INFORMATION ABOUT THIS PROBLEM, CONTACT MR. CROWE AT THE CALIFORNIA AIR
    19      RESOURCES BOARD.
    20      .
**

@BRKPT PRINT$
```

Figure 2.3.3.g Comments report

SUMMARY OF SITES SUBMITTING DATA

General Description

This report uses information from the summary file to produce a count by State of the number of sites reporting date for particulate, sulfur dioxide, nitrogen dioxide, oxidant-ozone, carbon monoxide, lead, and total hydrocarbons. The report is based on a quarter or a year of data and counts the number of sites submitting any data or the number of sites submitting data that meets the summary criteria.

Each page contains the report for an EPA Region with a total number of sites reported for the Region. Within Region the States are listed alphabetically. If no sites for a State meet the selection criteria, the State name is omitted.

Retrievals Available

The report is produced utilizing the following selection criteria: (1) year or quarter, (2) counts based on all sites reporting data or based on sites reporting data that meets the summary criteria, and (3) geographically for the nation, individual Regional Offices or States.

Sorts Available

No optional sorts are available.

Sample Report

Figure 2.3.3.h shows this report for Region II for first quarter 1978.

04/09/81 NATIONAL AEROMETRIC DATA BANK PAGE 1

REPORTING SITES WITH DATA MEETING SUMMARY

CRITERIA BASED ON 1978/01 (YEAR/QUARTER) DATA

REGION: 02	STATE	TSP	NO2	T.HYDRO	OX	CO	SO2	PB
	NEW JERSEY	84	11	0	2	16	23	8
	NEW YORK	288	14	0	16	16	64	0
	PUERTO RICO	14	10	0	0	0	19	5
	VIRGIN ISLANDS	4	0	0	0	0	3	2
	TOTAL	390	35	0	18	32	109	15

Figure 2.3.3.h Summary of sites submitting data

NADB no longer has the responsibility for maintaining the Air Quality Assurance Data.

EMISSIONS SUMMARY REPORT

General Description

The HATREMS Emissions Summary Report shows emissions data summaries for HATREMS point and area sources for selected geographical areas. Each selected report includes annual emissions for up to five pollutants specified by the user. The emission sources included in this report are:

- Fuel Combustion
  - Residential Fuel (Area)
  - Electric Generation (Point)
  - Industrial Fuel (Area and Point)
  - Commerical/Industrial Fuel (Area and Point)
  - Internal Combustion (Point)
- Industrial Process (Point)
  - 13 categories
- Solid Waste Disposal
  - Government (Point)
  - Residential (Area)
  - Commercial-Institutional (Area and Point)
  - Industrial (Area and Point)
  - Other (Point)
- Transportation (Area)
  - Land Vehicles
  - Aircraft
  - Vessels
  - Gas Handling Evaporative Loss

° Miscellaneous (Area)

Includes free area sources

The report also shows grand totals for each pollutant, subdivided into area source and point source emissions.

Retrievals Available

The retrieval options for the HATREMS "Emissions Summary Report" are:

° Nation
° State
° County
° EPA Region
° AQCR
° State/AQCR

Sorts

No sorts are available for this report.

Sample Reports

Figure 2.5.1-a is an example report run for the entire nation. The report format is the same for each of the retrieval options. When all fields of a print line contain no emissions data or invalid emissions data, the line is deleted from the report.

HAZARDOUS AND TRACE EMISSIONS SYSTEM

ENVIRONMENTAL PROTECTION AGENCY

NATIONWIDE EMISSIONS REPORT

UNITED STATES

RUN DATE: THURSDAY APRIL 09, 1981
AREA EMISSIONS AS OF: TUESDAY APRIL 7, 1981
POINT EMISSIONS AS OF: THURSDAY SEPTEMBER 19, 19 1

	PB TONS / YR	VOC TONS / YR	TONS / YR	TONS / YR	TONS / YR
FUEL COMBUSTION					
EXTERNAL COMBUSTION					
RESIDENTIAL FUEL (AREA)					
ANTHRACITE COAL	0	442			
BITUMINOUS COAL	2	1582			
DISTILLATE OIL	0	3220			
RESIDUAL OIL	0	0			
NATURAL GAS		7431			
WOOD		9807			
TOTAL (RESIDENTIAL)	2	22482			
ELEC GENERATION (POINT)					
ANTHRACITE COAL	2				
BITUMINOUS COAL	248	23456			
LIGNITE	11	2610			
RESIDUAL OIL	41	11871			
DISTILLATE OIL	1	1716			
NATURAL GAS		638			
PROCESS GAS		16			
COKE		4			
OTHER	55	871			
TOTAL (ELECT GEN)	357	41183			
INDUSTRIAL FUEL					
ANTHRACITE COAL					
AREA SOURCES	0	0			
POINT SOURCES	0	1			
BITUMINOUS COAL					
AREA SOURCES	106	869			
POINT SOURCES	67	5011			
LIGNITE					
POINT SOURCES	3	188			
RESIDUAL OIL					
AREA SOURCES	5	440			
POINT SOURCES	26	5771			
DISTILLATE OIL					
AREA SOURCES	1	600			
POINT SOURCES	1	1822			

Figure 2.5.1.a HATREMS Emission Summary Report

NATURAL GAS		
AREA SOURCES		1563
POINT SOURCES		2233
PROCESS GAS		
AREA SOURCES		1
COKE		
AREA SOURCES		0
WOOD		
AREA SOURCES		134
POINT SOURCES		14624
LIQUID PETROL GAS		
POINT SOURCES		9
BAGASSE		
POINT SOURCES		3432
OTHER		
POINT SOURCES	280	
TOTAL (INDUSTRIAL)		
AREA SOURCES	112	3627
POINT SOURCES	377	33090
COMM-INSTITUTIONAL FUEL		
ANTHRACITE COAL		
AREA SOURCES	12	51
POINT SOURCES	1	1
BITUMINOUS COAL		
AREA SOURCES	1	49
POINT SOURCES	8	625
LIGNITE		
POINT SOURCES	1	23
RESIDUAL OIL		
AREA SOURCES	7	611
POINT SOURCES	4	854
DISTILLATE OIL		
AREA SOURCES	1	842
POINT SOURCES	0	657
NATURAL GAS		
AREA SOURCES		2961
POINT SOURCES		391
WOOD		
AREA SOURCES		16
POINT SOURCES		123
LIQUID PETROL GAS		
POINT SOURCES		2
OTHER		
POINT SOURCES	4	
TOTAL (COMM-INST)		
AREA SOURCES	22	4531
POINT SOURCES	18	2677
TOTAL (EXTERNAL COMBUSTION)		
AREA SOURCES	136	30639
POINT SOURCES	752	76949
INTERNAL COMBUSTION (POINT)		
ELECTRIC GENERATION		

Figure 2.5.1.a HATREMS Emission Summary Report

DISTILLATE OIL		2070
NATURAL GAS		26179
DIESEL		3131
OTHER		143
TOTAL (ELEC GEN)		31523
INDUSTRIAL FUEL		
DISTILLATE OIL		569
NATURAL GAS		73605
GASOLINE		120
DIESEL FUEL		1358
TOTAL (INDUSTRIAL)		75731
COMMERCIAL-INSTITUTIONAL		
TOTAL		54
ENGINE-TESTING		
TOTAL		346
TOTAL (INTERNAL COMB)		107655
TOTAL (FUEL COMBUSTION)		
AREA SOURCES	136	30639
POINT SOURCES	752	184504
INDUSTRIAL PROCESS (POINT)		
**********		
CHEMICAL MANUFACTURING		444790
FOOD/AGRICULTURE		26111
PRIMARY METALS	10544	17889
SECONDARY METALS	3856	
MINERAL PRODUCTS	622	5649
PETROLEUM INDUSTRY	0	457177
WOOD PRODUCTS		3862
ORGANIC SOLVENT EVAPORATION		7120935
PETROLEUM STORAGE TRANSFER		1279605
TOTAL (INDUSTRIAL)	15023	9356018
SOLID WASTE DISPOSAL		
**********		
GOVERNMENT (POINT)		
MUNICIPAL INCINERATION	755	7654
OPEN BURNING		19459
OTHER		592
TOTAL (GOVERNMENT)	755	27705
RESIDENTIAL (AREA)		
ON SITE INCINERATION	1540	200954
OPEN BURNING		206375
TOTAL (RESIDENTIAL)	1540	407330

Figure 2.5.1.a HATREMS Emission Summary Report

COMMERCIAL-INSTITUTIONAL		
ON SITE INCINERATION		
AREA SOURCES	1023	7415
POINT SOURCES		2972
OPEN BURNING		
AREA SOURCES		11024
POINT SOURCES		133
OTHER		
POINT SOURCES		1345
TOTAL (COMM-INST)		
AREA SOURCES	1023	18438
POINT SOURCES		4449
INDUSTRIAL		
ON SITE INCINERATION		
AREA SOURCES	330	2392
POINT SOURCES		30168
OPEN BURNING		
AREA SOURCES		5399
POINT SOURCES		10391
OTHER		
POINT SOURCES		49
TOTAL (INDUSTRIAL)		
AREA SOURCES	330	7792
POINT SOURCES		40608
TOTAL (SOLID WASTE DISP)		
AREA SOURCES	2893	433560
POINT SOURCES	755	72763
TRANSPORTATION (AREA)		
**********		
LAND VEHICLES		
GASOLINE		
LIGHT DUTY VEHICLES	69613	6521761
LIGHT DUTY TRUCKS		1458641
HEAVY DUTY VEHICLES	4856	1333057
OFF HIGHWAY	2872	450735
TOTAL (GASOLINE)	77341	9764193
DIESEL		
HEAVY DUTY VEHICLES		277034
OFF HIGHWAY		90309
RAIL		190607
TOTAL (DIESEL)		557950
AIRCRAFT		
MILITARY		146398
CIVIL		53774

Figure 2.5.1.a HATREMS Emission Summary Report

COMMERCIAL		89211
TOTAL (AIRCRAFT)		289384
VESSELS		
BITUMINOUS COAL		1142
DIESEL FUEL		33697
RESIDUAL OIL		2605
GASOLINE		404535
TOTAL (VESSELS)		441978
TOTAL (TRANSPORTATION)	77341	11053506
MISCELLANEOUS (AREA)		
**********		
GAS HANDLING EVAP LOSS		1102319
FOREST WILDFIRES		293897
STRUCTURAL FIRES		6553
AGRICULTURAL FIELD BURNING		67972
SLASH BURNING		311356
FROST CONTROL		0
SOLVENT EVAPORATION LOSS		7267877
TOTAL (MISCELLANEOUS)		9049974
GRAND TOTAL		
**********		
AREA SOURCES	80370	20567679
POINT SOURCES	16530	9613385
TOTAL	96900	30181064

Figure 2.5.1.a HATREMS Emission Summary Report

POINT SOURCE REPORT

General Description

The HATREMS Point Source Report shows point source operating data and emissions for up to five or for all hazardous pollutants in HATREMS as specified by the user. Both NEDS and the HATREMS point source files provide data for this report.

Retrievals

The retrieval options for geographic area are:

- Nation
- State
- County
- City
- AQCR
- State/AQCR
- Plant
- Point

In addition, the user may specify the following data parameters as point source selection criteria:

- Source Classification Code (or portions of the SCC)
- Ownership
- Standard Industrial Classification Code
- Pollutant
- Emissions Estimation Method Code - A separate method can be specified for each of five pollutants, or all pollutants may be specified.

- Minimum emissions level - A minimum emissions level can be specified for each of five pollutants or one minimum can be specified for all pollutants.
- Significant Digits - The number of significant digits to be used for reporting emissions can be specified for each of up to five pollutants or for all pollutants.

Any valid combinations of these retrieval options can be specified.

Sorts

The following sorts are available for the Point Source Report. All sorts are in ascending sequence unless denoted as descending.

- State
- County
- Plant
- Point
- SCC
- Ownership
- SIC
- Estimation Method
- AQCR
- Plant Name
- Calculated Emissions
- Year of Record of Emissions
- Control Equipment Code
- Control Efficiency (descending)
- Pollutant
- City
- UTM Coordinates

- Operating Rate (descending)
- Confidentiality

Unless the user specifies otherwise, the sort sequence for this report is State/County/AQCR/Plant/Point/SCC.

Sample Report

Figure 2.5.2-a is an example point source report for the sintering operation at a lead smelters. Lead was the only pollutant specified for this retrieval.

```
POINT SOURCE RECREATED 07/81/01                                                                    RUN DATE 04/09/81
POINT SOURCE MANUALLY UPDATED 12/19/80                                                             PAGE     1

                                H A Z A R D O U S   A N D   T R A C E   E M I S S I O N S   S Y S T E M
                                                  P O I N T   S O U R C E   L I S T I N G

STATE(26): MISSOURI        AQCR(070): METROPOLITAN ST. LOUIS                                  CITY(     ):
COUNTY(2280): JEFFERSON CO                  PLANT ID: 0003  POINT ID: 01

NAME ADDRESS: ST. JOE LEAD CO./SMELTING DIVISION/HERCU  SIC(3332): PRIMARY SMELTING AND REFINING OF LEAD
PERSONAL CONTACT: DANIEL VORNB  SCC(3-03-010-01): INDUSTRIAL PROCES  PRIMARY METALS     LEAD SMELTERS      SINTERING
-----------------------------------------------------------------------------------------------------------------------
!  GENERAL INFORMATION     !  NORMAL OPERATIONS    !  % ANNUAL THROUGHPUT    !  UTM GRID COORDINATES    !    STACK PARAMETERS        !
!  ******************      !  *****************    !  ******************     !  ********************    !    ****************        !
!  YEAR OF RECORD: 1980    !   HOURS/DAY:  24      !    DEC-FEB:  25 %      !   UTM ZONE:    15         ! HEIGHT:            352 FT  !
!  OWNERSHIP(Z):           !                       !    MAR-MAY:  25 %      !                           ! DIAMETER:         20.0 FT  !
!   NOT FOUND              !   DAYS/WEEK:   7      !    JUNE-AUG: 25 %      !   HORIZONTAL: 729.0    KM! TEMPERATURE:       165 F   !
!  BOILER DESIGN CAP:      !                       !    SEPT-NOV: 25 %      !                           ! FLOW RATE:      418460 ACFM!
!        MILLION BTU/HR    !   WEEKS/YEAR: 52      !                        !   VERTICAL:   4238.0   KM! PLUME HEIGHT:          FT  !
!  IPP PROCESS: 01         !                       !                        !                           ! PT/COMMON STACK:   01-03   !
!---------------------------------------------------------------------------------------------------------------------!
!  OPERATING RATES IN  TONS CONCENTRATED ORE                !                  CONTROL DEVICE/METHOD IDENTIFICATION                !
!  *****************************************                !                  ************************************                !
!    ANNUAL OPERATING RATE:          883204                 !       PRIMARY  PB    : GRAVEL BED FILTER                            !
!    MAXIMUM HOURLY DESIGN RATE:     72.000                 !       SECOND   PB    : H2SO4 PLANT-CONTACT PROCESS                  !
!    AVERAGE HOURLY RATE:                                   !       TERTIARY PB    : NO DATA                                      !
!    OPERATING RATE AFTER 10 YEARS:      % INCREASE         !       PRIMARY        :                                              !
!    OPERATING RATE AFTER 20 YEARS:      % INCREASE         !       SECOND         :                                              !
!-------------------------------------------------------------!       TERTIARY       :
!                   ***COMMENTS***                          !       PRIMARY        :
!PLANT :                                                    !       SECOND         :
!POINT :                                                    !       TERTIARY       :
!SCC   :                                                    !       PRIMARY        :
!PB    :                                                    !       SECOND         :                                              !
!      :                                                    !       TERTIARY       :                                              !
!      :                                                    !       PRIMARY        :                                              !
!      :                                                    !       SECOND         :                                              !
!      :                                                    !       TERTIARY       :                                              !
!---------------------------------------------------------------------------------------------------------------------!
! POLLUTANT          ANALYSIS METHOD          EMISSION ESTIMATION METHODS    ESTIMATED EMISSIONS    CALCULATED EMISSIONS   !
! ********           ***************          ***************************    *******************    ********************   !
!  PB                                         EPA EMISSION FACTOR                        TONS/YR        46.368   TONS/YR   !
!                                                                                        TONS/YR                 TONS/YR   !
!                                                                                        TONS/YR                 TONS/YR   !
!                                                                                        TONS/YR                 TONS/YR   !
!                                                                                        TONS/YR                 TONS/YR   !
!---------------------------------------------------------------------------------------------------------------------!
!              EMISSION PARAMETER      EMISSION PARAM      CALCULATED CONTROL      MANUAL INPUT CNTRL      CONTROL EQUIPMENT  !
! POLLUTANT          CONTENT              EST METHOD        EQUIP EFFICIENCIES      EQUIP EFFICIENCIES      EFFICIENCY EST MTHD !
! ********     *******************      **************      ******************      ******************      ******************  !
!  PB                                                            99.90                                                        !
!                                                                                                                             !
!                                                                                                                             !
!                                                                                                                             !
!                                                                                                                             !
-----------------------------------------------------------------------------------------------------------------------
```

Figure 2.5.2.a Point Source Report

The SIP system is not supported by OAQPS at the current time. No retrievals are available.

NADB no longer has the responsibility for maintaining the Federal Power Commission Form 67 System.

The Energy Data System is no longer supported by OAQPS. No retrievals are available.

Various data sets are used with the AEROS system as sources of emissions related information. These include, for example, data on fuel usage, on traffic counts, and on census counts. The data sets currently utilized by AEROS include the following:

Area Source Apportioning
Census Data

EPA has developed a computerized methodology whereby fuel consumption by stationary area sources and all mobile sources can be collected on an annual basis according to county. The data collected include aircraft activity and organic solvent use. These data are used as input to several computer programs that produce NEDS area source cards for updating the NEDS area source data file. As a result, the NEDS area source update program may be considered a means by which the data may be presented in printed form. Following are some examples of the data involved.

State Level Data

Item	Data Values
Residential Gas Consumption	52
Percentage Growth in Gas Customers	52
Conversion to Gas Heating	156
Additions to Gas Heating	156
Population Growth Rate	52
Bituminous Coal Shipments, Retail	52
Anthracite Coal Shipments	52
LPG Residential Consumption	52
Industrial Gas Consumption	52
Industrial LPG Consumption	52
Industrial Bituminous Coal Shipments	52
Fuel Consumption, Industrial (x 20 SIC)	1092
Industrial Employment (x 20 SIC)	1092
Coal Shipments (Industrial and Retail) (x Prod. District)	2392
Commercial LPG Consumption	52
Other Gas Consumption	52
Public School Employment	52

Item	Data Values
Coal Shipments (Industrial and Retail) (x Prod. District)	2392
Commercial LPG Consumption	52
Other Gas Consumption	52
Public School Employment	52
Motorcycle Registrations	52
Boat Registrations	52
Population (Current Year)	52
Anthracite Market Share	52
Tractor/Farm Equipment Scaling Factors	1092
Hotel Room/Employee Ratio	52
Snowmobile Registrations	52
Heating Oil Consumption	208
Industrial Oil Consumption	104
Oil Company Oil Consumption	104
Military Oil Consumption	104
Highway Vehicles Fuel Sales	156
Housing Units - Census Year	260
Change in Housing Units Since Census	52
Average Degree - Days	52
Population (Census Year)	52
Commercial Employment (x 9 SIC)	468
Motor Vehicle Registrations	416
Average Miles Per Year Driven by Trucks	208

County Levels Data

LTO's at Military Airports	8000
LTO's at Civil Airports	8000

Item	Data Values
Aircraft Registrations	8000
Hospital Beds	14000
Hospital Employment	7000
Public University Enrollment	2000
Inland Water Area	6282
Farm Tractors	6282
Housing Units-Census Year	15500
Degree-Days	3100
Commercial Employment (x 9 SIC)	27900
Manufacturing Employment (x 20 SIC)	65100
Motor Vehicle Registrations	18600
Retail Sales of Gasoline	6282
Coastline	6282
Population (Current Year)	6282
Regional	
Water Heater Gas Consumption	9
Cooking Range Gas Consumption	9
Sulfur Content (Retail-Industrial)	69
National Level Data	
Synthetic Organic Solvent Production	15
Special Naphtha Production	1
Construction (Gasoline and Diesel)	2
Motorcycle (km/yr, gal/km)	10
Tractor (hr/yr, gal/hr)	4
Industrial (Gasoline and Diesel)	2

Item	Data Values
Lawn and Garden Gasoline	1
Snowmobile Gasoline	1

The NEDS Verification File has been dropped.

EPA maintains census data tapes that may be used directly as input to numerous AEROS systems and analysis packages. These data files are used in updating NEDS area source files.

NADB no longer has the responsibility for maintaining the following analysis packages:

1. The Source Inventory and Emission Factor Analysis System (SIEFA)

2. The Weighted Sensitivity Analysis Program (WSAP)

3. The Regional Emissions Projection System (REPS)

4. The Computer Assisted Area Source Emissions Gridding Procedure (CAASE)

As used in this Section, "User Access" is defined as the set of procedures that must be followed by any potential user of AEROS to facilitate the speedy and efficient fulfillment of his request.

Before a potential user requests information from AEROS, the standard computer reports as documented in Sections 2.0.0 through 3.5.0 should be reviewed to see if the specific information is available in any of these reports. If a specific report or a combination of reports meets the data requirements, the procedures as documented in this Section should be followed. Even if a specific report does not meet the specific requirements, the procedures should be followed to determine whether new reports have been developed, but not documented in Sections 2.0.0 through 3.5.0, or whether the data are available from other sources.

This Chapter deals with procedures to be utilized by users outside of the United States Environmental Protection Agency. This user community includes state and local air pollution control agencies, universities, consultants, contractors, private citizens, and private industry. Excluded from this group are other Federal agencies and groups utilizing the data for a grant or contract to any Federal agency.

Requests from the non-EPA users group will be treated under the Freedom of Information Act. After the request is received in writing, the cost will be estimated, and the requestor will be informed of the approximate cost. The request will not be processed until the requestor has agreed to pay this charge.

The procedures to request information from AEROS vary depending on whether the data are for states under the jurisdiction of one EPA Regional Office (Intra-regional) or several Regional Offices (Inter-regional). Table 4.1.1-a gives a list of states in each Regional Office and should be utilized to determine if it is an intra-regional or inter-regional request.

For requests for intra-regional data, the correct Regional Office should be determined from Table 4.1.1-a and the address or telephone number as given in Table 4.1.1-b should be utilized. The specific name of the NEDS or SAROAD contact is not given, but the address and telephone numbers are correct. The request should be addressed to the attention of the NEDS or SAROAD Contact. If the request is for a standard report, a letter specifying the report name, the retrieval options, and the sort options is sufficient. If the request is not for a standard report, a telephone call may be necessary to discuss the specific data needs.

For requests for inter-regional data, the letter or telephone call should be directed to one of the regional contacts or to:

Chief, Requests and Information Section (MD-14)
National Air Data Branch
Environmental Protection Agency
Research Triangle Park, NC 27711
FTS 629-5694
Comm (919) 541-5694

Table 4.1.1.a. LIST OF STATES BY REGIONAL OFFICE

Region I

Connecticut	New Hampshire
Maine	Rhode Island
Massachusetts	Vermont

Region II

New Jersey	Puerto Rico
New York	Virgin Island

Region III

Delaware	Pennsylvania
District of Columbia	Virginia
Maryland	West Virginia

Region IV

Alabama	Mississippi
Florida	North Carolina
Georgia	South Carolina
Kentucky	Tennessee

Region V

Illinois	Minnesota
Indiana	Ohio
Michigan	Wisconsin

Region VI

Arkansas	Oklahoma
Louisiana	Texas
New Mexico	

Table 4.1.1.a (continued). LIST OF STATES BY REGIONAL OFFICE

Region VII

Iowa	Missouri
Kansas	Nebraska

Region VIII

Colorado	South Dakota
Montana	Utah
North Dakota	Wyoming

Region IX

Arizona	Hawaii
California	Nevada
Guam	

Region X

Alaska	Oregon
Idaho	Washington

Table 4.1.1.b REGIONAL OFFICE CONTACTS

REGIONAL OFFICE	NEDS	SAROAD
	Air Management Division EPA, Region I John F. Kennedy Bldg. Boston, MA 02203 FTS 223-5633 Com. (617) 223-5633	Environmental Services Division EPA, Region I 60 Westview Street Lexington, MA 02173 Com. (617) 861-6700
II	Air & Waste Materials Division EPA, Region II 26 Federal Plaza New York, NY 10278 FTS 264-8687 Com. (212) 264-8687	Air & Waste Materials Division EPA, Region II 26 Federal Plaza New York, NY 10278 FTS 264-9800 Com. (212) 264-9800
III	Management Administration Branch EPA, Region III 6th and Walnut Streets Philadelphia, PA 19106 FTS 597-7903 Com. (215) 597-7903	Management Administration Branch EPA, Region III 6th and Walnut Streets Philadelphia, PA 19106 FTS 597-7903 Com. (215) 597-7903
IV	Management Services Branch EPA, Region IV 345 Courtland Street, N.E. Atlanta, GA 30365 FTS 257-2316 Com. (404) 881-2316	Environmental Services Division EPA, Region IV College Station Road Athens, GA 30613 FTS 250-3548 Com. (404) 546-3548
V	Environmental Services Division EPA, Region V 536 S. Clark Street Chicago, IL 60605 FTS 886-6227 Com. (312) 886-6227	Environmental Services Division EPA, Region V 536 S. Clark Street Chicago, IL 60605 FTS 886-6231 Com. (312) 886-6231
VI	Environmental Services Division EPA, Region VI 1201 Elm Street Dallas, TX 75270 FTS 729-2724 Com. (312) 767-2724	Environmental Services Division EPA, Region VI 1201 Elm Street Dallas, TX 75270 FTS 729-2724 Com. (312) 767-2724
VII	Environmental Services Division EPA, Region VII 25 Funston Road Kansas City, KS 66115 FTS 758-4461 Com. (816) 758-4461	Environmental Services Division EPA, Region VII 25 Funston Road Kansas City, KS 66115 FTS 758-4461 Com. (816) 758-4461
VIII	Environmental Services Division EPA, Region VIII 1860 Lincoln Street Denver, CO 80295 FTS 327-2226 Com. (303) 837-2226	Environmental Services Division EPA, Region VIII 1860 Lincoln Street Denver, CO 80295 FTS 327-2226 Com. (303) 837-2226
IX	Air Management Division EPA, Region IX 215 Fremont Street San Francisco, CA 94105 FTS 454-8222 Com. (415) 974-8222	Air Management Division EPA, Region IX 215 Fremont Street San Francisco, CA 94105 FTS 454-8222 Com. (415) 974-8222
X	Environmental Services Division EPA, Region X 1200 6th Avenue (M/S 345) Seattle, WA 98101 FTS 399-1702 Com. (206) 442-1702	Environmental Services Division EPA, Region X 1200 6th Avenue (M/S 345) Seattle, WA 98101 FTS 399-1702 Com. (206) 442-1702

If the request is for a standard report, a letter specifying the report name, the retrieval options and the sort options is sufficient. If the request is not for a standard report, a telephone call may be necessary to discuss the specific data needs.

In addition to stating the report name, the retrieval options, and the sort options, any letter requesting data should include the person to contact concerning technical questions and the date when a response from NADB is needed.

This Chapter describes the procedures to be followed by users who are either direct employees of the U.S. EPA or are working under a grant or Federal contract given by EPA. Any employee of EPA or other individuals who are registered users of the National Computer Center (NCC), Research Triangle Park, North Carolina, can retrieve data using the AEROS Terminal Users System as explained in Section 4.2.2, can utilize the routine AEROS programs, or can utilize the procedures and file formats in Sections 7.0.0-7.2.3 to write software to create specific reports.

The procedures to request information from AEROS vary depending on whether the requestor is an EPA employee or contractor and where he is located or whether the requestor is an employee, contractor, or grantee for another Federal agency.

If the requestor is an EPA employee or contractor, the EPA employee or project officer must submit the request. If the requestor is located in an EPA Regional Office, the request should be submitted to the NEDS or SAROAD Contract in the Regional Office. All other EPA requests should be submitted to:

Chief, Requests and Information Section (MD-14)
National Air Data Branch
Environmental Protection Agency
Research Triangle Park, North Carolina 27711

The request should include the report name or information required, retrieval options, and sort options.

If the requestor is an employee, contractor, or grantee for another Federal agency, the Federal agency employee must submit the request. All requests of this type should be submitted to: the Chief, Requests and Information Section at the above address. The request should include the report name, the retrieval options, and the sort options. If requests of this type are determined to be of major impact on the Branch's computer budget, the requestor may be required to establish user and account codes by way of Interagency Agreements. In all cases, the request should include the person to contact concerning technical questions and the data

when a response from NADB is necessary. Any request may be preceded by a telephone call to Chief, RIS (FTS 629-5694) to discuss the availability of the data and the necessary report formats. Such a call may prevent unnecessary work and wasted time occasioned by "inappropriate" requests (i.e. requests for data inappropriate to the user's needs or for data that are nonexistent or not yet in a suitable form to satisfy the particular requests).

SAROAD TERMINAL SYSTEM (STS)

Introduction

The Aerometric and Emissions Reporting System (AEROS) has been expanded to enable users to access air quality data files for retrieval via demand (interactive) terminals. Using this system, the user can interactively access the data files or can build requests that are then submitted to the operating system to be run at a later time (batch). The user has the option of requesting the output be printed at his low- or medium-speed terminal or requesting the output be printed at the central computer site and be mailed to him later.

The AEROS terminal system is designed so that users who are not familiar with computers as well as users who are computer-oriented can access the system and submit their requests. The system operates in a conversational mode to request information from the user. A function (subprogram) is specified by the user, the master program calls the appropriate subprogram, and the subprogram assumes control.

The two types of subprograms are those that retrieve data immediately and display them on the low-speed terminal (interactive) and those that ask the user questions that allow a run to be generated and submitted for later processing (remote batch). The first time a remote batch function is requested, the master program asks the user for fixed accounting information such as account code. This information is then used for all remote batch runs submitted. Other information, such as run time, is requested by each individual remote batch function.

When a user has accessed all the desired functions and has returned to the master program, the END command will take him out of the system. The user is returned to the EXEC 8 operating system in which any software available at this time, including reentry to the SAROAD Terminal System, can be used.

Descriptions of the master program and all available functions follow, and sample interactive sessions and sample outputs are included. Any questions regarding this system, other than instructions on how to use a specific type of terminal, are to be referred to:

National Air Data Branch (MD-14)
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711
Phone: (919) 541-5395

Questions regarding accounting information, use of a terminal, or the status of the UNIVAC 1110 are to be referred to:

National Computer Center (MD-34)
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711
Phone : (919) 541-3649

Note: Throughout the manual the selection commands are listed as follows:

'state=??'
'site=???'

The number of question marks following the equal sign defines the number of characters in that code. In the above examples, the state command requires two characters following the equal sign and site requires three. If the incorrect number of characters is entered, the command is rejected.

Required Accounting Information

In order to use the SAROAD terminal system, the user must be registered at the National Computer Center (NCC), Research Triangle Park, NC. The accounting symbols assigned to the user plus other information necessary to submit batch jobs will be requested by the terminal system. The information required is:

i. account number.

ii. project code.

iii. terminal identification code. (This information is used for routing the printout generated by batch jobs. It can be either the user's site or the central computer site.)

iv. priority code. (This is one of a system of codes established by NCC.)

v. run identification code. (This code is composed of an NCC-assigned bin number and up to four additional characters specified by the user.)

vi. estimated run time
(The user must furnish an estimate to be entered on the @RUN card. Sample estimates for the batch runs are given in the functional sections).

Almost all of the codes require interaction with the National Computer Center. If the user has questions relating to these items, please call User Services, FTS 629-3649.

Computer Instructions For Entering STS

In order to use STS, the user must know how to dial the computer, establish contact, and identify himself to the operating system. The procedure varies slightly from terminal to terminal so no attempt is made here to instruct the user on terminal usage. If there is a need for instruction in this area, please contact User Services, NCC as listed in this manual.

When contact with the UNIVAC 1110 has been established and the user's terminal identification has been accepted, the operating system will print a message identifying the operating system. At this point the user must enter an @RUN card to begin his session. Please note that, because of the STS design, the user must specify the CARD parameter on the RUN card if the remote batch portion of the STS is to be used. No cards will actually be punched.

Once the user's RUN card has been accepted, the date and time the user signed on is displayed on the terminal and the user can start entering instructions. When the user is ready to use the AEROS Terminal System, the following sequence of instructions is entered.

```
@ASG,A  NADB*NADB-ABS/SDS.
@COPY,A  NADB*NADB-ABS.NA206
@FREE   NADB*NADB-ABS.
@NA206
```

The user will enter the master program and interaction with the system will begin. (All responses entered by the user within STS must be in capital letters.) When the user is finished with the system, the END command is entered. Control is returned to the operating system and the

user is free to access any UNIVAC 1110 functions desired, re-enter the STS, or sign off the UNIVAC system. To sign off, the user enters @FIN, waits for the accounting information to print, and then enters @@TERM.

Should the 1110 system go down or should the line drop during an STS session, the user has to re-dial the computer and follow regular sign on procedures to re-enter the system. If the user was building remote batch jobs at the time computer contact was broken, only the job being constructed at that time is lost. This is due to the dynamic submission of batch runs by the STS at the time the user requests the run be submitted.

STS Master Program

The STS master program is designed as a processor. This means that all the files required for the system are dynamically assigned by the program. If there are any problems encountered in assigning a file, a message is printed but processing continues. If a file is unavailable, only those functions using that particular file are not operable. The messages and their meanings are listed below.

i. file name WAITING TO ROLL FILE IN

The file specified has been rolled out by the 1110 Operating System and the terminal system is waiting for the file to be restored to mass storage.

ii. file name DESTROYED--CONTINUING

The file specified has been marked as having been destroyed by the 1110 Operating System. The system will continue but any function using the specified file will not be operational. Call NCC, User Services Section.

iii. file name DISABLED--CONTINUING

The file specified was in use when the 1110 system crashed. There is usually no problem with using the file.

iv. file name IN EXCLUSIVE USE-CONTINUING

The file specified is in exclusive use by another run. This usually happens when NADB is updating the file. The system continues, but functions requiring the specified file will be inoperable. A later attempt may provide access to a function requiring this file.

v. file name FACILITY REJECTED--CONTINUING

The file specified does not exist. It may have been removed by the 1110 Operating System or may have been deleted in preparation for an update that then failed. Call NADB, Data Processing Section.

The user is asked if a CRT terminal is being used. A CRT terminal is a cathode-ray-type terminal such as a UNISCOPE 100 or a HAZELTINE 2000. The interactive functions are designed to utilize either a 120-character print line or a 72-character print line. If you answer YES to the CRT question, a 72-character print line is used. If answer is NO, a 120-character line is used.

Next, the user is asked whether instructions are needed for using the system. If YES is entered, a brief discussion of the system and the function list are provided. Each function entered then prints a brief description of itself thereafter. If NO is entered, it is assumed that the user is familar with the system and less instructional information is displayed. If the user enters NO and then decides he needs a list of the functions, he can enter HELP after the FUNCTION? prompt.

When the FUNCTION? prompt is printed, the user is free to enter any valid STS function. If an invalid entry is encountered, a message is printed and the FUNCTION? prompt is printed again. If the user has finished using STS, he enters END after the FUNCTION? prompt and control is returned to the UNIVAC 1110 operating system.

If an interactive function is specified, control is immediately passed to the appropriate subprogram. Interaction between the user and the data files via commands given to the subprogram continues until the END command is entered. The subprogram then returns control to the master program and a new function is requested.

If a remote batch function is requested, the master program first checks to see if this is the first remote function requested during the current terminal session.

If this is not the first batch function requested, control is passed to the appropriate subprogram. The subprogram interacts with the user to construct remote batch runs. When the final END command for the subprogram is encountered, a summary of the job constructed is printed for user review. The user has the option of submitting or cancelling the constructed run. If the run is submitted, the subprogram dynamically submits the run to the UNIVAC 1110 system. The job enters the job queue at this point and is eligible for execution. (As jobs are submitted to the UNIVAC operating system, a message is returned indicating the run identifier and whether the run was accepted or not). After the job is submitted or cancelled, control is returned to the master program.

The first remote batch function requested during a terminal session causes the master program to request some fixed accounting information. The information requested is then used for all batch runs constructed during the terminal session. The information requested is:

i. project code. At the prompt, PROJ?, the user should enter his valid UNIVAC project code.

ii. terminal identifier. The user can select a location where all of the remote batch output will be routed. This location can be a low-speed, medium-speed or high-speed terminal. To route the output to the central UNIVAC 1110 site the user enters PR. The location selected is entered after the TERMINAL ID? prompt.

iii. account number. Account numbers must be registered with NCC before run submissions will be accepted. The account number is entered after the ACCT #? prompt.

No validity or edit checks are made for the above three entries by ATS. At the point an actual batch run is submitted to the 1110 operating system, a check is made by that system against the valid account and project code combinations. If the combination entered is not valid, the run will not be accepted.

After the initial information is entered for the first access of a batch function, control is passed to the appropriate subprogram and the session proceeds as described above.

The following sections describe the actual functions available within the SAROAD Terminal System. Besides the descriptive name, the subsystem, access type, and function entry is listed. The notation used is:

S = SAROAD

I = Interactive Access

RB = Remote Batch Access

SAROAD POLLUTANT NAMES (S, I, PO)

Description

The pollutant names function is an interactive function that allows the user to retrieve pollutant names corresponding to user given valid pollutant codes. Sample of an interactive session using this function is included in this section.

Structured Entries

When this function is first entered, the user may ask for a listing of the available functional commands by replying "yes" to the prompt "COMMAND LIST. . .YES OR NO?"

Commands

After the preliminary responses have been entered, the user receives the prompt, COMMAND? The user should select and enter a command word from the list given below. The command word can be entered in its entirety or can be abbreviated to the first two characters of the word. The commands for this function are:

COMMAND	DESCRIPTION
POLLUTANT=????	The pollutant code for which a name is desired.
FIND	List the pollutant name for the code specified by the POLLUTANT command. If the POLLUTANT command is not specified, then the first pollutant name will be listed.

NEXT ??

List the pollutant name for the next ?? sequential pollutant codes.

?? must be a 2-digit number specifying the number of sequential pollutant names desired. If ?? is entered as blanks, the next sequential pollutant name is listed.

END

Signals the end of processing.

Special Notes

The output generated by this function is produced on the user's terminal immediately after the commands FIND or NEXT.

"Example Interactive Session"

```
@ASG,A NADB*NADB-ABS/SDS
FACILITY WARNING  000200000000
@COPY,A NADB*NADB-ABS,NA206
FORPUR 27R3C E33 SL73R1 08/10/78 10:29:03
 1 ABS
@FREE NADB*NADB-ABS
READY
@NA206
SAROAD TERMINAL SYSTEM (V.2)  DATE: 08/10/78      TIME: 10:29:36

NADB-STE-INX DISABLED--CONTINUING
NADB-AL-SFBK DISABLED--CONTINUING
NADB-AL-SFPI DISABLED--CONTINUING
NADB-AL-SFSI DISABLED--CONTINUING
NADB-PARMFL  DISABLED--CONTINUING
ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
YES
THE SAROAD TERMINAL SYSTEM PROVIDES ACCESS TO THE AIR
QUALITY DATA (SAROAD) THROUGH
THE FUNCTIONS LISTED BELOW. EACH FUNCTION DEFINES THE
SUB-SYSTEM AND THE MODE OF ACCESS. THIS IS INDICATED
BY THE FOLLOWING NOTATION:
    S = SAROAD
    I = INTERACTIVE ACCESS
   RB = REMOTE BATCH ACCESS
THE FOLLOWING IS THE LIST OF LEGAL FUNCTONS.
    SB   - SAROAD REMOTE BATCH            (S, RB)
    QS   - QUARTERLY SUMMARIES            (S, I)
    YS   - YEARLY SUMMARIES               (S, I)
    SI   - SITE DESCRIPTIONS              (S, I)
    UN   - UNIT TABLE                     (S, I)
    PO   - POLLUTANT NAMES                (S, I)
    HELP - DESCRIPTION OF FUNCTIONS
    END  - END TERMINAL SESSION
FUNCTION?
PO


AIR POLLUTION POLLUTANT NAMES


GIVEN A VALID POLLUTANT CODE, THIS PROGRAM GIVES THE USER
THE CORRESPONDING POLLUTANT NAME.

IF YOU WISH A SHORT DESCRIPTION OF THE VALID COMMANDS,
REPLY YES. OTHERWISE, REPLY NO.
YES OR NO?
YES

COMMANDS USED IN THIS PROGRAM ARE:

'POLLUTANT=?????' -THE POLLUTANT CODE FOR WHICH A NAME
                   IS DESIRED
'FIND'            -GET THE POLLUTANT NAME FOR THE CODE
                   GIVEN
'NEXT ??'         -GET THE POLLUTANT NAME FOR THE NEXT
                   SEQUENTIAL POLLUTANT CODE.
```

```
                    IF ?? IS ENTERED AS BLANKS, 01 IS ASSUMED.
                    OTHERWISE, ?? MUST BE A 2 DIGIT NUMBER.
'END'               -SIGNALS THE END OF PROCESSING
THE ENTIRE COMMAND CAN BE ENTERED OR THE COMMAND CAN
BE ABBREVIATED TO THE FIRST TWO LETTERS OF THE COMMAND.
START  ENTERING COMMANDS

COMMAND?
POLLUTANT=11103

POLLUTANT=11103

COMMAND?
FI

POLLUTANT CODE: 11103
POLLUTANT NAME IS BENZENE SOLUBLE ORGANIC FRACTION

COMMAND?
NE 02

POLLUTANT CODE: 11104
POLLUTANT NAME IS POLYNUCLEAR HYDROCARBONS

POLLUTANT CODE: 11105
POLLUTANT NAME IS WATER SOLUBLE ORGANICS

COMMAND?
PO=43101

POLLUTANT=43101

COMMAND?
FI

POLLUTANT CODE: 43101
POLLUTANT NAME IS TOTAL HYDROCARBON

COMMAND?
NE 02

POLLUTANT CODE: 43102
POLLUTANT NAME IS NON-METHANE HYDROCARBON

POLLUTANT CODE: 43103
POLLUTANT NAME IS GASOLINE

COMMAND?
END

ALL POLLUTANT NAME REQUESTS ANSWERED.
PLEASE CHOOSE THE NEXT FUNCTION YOU WISH TO ACCESS.
```

```
FUNCTION?
END

END SESSION
```

SAROAD SITE DESCRIPTION (S, I, SI)

Description

The site description function is an interactive function that allows the user to retrieve either complete or abbreviated site information for the sites referenced in the SAROAD data bank. Sample of an interactive session using this function is included in this section.

Structured Entries

When the function is first entered, the user may obtain a list of available functional commands by replying "YES" to the prompt, COMMAND LIST. . . .YES OR NO?.

The user is then given the option for abbreviated or full description. The user should select one of the two options and enter either ABBR or FULL in response to the prompt, ABBR or FULL?. This function is now ready to receive functional commands. This fact is indicated by the system response, START ENTERING COMMANDS.

Commands

After the preliminary responses have been entered, the user receives the prompt, COMMAND? The user should select and enter a command word from the list given below. The command word can be entered in its entirety or can be abbreviated to the first two characters of the word ("=" is entered after the first 2 characters where applicable).

The commands for this function are:

COMMAND	DESCRIPTION
STATE=??	2 digit code for the state desired.
AREA=????	4-digit code for the city or county desired.
SITE=???	3 digit code for site desired within the area.
AGENCY=?	1 character code of the sponsoring agency.
PROJECT=??	2 digit code, specifying the type of sampling.
KEY=???????????	12 characters, which is the combination of the above codes in the same order they are given above.
FIND	List the description for the site identified by one or more of the above commands.
NEXT=??	List the description for the next ?? sequential sites. ?? must be a 2-digit number specifying the number of sequential site descriptions desired. If ?? is entered as blanks, the next site description is listed.
END	Signals end of processing.

Special Notes

If a match is not found for the specified site, the fact is indicated and the KEY must be reentered, or a portion of the key may be reentered with the singular commands.

This function operates in an interactive mode. Therefore, the output produced will be displayed on the user's terminal immediately after the FIND or NEXT commands.

"Example Interactive Session"

```
JNA206
SAROAD TERMINAL SYSTEM (V.2)  DATE: 08/10/78      TIME: 10:34:50

ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
NO

FUNCTION?
SITE

AIR POLLUTION SITE DESCRIPTIONS
COMMAND LIST---YES OR NO?
YES


THE COMMANDS USED BY THIS PROGRAM ARE LISTED BELOW:
'STATE=??'     THE STATE DESIRED
'AREA=????'    THE CODE NUMBER FOR THE CITY OR COUNTY
'SITE=???'     THE SITE NUMBER WITHIN THE AREA
'AGENCY=?'     THE CODE FOR THE SPONSORING AGENCY
'PROJECT=??'   THE CODE FOR THE TYPE OF SAMPLING
'KEY=??????????????' (12 CHARACTERS)
               THE COMPLETE KEY IS COMPOSED OF THE CODES ABOVE
               IN THE ORDER GIVEN.
'FIND'         GET THE DESCRIPTION FOR THE SITE SPECIFIED
'NEXT ??'      GET THE DESCRIPTION FOR THE NEXT SEQUENTIAL SITE
               COMBINATION.  IF ?? IS ENTERED AS BLANKS, 01 IS
               ASSUMED. OTHERWISE, ?? MUST BE A 2 DIGIT NUMBER.
'END'          SIGNALS END OF SESSION,PROGRAM ENDS
THE FULL COMMAND CAN BE USED OR THE COMMAND CAN BE
ABBREVIATED TO THE FIRST TWO (2) CHARACTERS.
IF A MATCH IS NOT FOUND FOR THE SPECIFIED SITE, THE FACT
IS INDICATED AND THE KEY MUST BE REENTERED.

PLEASE SPECIFY ABBREVIATED OR FULL DESCRIPTION
ABBR OR FULL?
FULL

START ENTERING COMMANDS

COMMAND?
KE=020160013F01

COMPLETE KEY ='020160013F01'

COMMAND?
FI


SITECODE: 020160013 AGENCY/PROJ:F01 AGENCY-TYPE: STATE            EPA-REG:0
LOCATION: FAIRBANKS                 ,ALASKA                  C-POP:    14,771
AQCR(009):NORTHERN ALASKA                                    A-POP:   307,000
SITE ADDR: 604 BARNETTE ST                            LA:  64 D. 50 M. 27 S.N
SMSA(0000):                    LO: 147 D. 43 M. 23 S.W
CNTY(0180): FAIRBANKS ED                UTM-N:7,190,700 M. ELEV-GRD: 010 FT
STN-TYPE  (13):CENTER CITY - COMMERCIAL  UTM-E:  465,700 M. ELEV-MSG:0410 FT
SUPPORT-AGENCY:ALASKA DEPT OF ENVIRONMENTAL CONSERVATION
```

```
COMMENTS:SO SIDE OF STATE OFF BLD 604 BARNETTE ST 180 FT FROM COR OF
         BARNETTE & 7TH AVE
UTM-ZONE: 06  DIFF-GMT: WEST 02 HOURS
COMMAND?
STATE=34

STATE=34

COMMAND?
FI


NO SITE FILE ENTRY FOR   340160013F01  . ENTER VALID KEY

COMMAND?
KE=361220019A05

COMPLETE KEY ='361220019A05'

COMMAND?
FI


SITECODE: 361220019 AGENCY/PROJ:A05 AGENCY-TYPE: EPA/ATMOS. SURV.  EPA-REG:5
LOCATION: CINCINNATI                ,OHIO                          C-POP:   452,524
AQCR(079):METROPOLITAN CINCINNATI                                  A-POP: 1,654,792
SITE ADDR: 1675 GEST STREET                                  LA:  39 D. 08 M. 24 S.N
SMSA(1640): CINCINNATI, OHIO-KY.-                            LO: 084 D. 32 M. 47 S.W
CNTY(2720): HAMILTON CO                     UTM-N:4,335,000 M. ELEV-GRD: 035 FT
STN-TYPE  (11):CENTER CITY - INDUSTRIAL     UTM-E:  712,050 M. ELEV-MSG:0585 FT
SUPPORT-AGENCY:CITY OF CINCINNATI DIV OF AIR POLLUTION CONTROL
COMMENTS:NO2 SPECIAL STUDY
UTM-ZONE: 16  DIFF-GMT: WEST 05 HOURS
COMMAND?
AGENCY=H

AGENCY=H


COMMAND?
FI


SITECODE: 361220019 AGENCY/PROJ:H05 AGENCY-TYPE: CITY                EPA-REG:5
LOCATION: CINCINNATI                ,OHIO                          C-POP:   452,524
AQCR(079):METROPOLITAN CINCINNATI                                  A-POP: 1,654,792
SITE ADDR: 1675 GEST ST                                      LA:  39 D. 08 M. 24 S.N
SMSA(1640): CINCINNATI, OHIO-KY.-                            LO: 084 D. 32 M. 47 S.W
CNTY(2720): HAMILTON CO                     UTM-N:4,335,000 M. ELEV-GRD: 015 FT
STN-TYPE  (11):CENTER CITY - INDUSTRIAL     UTM-E:  712,050 M. ELEV-MSG:0525 FT
SUPPORT-AGENCY:CINCINNATI APC
UTM-ZONE: 16  DIFF-GMT: WEST 05 HOURS          COMMENTS:NO COMMENTS.
COMMAND?

KE=56**********

COMPLETE KEY ='56**********'
```

```
COMMAND?
FI

NO SITE FILE ENTRY FOR   56**********  . ENTER VALID KEY

COMMAND?
KE=55**********
COMPLETE KEY ='55**********'

COMMAND?
FI

NO SITE FILE ENTRY FOR   55**********  . ENTER VALID KEY

COMMAND?
END

ALL SITE INFORMATION REQUESTS ANSWERED.
PLEASE ENTER THE NEXT FUNCTION YOU WISH TO ACCESS.
FUNCTION?
END

END SESSION
```

SAROAD UNITS TABLE (S, I, UN)

Description

The units table function is an interactive function that will produce the AEROS units table. Sample output of this function is included in this section.

Structured Entries

No structured entries are required by this function.

Command

This function does not have any commands.

Special Notes

This function operates in an interactive mode. Only one table is produced as output which is displayed on the user's terminal immediately after entering the function.

"Example Interactive Session"

```
GNA206
SAROAD TERMINAL SYSTEM (V.2)  DATE: 08/10/78      TIME: 10:08:40

ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
NO

FUNCTION?
UNIT

NADB UNITS TABLE

(00)      (UNKNOWN                    )
(01)      (UG/CU METER (25 C)         )
(02)      (UG/CU METER (0  C)         )
(03)      (NG/CU METER (25 C)         )
(04)      (NG/CU METER (0  C)         )
(05)      (MG/CU METER (25 C)         )
(06)      (MG/CU METER (0 C)          )
(07)      (PARTS PER MILLION          )
(08)      (PARTS PER BILLION          )
(09)      (COHS/1,000 LINEAR FT       )
(10)      (RUDS/10,000 LINEAR FT      )
(11)      (METERS/SECOND              )
(12)      (MILES/HOUR                 )
(13)      (KNOTS                      )
(14)      (DEGREES, COMPASS           )
(15)      (DEGREES, FAHRENHEIT        )
(16)      (MILLIBARS                  )
(17)      (DEGREES, CENTIGRADE        )
(18)      (LANGLEYS                   )
(19)      (PER CENT REL. HUMIDITY     )
(20)      (MICRONS                    )
(21)      (INCHES (RAINFALL)          )
(22)      (INCHES(MERCURY)            )
(23)      (MCAL./SQ. CM./MIN.         )
(24)      (MILES (VISIBILITY)         )
(25)      (LANGLEYS/MINUTE            )
(26)      (DEGREES-RANKINE            )
(27)      (BETA SCATTER               )
(28)      (DEGREES CENTIGRADE/100M)
(29)      (MILLIMETERS(RAINFALL)      )
(30)      (PICOCURIES/CU. METER       )
(31)      (MICROCURIES/CU. METER      )
(32)      (PICOCURIES/SQ. METER       )
(33)      (MICROCURIES/SQ. METER      )
(34)      (PICOCURIES/CU. CM.         )
(35)      (PICOCURIES/GRAM            )
(36)      (CALORIES/SQ. CM./HOUR      )
(37)      (DEGREES-KELVIN             )
(40)      (PARTS/HUNDRED MILLION      )
(41)      (MG. SO3/100 SQ. CM./MO.)
(42)      (RUDS/1,000 LINEAR FT.      )
(43)      (GRAMS/SQ. METER/MONTH      )
(44)      (UG/SQ. MILE/MONTH          )
(45)      (TONS/SQ. MI./DAY           )
(46)      (GRAMS/SQ. METER /DAY       )
```

```
(47)      (UG/SQ. METER/DAY          )
(48)      (1000 PARTICULES/SQ. IN.)
(49)      (100 PARTICULES/SQ. IN. )
(50)      (NO. THRESHOLD LEVELS    )
(51)      (% LOSS IN REFLEC./MONTH)
(52)      (MICRONS/WEEK            )
(53)      (# DEFECTS/7.7 SQ. IN.MO)
(54)      (PARTICLES/SQ. MM./WEEK )
(55)      (NBS COLOR DIF. UNITS    )
(56)      (MICRONS/YEAR            )
(61)      (PH UNITS                )
(62)      (MILLIGRAMS/LITER        )
(67)      (MICRO EQUIVALENCE       )
(69)      (MICRO SIEMENS/CM.       )
(70)      (MG. F/100 SQ. CM./DAY   )
(71)      (UG.F/100 SQ. CM./DAY    )
(80)      (MG. SO3/100 SQ. CM./DAY)
(81)      (UG. SO2/SQ. CM./DAY     )
(82)      (UG. SO2/SQ. M./DAY      )
(90)      (TONS/SQ. MI./MONTH      )
(91)      (MG./SQ. CM./MONTH       )
(92)      (UG./CU. M./MONTH        )
(93)      (GRAMS/SQ. METER/MONTH   )
(94)      (POUNDS/SQ. MI. /MONTH   )
(97)      (UG/SQ. CM./30 DAYS      )
(98)      (MG. SO4/SQ. CM./30 DAYS)
(99)      (MG./SQ. CM./30 DAYS     )

UNITS TABLE COMPLETE.  PLEASE ENTER NEXT FUNCTION YOU WISH TO ACCESS.
FUNCTION?
END

END SESSION
@ASG,A NADB*NADB-ABS/SDS.
FACILITY WARNING  000200000000
@COPY,A NADB*NADB-ABS.NA206
FURPUR 27R3C E33 SL73R1 08/10/78 10:13:06
 1 ABS
@FREE NADB*NADB-ABS
READY
```

SAROAD QUARTERLY SUMMARIES (S, I, QS)

Description

The SAROAD Quarterly Summaries is an interactive function which allows the user to retrieve selected summary information for any site for a given pollutant. The following summary information is available:

THE VALID SUMMARY INFORMATION COMMANDS ARE:

ALL	ALL STATISTICS ARE REQUIRED
OBSER	THE NUMBER OF OBSERVATIONS
MIN	THE MINIMUM VALUE ENCOUNTERED
MAX	THE MAXIMUM VALUE ENCOUNTERED
MTIME	TIME MAXIMUM OCCURRED (MM: DA: HR)
SMAX	SECOND MAXIMUM VALUE
TS	TIME SECOND MAXIMUM OCCURRED (MM: DA: HR)
%OBSERV	THE PERCENT OF POSSIBLE OBSERVATIONS THAT ARE PRESENT
ZSUB	ONE HALF THE MINIMUM DETECTABLE
ZCNT	THE NUMBER OF TIMES VALUES OCCURRED THAT WERE LESS THAN THE MINIMUM DETECTABLE

FOR INTERVALS OTHER THAN 3, 8 and 24 HOUR RUNNING AVERAGES--

AMEAN	THE ARITHMETIC MEAN
GMEAN	THE GEOMETRIC MEAN
ASTDEV	THE ARITHMETIC STANDARD DEVIATION
GSTDEV	THE GEOMETRIC STANDARD DEVIATION
PVIOL	NUMBER OF PRIMARY VIOLATIONS (BLANK IF NO STANDARD)

SVIOL	NUMBER OF SECONDARY VIOLATIONS (BLANK IF NO STANDARD)

FOR 3, 8 and 24 HOUR RUNNING AVERAGES--

NPRI	NUMBER OF NON-OVERLAPPING PRIMARY VIOLATIONS
NSEC	NUMBER OF NON-OVERLAPPING SECONDARY VIOLATIONS
OP	NUMBER OF OVERLAPPING VALUES THAT EXCEEDED THE PRIMARY STANDARD
OS	NUMBER OF OVERLAPPING VALUES THAT EXCEEDED THE SECONDARY STANDARD

VALID SUMMARIZATION CRITERIA COMMANDS ARE:

CR	SELECT ONLY CRITERIA DATA
NC	SELECT ONLY NON-CRITERIA DATA
BB	SELECT BOTH CRITERIA AND NON-CRITERIA DATA BLANK STATISTICS FOR NON-CRITERIA DATA
BF	SELECT BOTH CRITERIA AND NON-CRITERIA DATA FLAG NON-CRITERIA DATA

Structured Entries

When the Quarterly Summaries (QS) function is entered, the user may ask for a listing of the available commands by responding 'YES' to the display 'COMMAND LIST---YES OR NO?'.

When the program is ready for accepting commands, it will display 'START ENTERING COMMANDS'.

Commands

After the preliminary responses have been processed, the user is prompted by the display, COMMAND? The user should select and enter a command word from the list which follows. The command word can be entered in its entirety or can be abbreviated to the first two characters of the word. Where '=' is present in the command, it should appear after the first two characters if the abbreviated mode is being used; otherwise, the '=' should follow the full name of the command.

THE VALID REPORT TYPES ARE:

KR	KEYS QUALIFYING REPORT
QR	QUARTERLY SUMMARIES REPORT

THE VALID SITE-POLLUTANT COMMANDS ARE:

STATE=??	THE STATE DESIRED
AREA=????	THE CODE NUMBER FOR THE CITY OR COUNTY
SITE=???	THE SITE NUMBER WITHIN THE AREA
AGENCY=?	THE CODE FOR THE SPONSORING AGENCY
PROJECT=??	THE CODE FOR THE TYPE OF SAMPLING
POLLUTANT=?????	THE CODE FOR THE DESIRED POLLUTANT
METHOD=??	THE CODE FOR THE SAMPLING METHOD
INTERVAL=?	THE CODE FOR THE SAMPLING INTERVAL
BYEAR=??	BEGINNING YEAR DESIRED
BQUARTER=??	BEGINNING QUARTER DESIRED
BDAY=??	NOT USED. ENTER **.
EYEAR=??	ENDING YEAR DESIRED

EQUARTER=??	ENDING QUARTER DESIRED
EDAY=??	NOT USED. ENTER **
KEY=???....	THE COMPLETE KEY IN THE ORDER GIVEN ABOVE (32 CHARACTERS)

THE VALID SUMMARY INFORMATION COMMANDS ARE:

ALL	ALL STATISTICS ARE REQUIRED
OBSERV	THE NUMBER OF OBSERVATIONS
MIN	THE MINIMUM VALUE ENCOUNTERED
MAX	THE MAXIMUM VALUE ENCOUNTERED
MTIME	TIME MAXIMUM OCCURRED (MM: DA: HR)
SMAX	SECOND MAXIMUM VALUE
TS	TIME SECOND MAXIMUM OCCURRED (MM: DA: HR)
%OBSERV	THE PERCENT OF POSSIBLE OBSERVATIONS THAT ARE PRESENT
ZSUB	ONE HALF THE MINIMUM DETECTABLE
ZCNT	THE NUMBER OF TIMES VALUES OCCURRED THAT WERE LESS THAN THE MINIMUM DETECTABLE

FOR INTERVALS OTHER THAN 3, 8 and 24 HOUR RUNNING AVERAGES--

AMEAN	THE ARITHMETIC MEAN
GMEAN	THE GEOMETRIC MEAN
ASTDEV	THE ARITHMETIC STANDARD DEVIATION
GSTDEV	THE GEOMETRIC STANDARD DEVIATION
PVIOL	NUMBER OF PRIMARY VIOLATIONS (BLANK IF NO STANDARD)
SVIOL	NUMBER OF SECONDARY VIOLATIONS (BLANK IF NO STANDARD)

For 3, 8 and 24 HOUR RUNNING AVERAGES--

NPRI	NUMBER OF NON-OVERLAPPING PRIMARY VIOLATIONS
NSEC	NUMBER OF NON-OVERLAPPING SECONDARY VIOLATIONS
OP	NUMBER OF OVERLAPPING VALUES THAT EXCEEDED THE PRIMARY STANDARD
OS	NUMBER OF OVERLAPPING VALUES THAT EXCEEDED THE SECONDARY STANDARD

VALID SUMMARIZATION CRITERIA COMMANDS ARE:

CR	SELECT ONLY CRITERIA DATA
NC	SELECT ONLY NON-CRITERIA DATA
BB	SELECT BOTH CRITERIA AND NON-CRITERIA DATA BLANK STATISTICS FOR NON-CRITERIA DATA
BF	SELECT BOTH CRITERIA AND NON-CRITERIA DATA FLAG NON-CRITERIA DATA

THE VALID COMMANDS FOR PROGRAM DIRECTION ARE:

FIND	(QR)	GETS THE FIRST SEQUENTIAL RECORD OF THE QUARTERLY SUMMARY INFORMATION CONTAINING THE USER INPUT KEY
	(KR)	GETS ALL THE RECORD KEYS OF THE QUARTERLY SUMMARY FILE CONTAINING THE USER INPUT KEY
NEXT ??	(QR)	1. GETS THE NEXT SEQUENTIAL RECORD OF THE QUARTERLY SUMMARY INFORMATION OF THE SUBSET CONTAINING THE USER INPUT KEY. ?? IS THE NUMBER OF RECORDS WANTED.
	(QR)	2. IF NO MATCH ON 'FIND' COMMAND. A NEW KEY MUST BE ENTERED.

XKEY	FILLS CURRENT USER KEY WITH ALL ASTERISKS
?KEY	ALLOWS THE USER TO LOOK AT CURRENT USER KEY.
HELP	LISTS ALL VALID COMMANDS
END	SIGNALS END OF SESSION. PROGRAM ENDS.

The following is a discussion of the commands.

Commands may be entered in any sequence. Once a command is entered, it is altered only through deliberate action on a particular command on the part of the user.

Enter the valid commands as follows:

1. Site-pollutant User Key Commands (referred to as key commands) - The key commands may be entered individually or entered in entirety by using the 'KEY=' command. The user may enter the entire command or the first two letters. The key to be entered may be a full key, a hierarchial key, or a partial key. In all instances, the STATE must be present. When entering the key fields individually (STATE=?? or ST=??, AREA=???? or AR=????, etc.), the key fields entered previously will remain the same unless overlaid with new key field information. Initially, all key entry fields are set to asterisks (don't care entries). If the user desires a key field to be blanked out and no data to be re-entered, simply enter the key command accompanied by asterisks for the number of field positions to be blanked out. For example, if you want 'AREA' blanked out, enter AREA=****. When using the KEY= command entry, enter asterisks in the 'don't care' fields. Note: Use the command ?KEY to look at the current user key at any time.

2. Summary Information Commands - Initially, the Quarterly Summaries Report is set up not to print any of the summary information. (Keys Qualifying Report does not use these commands). To request the particular summary information desired, enter the correct summary information command. The command, ALL, selects all summary information. The user may enter the entire command or the first two (2) characters. To negate a summary information command, three (3) characters are required. Enter the command preceded by X. For example, XALL negates all summary information commands, XOS negates OS, etc.
3. Summarization Criteria Commands - The user may select criteria or non-criteria data or both at any point in the session. If the user selects both types of data, non-criteria data can either be printed or blanked out. These commands are applicable to the Quarterly Summaries Report only. If no selection is made, the program defaults to BB which selects both criteria and non-criteria data. Enter the two character selection code after COMMAND? To negate the command, enter the command preceded by an X such as XBF; and the criteria then defaults to BB. Also, another criteria command may be entered, thus negating the previous criteria selection.
4. Report Type Commands - Selection of either report type may be entered interchangeably throughout the interactive session. No other commands are altered even though they may not be used by a particular report. Initially, the program defaults to the Quarterly Summaries Report, but may be immediately changed to the Keys Qualifying Report if desired.
5. Program Direction Commands - These commands perform a particular function in directing the program and are negated by the entry of a new command of any type.

A. HELP - By entering HELP after COMMAND?, a list of all valid commands will be given.

B. XKEY - Fills current user key with asterisks (clears key).

C. ?KEY - Allows the user to look at the current user key.

D. END - Signals the end of processing of the Quarterly Summaries requests. Program Control is returned to the master calling program, and a new function may be entered.

E. FIND

1. Quarterly Summaries Report - Once the site-pollutant key commands, summary commands, and summarization criteria commands have been entered, the FIND command is issued to find the 1st sequential record of the summary-frequency file containing the desired user key information. See NEXT for more information.
2. Keys Qualifying Report - Once the key commands are entered, the FIND command searches the summary-frequency file to retrieve a list of all keys containing the user input key.

F. NEXT ??

1. Quarterly Summaries Report (QR)
   A. NEXT ?? gets the next sequential records of the summary-frequency file information of the subset containing the user input key. ?? is the number of records wanted. If ?? is blank, the next sequential matching record will be retrieved.
   B. If the user key has no match on the FIND command, a message will be entered prompting the user to enter a new key.

Negate valid commands as follows:

1. Key Commands - To alter key commands, simply re-enter the command accompanied by the new data. To blank out a key command, enter the command accompanied by all asterisks for the number of positions of data. XKEY negates all key commands.
2. Summary Information Commands - To negate these commands, enter the command preceded by X. For example, XALL negates all summary information commands, XOBSERV negates OBSERV, etc.
3. Summarization Criteria Commands - To negate these commands, enter the command preceded by X. The criteria then defaults to 'BB" unless a new summarization criteria command is entered.
4. Report Type Commands - The report type stays the same until a new report type code is entered. Other command data is not altered.
5. Program Direction Commands - These commands perform a particular function and are negated by the entry of a new program direction command or any other command.

"Example Interactive Session"

```
QNA206
SAROAD TERMINAL SYSTEM (V.2)  DATE: 08/10/78      TIME: 10:42:12

ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
NO

FUNCTION?
QS

AIR POLLUTION QUARTERLY DATA SUMMARY REQUESTS

COMMAND LIST---YES OR NO?

YES

THE VALID REPORT TYPES ARE:

'KR'                KEYS QUALIFYING REPORT
'QR'                QUARTERLY SUMMARIES REPORT

THE VALID SITE-POLLUTANT COMMANDS ARE:

'STATE=??'          THE STATE DESIRED
'AREA=????'         THE CODE NUMBER FOR THE CITY OR COUNTY
'SITE=???'          THE SITE NUMBER WITHIN THE AREA
'AGENCY=?'          THE CODE FOR THE SPONSORING AGENCY
'PROJECT=??'        THE CODE FOR THE TYPE OF SAMPLING
'POLLUTANT=?????'   THE CODE FOR THE DESIRED POLLUTANT
'METHOD=??'         THE CODE FOR THE SAMPLING METHOD
'INTERVAL=?'        THE CODE FOR THE SAMPLING INTERVAL
'BYEAR=??'          BEGINNING YEAR DESIRED
'BQUARTER=??'       BEGINNING QUARTER DESIRED
'BDAY=??'           NOT USED. ENTER **.
'EYEAR=??'          ENDING YEAR DESIRED
'EQUARTER=??'       ENDING QUARTER DESIRED
'EDAY=??'           NOT USED. ENTER **.
'KEY=???...'        THE COMPLETE OR PARTIAL KEY IN THE ORDER GIVEN ABOVE

THE VALID SUMMARY INFORMATION COMMANDS ARE:

'ALL'               ALL STATISTICS ARE REQUIRED
'OBSERV'            THE NUMBER OF OBSERVATIONS
'MIN'               THE MINIMUM VALUE ENCOUNTERED
'MAX'               THE MAXIMUM VALUE ENCOUNTERED
'MTIME'             TIME MAXIMUM OCCURRED (MM:DA:HR)
'SMAX'              SECOND MAXIMUM VALUE
'TS'                TIME SECOND MAXIMUM OCCURRED (MM:DA:HR)
'%OBSERV'           THE PERCENT OF POSSIBLE OBSERVATIONS THAT ARE PRESENT
'ZSUB'              ONE HALF THE MINIMUM DETECTABLE
'ZCNT'              THE NUMBER OF TIMES VALUES OCCURRED THAT WERE LESS
                    THAN THE MINIMUM DETECTABLE

FOR INTERVALS OTHER THAN 3, 8 AND 24 HOUR RUNNING AVERAGES--

'AMEAN'             THE ARITHMETIC MEAN
'GMEAN'             THE GEOMETRIC MEAN
'ASTDEV'            THE ARITHMETIC STANDARD DEVIATION
```

```
'GSTDEV'          THE GEOMETRIC STANDARD DEVIATION
'PVIOL'           NUMBER OF PRIMARY VIOLATIONS
                  (BLANK IF NO STANDARD)
'SVIOL'           NUMBER OF SECONDARY VIOLATIONS
                  (BLANK IF NO STANDARD)

FOR 3, 8 AND 24 HOUR RUNNING AVERAGES--

'NPRI'            NUMBER OF NON-OVERLAPPING PRIMARY VIOLATIONS
'NSEC'            NUMBER OF NON-OVERLAPPING SECONDARY VIOLATIONS
'OP'              NUMBER OF OVERLAPPING VALUES THAT EXCEEDED
                  THE PRIMARY STANDARD
'OS'              NUMBER OF OVERLAPPING VALUES THAT EXCEEDED
                  THE SECONDARY STANDARD

VALID SUMMARIZATION CRITERIA COMMANDS ARE:

'CR'              SELECT ONLY CRITERIA DATA
'NC'              SELECT ONLY NON-CRITERIA DATA
'BB'              SELECT BOTH CRITERIA AND NON-CRITERIA DATA.
                  BLANK STATISTICS FOR NON-CRITERIA DATA.
'BF'              SELECT BOTH CRITERIA AND NON-CRITERIA DATA.
                  FLAG NON-CRITERIA DATA.

THE VALID COMMANDS FOR PROGRAM DIRECTION ARE:

'FIND'       (QR) GETS THE FIRST SEQUENTIAL RECORD OF THE
                  QUARTERLY SUMMARY INFORMATION CONTAINING
                  THE USER INPUT KEY.
             (KR) GETS ALL THE RECORD KEYS OF THE QUARTERLY
                  SUMMARY FILE CONTAINING THE USER INPUT KEY
'NEXT ??'    (QR) 1. GETS THE NEXT SEQUENTIAL RECORD OF THE QUARTERLY
                  SUMMARY INFORMATION OF THE SUBSET CONTAINING THE USER
                  INPUT KEY. ?? IS THE NUMBER OF RECORDS WANTED.
             (QR) 2. IF NO MATCH ON 'FIND' COMMAND, A NEW KEY MUST
                  BE INPUT.
'?KEY'            ALLOWS USER TO LOOK AT CURRENT USER KEY
'XKEY'            FILLS USER KEY WITH ALL ASTERISKS
'HELP'            LISTS ALL COMMANDS.
'END'             SIGNALS END OF SESSION. PROGRAM ENDS.

START ENTERING COMMANDS

COMMAND?

KR

KR = KEYS QUALIFYING REPORT

COMMAND?

KE=020160***F**42101***750300760200

COMPLETE KEY=020160***F**42101***750300760200

COMMAND?

F1
```

```
KEYS QUALIFYING REPORT

                    ST  AREA  SITE A  PR  POLL   ME  I BEG DATE END DATE
KEY ENTERED:        02  0160  ***  F  **  42101  **  *  7503**   7602**

                    ST  AREA  SITE A  PR  POLL   ME  I  DATE
KEYS MATCHING:      02  0160  013  F  01  42101  11  1  75/03
                    02  0160  013  F  01  42101  11  1  75/04
                    02  0160  013  F  01  42101  11  1  76/01
                    02  0160  013  F  01  42101  11  1  76/02
                    02  0160  013  F  01  42101  11  Z  75/03
                    02  0160  013  F  01  42101  11  Z  75/04
                    02  0160  013  F  01  42101  11  Z  76/01
                    02  0160  013  F  01  42101  11  Z  76/02

NO. MATCHING KEYS:        8

COMMAND?
QR

QR = QUARTERLY SUMMARIES REPORT

COMMAND?
KE=020160013F014210111*750400750400

COMPLETE KEY=020160013F014210111*750400750400

COMMAND?
FI


SITECODE=020160013F01   FAIRBANKS              ,ALASKA
POLL/ME=4210111         UNITS=05     INT=1     YR=75    QR=04
CARBON    MONOXIDE      INSTRUMENTAL  NONDISPERSIVE INFRA-RED


COMMAND?

ALL

ALL

COMMAND?

NE

NEXT HIGHER SEQUENTIAL RECORD AFTER USER INPUT KEY
```

```
SITECODE=020160013F01   FAIRBANKS                    ,ALASKA
POLL/ME=4210111         UNITS=05     INT=Z     YR=75    QR=01
CARBON     MONOXIDE     INSTRUMENTAL  NONDISPERSIVE INFRA-RED
# OBSERVATIONS=                                  1807
MAXIMUM=                                         30.6
MINIMUM=                                           .3
SUBSTITUTE VALUE=                                  .3
# SUBSTITUTIONS MADE=                               0
# SECONDARY VIOLATIONS=                           153
# NON-OVLP PRI-VIOLATIONS =                        26
# NON-OVLP SEC-VIOLATIONS =                        26
TIME MAXIMUM OCCURRED=                       01:22:18
TIME SECOND MAXIMUM OCCURRED=                01:22:22
SECOND MAXIMUM VALUE=                            23.7
# OVLP VALS EXCEEDING PRIMARY=                    153
# OVLP VALS EXCEEDING SECONDARY=                  153
```

```
SITECODE=020160013F01   FAIRBANKS                    ,ALASKA
POLL/ME=4210111         UNITS=05     INT=Z     YR=75    QR=02
CARBON     MONOXIDE     INSTRUMENTAL  NONDISPERSIVE INFRA-RED
# OBSERVATIONS=                                  1688
MAXIMUM=                                          4.2
MINIMUM=                                           .3
SUBSTITUTE VALUE=                                  .3
# SUBSTITUTIONS MADE=                               0
# SECONDARY VIOLATIONS=                             0
# NON-OVLP PRI-VIOLATIONS =                         0
# NON-OVLP SEC-VIOLATIONS =                         0
TIME MAXIMUM OCCURRED=                       04:04:13
TIME SECOND MAXIMUM OCCURRED=                04:03:12
SECOND MAXIMUM VALUE=                             4.0
# OVLP VALS EXCEEDING PRIMARY=                      0
# OVLP VALS EXCEEDING SECONDARY=                    0
```

```
SITECODE=020160013F01   FAIRBANKS                    ,ALASKA
POLL/ME=4210111         UNITS=05     INT=Z     YR=75    QR=03
CARBON     MONOXIDE     INSTRUMENTAL  NONDISPERSIVE INFRA-RED
# OBSERVATIONS=                                  1946
MAXIMUM=                                          3.7
MINIMUM=                                           .3
SUBSTITUTE VALUE=                                  .3
# SUBSTITUTIONS MADE=                               0
# SECONDARY VIOLATIONS=                             0
# NON-OVLP PRI-VIOLATIONS =                         0
# NON-OVLP SEC-VIOLATIONS =                         0
TIME MAXIMUM OCCURRED=                       07:23:22
TIME SECOND MAXIMUM OCCURRED=                09:17:12
SECOND MAXIMUM VALUE=                             3.7
# OVLP VALS EXCEEDING PRIMARY=                      0
```

```
# OVLP VALS EXCEEDING SECONDARY=                0


SITECODE=020160013F01   FAIRBANKS                ,ALASKA
POLL/ME=4210111         UNITS=05     INT=Z     YR=75    QR=04
CARBON    MONOXIDE      INSTRUMENTAL  NONDISPERSIVE INFRA-RED
# OBSERVATIONS=                                 1729
MAXIMUM=                                        27.3
MINIMUM=                                          .3
SUBSTITUTE VALUE=                                 .3
# SUBSTITUTIONS MADE=                              0
# SECONDARY VIOLATIONS=                          191
# NON-OVLP PRI-VIOLATIONS =                       39
# NON-OVLP SEC-VIOLATIONS =                       39
TIME MAXIMUM OCCURRED=                       12:23:20
TIME SECOND MAXIMUM OCCURRED=                12:23:16
SECOND MAXIMUM VALUE=                           20.1
# OVLP VALS EXCEEDING PRIMARY=                   191
# OVLP VALS EXCEEDING SECONDARY=                 191

COMMAND?

KE=364340004H014420111175030075040 0

COMPLETE KEY=364340004H014420111175030075040 0

COMMAND?

XALL

XALL


COMMAND?

PVIOL

PVIOL

COMMAND?

MAX

MAX

COMMAND?

MTIME

MTIME

COMMAND?

?KE

V V   V  VV V    V VV V V V V V
```

```
364340004H014420111 750300750400

COMMAND?

FI


SITECODE=3643400 4H01    MIDDLETOWN              ,OHIO
POLL/ME=4420111          UNITS=01     INT=1     YR=75    QR=03
OZONE                    INSTRUMENTAL   CHEMILUMINESCENCE
MAXIMUM=                                     307.720
# PRIMARY VIOLATIONS=                            135
TIME MAXIMUM OCCURRED=                       07:22:17


SITECODE=364340004H01    MIDDLETOWN              ,OHIO
POLL/ME=4420111          UNITS=01     INT=1     YR=75    QR=04
OZONE                    INSTRUMENTAL   CHEMILUMINESCENCE
MAXIMUM=                                     150.920
# PRIMARY VIOLATIONS=                              0
TIME MAXIMUM OCCURRED=                       10:21:15

COMMAND?

XKE

V V   V  VV V    V VV V V V V V
*****************************

COMMAND?

STATE=50

STATE=50

COMMAND?

POLLUTANT=44201

POLLUTANT=44201

COMMAND?

BYEAR=76

BYEAR=76

COMMAND?

EYEAR=77

EYEAR=77
```

```
COMMAND?

KR

KR = KEYS QUALIFYING REPORT

COMMAND?

/KE
INVALID COMMAND /KE

COMMAND?

?KE

V V   V  VV V    V VV V V V V V
50**********44201***76****77****

COMMAND?

FI


KEYS QUALIFYING REPORT

KEY ENTERED:      ST  AREA  SITE A  PR  POLL   ME  I BEG DATE END DATE
                  50  ****  ***  *  **  44201  **  *  76****  77****

                  ST  AREA  SITE A  PR  POLL   ME  I  DATE
KEYS MATCHING:    50  0280  004  F  01  44201  11  1  77/01
                *  50  0280  004  F  01  44201  11  1  77/02
                   50  0280  004  F  01  44201  11  1  77/03
                   50  0280  004  F  01  44201  11  1  77/04

NO. MATCHING KEYS:        4

*=DATA DOES NOT MEET SUMMARY CRIT.-OAQPS GUIDELINE 1.2-040.

COMMAND?

QR

QR = QUARTERLY SUMMARIES REPORT

COMMAND?

BQUARTER=02

BQUARTER=02

COMMAND?

EQUARTER=03

EQUARTER=03

COMMAND?

FI
```

```
SITECODE=500280004F01   CHARLESTON              ,WEST VIRGINIA
POLL/ME=4420111         UNITS=01     INT=1     YR=77    QR=02
OZONE                   INSTRUMENTAL  CHEMILUMINESCENCE
MAXIMUM=                                        192
# PRIMARY VIOLATIONS=                             5
TIME MAXIMUM OCCURRED=                     06:16:13


SITECODE=500280004F01   CHARLESTON              ,WEST VIRGINIA
POLL/ME=4420111         UNITS=01     INT=1     YR=77    QR=03
OZONE                   INSTRUMENTAL  CHEMILUMINESCENCE
MAXIMUM=                                        282
# PRIMARY VIOLATIONS=                            41
TIME MAXIMUM OCCURRED=                     07:18:16

COMMAND?
XMAX
XMAX

COMMAND?
XPVIOL
XPVIOL

COMMAND?
XMTIME
XMTIME

COMMAND?
KE=030380001F024240114Y750400750400
COMPLETE KEY=030380001F024240114Y750400750400

COMMAND?
ALL
ALL

COMMAND?
BF
BF
```

```
COMMAND?
FI

SITECODE=030380001F02   GREENLEE CO            ,ARIZONA
POLL/ME=4240114        UNITS=01    INT=Y    YR=75   QR=04
SULFUR    DIOXIDE      INSTRUMENTAL  COULOMETRIC
# OBSERVATIONS=                              2033
MAXIMUM=                                     2933
MINIMUM=                                        3
SUBSTITUTE VALUE=                               3
# SUBSTITUTIONS MADE=                           0
# SECONDARY VIOLATIONS=                        63
# NON-OVLP PRI-VIOLATIONS =                     0
# NON-OVLP SEC-VIOLATIONS =                    32
TIME MAXIMUM OCCURRED=                   12:22:06
TIME SECOND MAXIMUM OCCURRED=            12:12:12
SECOND MAXIMUM VALUE=                        2850
# OVLP VALS EXCEEDING PRIMARY=                  0
# OVLP VALS EXCEEDING SECONDARY=               63

COMMAND?
END

QUARTERLY SUMMARY REQUESTS COMPLETED.
ENTER NEXT FUNCTION YOU WISH TO ACCESS
FUNCTION?
END

END SESSION
```

SAROAD YEARLY SUMMARIES (S, I, YS)

Description

The SAROAD Yearly Summaries is an interactive function which allows the user to retrieve selected summary information for any site for a given pollutant. The following summary information is available:

THE VALID SUMMARY INFORMATION COMMANDS ARE:

ALL	ALL STATISTICS ARE REQUIRED
OBSERV	THE NUMBER OF OBSERVATIONS
MIN	THE MINIMUM VALUE ENCOUNTERED
MAX	THE MAXIMUM VALUE ENCOUNTERED
MTIME	TIME MAXIMUM OCCURRED (MM: DA: HR)
SMAX	SECOND MAXIMUM VALUE
TS	TIME SECOND MAXIMUM OCCURRED (MM: DA: HR)
%OBSERV	THE PERCENT OF POSSIBLE OBSERVATIONS THAT ARE PRESENT
ZSUB	ONE HALF THE MINIMUM DETECTABLE
ZCNT	THE NUMBER OF TIMES VALUES OCCURRED THAT WERE LESS THAN THE MINIMUM DETECTABLE

FOR INTERVALS OTHER THAN 3, 8 and 24 Hour Running Averages--

AMEAN	THE ARITHMETIC MEAN
GMEAN	THE GEOMETRIC MEAN
ASTDEV	THE ARITHMETIC STANDARD DEVIATION

GSTDEV	THE GEOMETRIC STANDARD DEVIATION
PVIOL	NUMBER OF PRIMARY VIOLATIONS (BLANK IF NO STANDARD)
SVIOL	NUMBER OF SECONDARY VIOLATIONS (BLANK IF NO STANDARD)

FOR 3, 8 and 24 Hour Running Averages--

NPRI	NUMBER OF NON-OVERLAPPING PRIMARY VIOLATIONS
NSEC	NUMBER OF NON-OVERLAPPING SECONDARY VIOLATIONS
OP	NUMBER OF OVERLAPPING VALUES THAT EXCEEDED THE PRIMARY STANDARD
OS	NUMBER OF OVERLAPPING VALUES THAT EXCEEDED THE SECONDARY STANDARD

VALID SUMMARIZATION CRITERIA COMMANDS ARE:

CR	SELECT ONLY CRITERIA DATA
NC	SELECT ONLY NON-CRITERIA DATA
BB	SELECT BOTH CRITERIA AND NON-CRITERIA DATA BLANK STATISTICS FOR NON-CRITERIA DATA
BF	SELECT BOTH CRITERIA AND NON-CRITERIA DATA FLAG NON-CRITERIA DATA.

Structured Entries

When the Yearly Summaries (YS) function is entered, the user may ask for a listing of the available commands by responding 'YES' to the display 'COMMAND LIST---YES OR NO?'.

When the program is ready for accepting commands, it will display 'START ENTERING COMMANDS'.

Commands

After the preliminary responses have been processed, the user is prompted by the display, COMMAND? The user should select and enter a command word from the list which follows. The command word can be entered in its entirety or can be abbreviated to the first two characters of the word. Where '=' is present in the command, it should appear after the first two characters if the abbreviated mode is being used; otherwise, the '=' should follow the full name of the command.

THE VALID REPORT TYPES ARE:

KR	KEYS QUALIFYING REPORT
YR	YEARLY SUMMARIES REPORT

THE VALID SITE-POLLUTANT COMMANDS ARE:

STATE=??	THE STATE DESIRED
AREA=????	THE CODE NUMBER FOR THE CITY OR COUNTY
SITE=???	THE SITE NUMBER WITHIN THE AREA
AGENCY=?	THE CODE FOR THE SPONSORING AGENCY
PROJECT=??	THE CODE FOR THE TYPE OF SAMPLING
POLLUTANT=?????	THE CODE FOR THE DESIRED POLLUTANT
METHOD=??	THE CODE FOR THE SAMPLING METHOD
INTERVAL=?	THE CODE FOR THE SAMPLING INTERVAL
BYEAR=??	BEGINNING YEAR DESIRED
BQUARTER=??	NOT USED. ENTER**.

BDAY=??	NOT USED. ENTER**.
EYEAR=??	ENDING YEAR DESIRED
EQUARTER=??	NOT USED. ENTER**.
EDAY=??	NOT USED. ENTER**.
KEY=???....	THE COMPLETE KEY IN THE ORDER GIVEN ABOVE (32 CHARACTERS)

The VALID SUMMARY INFORMATION COMMANDS ARE:

ALL	ALL STATISTICS ARE REQUIRED
OBSERV	THE NUMBER OF OBSERVATIONS
MIN	THE MINIMUM VALUE ENCOUNTERED
MAX	THE MAXIMUM VALUE ENCOUNTERED
MTIME	TIME MAXIMUM OCCURED (MM: DA: HR)
SMAX	SECOND MAXIMUM VALUE
TS	TIME SECOND MAXIMUM OCCURRED (MM: DA: HR)
%OBSERV	THE PERCENT OF POSSIBLE OBSERVATIONS THAT ARE PRESENT
ZSUB	ONE HALF THE MINIMUM DETECTABLE
ZCNT	THE NUMBER OF TIMES VALUES OCCURRED THAT WERE LESS THAN THE MINIMUM DETECTABLE

FOR INTERVALS OTHER THAN 3, 8 and 24 HOUR RUNNING AVERAGES--

AMEAN	THE ARITHMETIC MEAN
GMEAN	THE GEOMETRIC MEAN
ASTDEV	THE ARITHMETIC STANDARD DEVIATION
GSTDEV	THE GEOMETRIC STANDARD DEVIATION
PVIOL	NUMBER OF PRIMARY VIOLATIONS (BLANK IF NO STANDARD)
SVIOL	NUMBER OF SECONDARY VIOLATIONS (BLANK IF NO STANDARD)

FOR 3, 8 and 24 HOUR RUNNING AVERAGES--

NPRI	NUMBER OF NON-OVERLAPPING PRIMARY VIOLATIONS
NSEC	NUMBER OF NON-OVERLAPPING SECONDARY VIOLATIONS
OP	NUMBER OF OVERLAPPING VALUES THAT EXCEEDED THE PRIMARY STANDARD
OS	NUMBER OF OVERLAPPING VALUES THAT EXCEEDED THE SECONDARY STANDARD

VALID SUMMARIZATION CRITERIA COMMANDS ARE:

CR	SELECT ONLY CRITERIA DATA
NC	SELECT ONLY NON-CRITERIA DATA
BB	SELECT BOTH CRITERIA AND NON-CRITERIA DATA BLANK STATISTICS FOR NON-CRITERIA DATA
BF	SELECT BOTH CRITERIA AND NON-CRITERIA DATA FLAG NON-CRITERIA DATA

THE VALID COMMANDS FOR PROGRAM DIRECTION ARE:

FIND (YR) GETS THE FIRST SEQUENTIAL RECORD OF THE YEARLY SUMMARY INFORMATION CONTAINING THE USER INPUT KEY

(KR) GETS ALL THE RECORD KEYS OF THE YEARLY SUMMARY FILE CONTAINING THE USER INPUT KEY

NEXT?? (YR) 1. GETS THE NEXT SEQUENTIAL RECORD OF THE YEARLY SUMMARY INFORMATION OF THE SUBSET CONTAINING THE USER INPUT KEY. ?? IS THE NUMBER OF RECORDS WANTED

(YR) 2. IF NO MATCH ON 'FIND' COMMAND, A NEW KEY MUST BE ENTERED.

XKEY FILLS CURRENT USER KEY WITH ALL ASTERISKS

?KEY ALLOWS THE USER TO LOOK AT CURRENT USER KEY.

HELP LISTS ALL VALID COMMANDS

END SIGNALS END OF SESSION. PROGRAM ENDS.

The following is a discussion of the commands.

Commands may be entered in any sequence. Once a command is entered, it is altered only through deliberate action on a particular command on the part of the user.

Enter the valid commands as follows:

1. Site-pollutant User Key Commands (referred to as key commands) - The key commands may be entered individually or entered in entirety by using the 'KEY=' command. The user may enter the entire command or the first two letters. The key to be entered may be a full key, a hierarchial key, or a partial key. In all instances, the STATE must be present. When entering the key fields individually

(STATE=?? or ST=??, AREA=???? or AR=????, etc), the key fields entered previously will remain the same unless overlaid with new key field information. Initially, all key entry fields are set to asterisks (don't care entries). If the user desires a key field to be blanked out and no data to be re-entered, simply enter the key command accompanied by asterisks for the number of field positions to be blanked out. For example, if you want 'AREA' blanked out, enter AREA=****. When using the KEY= command entry, enter asterisks in the 'don't care' fields. Note: Use the command ?KEY to look at the current user key at any time.

2. Summary Information Commands - Initially, the Yearly Summaries Report is set up not to print any of the summary information. (Keys Qualifying Report does not use these commands.) To request the particular summary information desired, enter the correct summary information command. The command ALL selects all summary information. The user may enter the entire command or the first two(2) characters. To negate a summary information command, three characters are required. Enter the command preceded by X. For example, XALL negates all summary information commands, XOS negate OS, etc.

3. Summarization Criteria Commands - The user may select criteria or non-criteria data or both at any point in the session. If the user selects both types of data, non-criteria data can either be printed or blanked out. These commands are applicable to the Yearly Summaries Report only. If no selection is made, the program defaults to BB, which selects both criteria and non-critieria data. Enter the two character selection code after COMMAND? To negate

the command, enter the command preceded by an X such as XBF and the criteria then defaults to BB. Also, another criteria command may be entered, thus negating the previous criteria selection.

4. Report Type Commands - Selection of either report type may be entered interchangeably throughout the interactive session. No other commands are altered even though they may not be used by a particular report. Initially, the program defaults to the Yearly Summaries Report, but may be immediately changed to the Keys Qualifying Report if desired.

5. Program Direction Commands - These commands perform a particular function in directing the program and are negated by the entry of a new command of any type.

A. HELP - By entering HELP after COMMAND?, a list of all valid commands will be given.

B. XKEY - Fills current user key with asterisks (clears key).

C. ?KEY - Allows the user to look at the current user key.

D. END - Signals the end of processing of the Yearly Summaries requests. Program control is returned to the master calling program, and a new function may be entered.

E. FIND

1. Yearly Summaries Report - Once the site-pollutant key commands, summary commands, and summarization criteria commands have been entered, the FIND command is issued to find the 1st sequential record of the summary-frequency file containing the desired user

key information. See NEXT for more information.

2. Keys Qualifying Report - Once the key commands are entered, the FIND command searches the summary-frequency file to retrieve a list of all keys containing the user input key.

F. NEXT ??

1. Yearly Summaries Report (YR)

   A. NEXT ?? gets the next sequential records of the summary-frequency file information of the subset containing the user input key. ?? is the number of records wanted. If ?? is blank, the next sequential matching record will be retrieved.

   B. If the user key has no match on the FIND command, a message will be printed prompting user to enter a new key.

Negate valid commands as follows:

1. Key Commands - To alter key commands simply re-enter the command accompanied by the new data. To blank out a key command, enter the command accompanied by all asterisks for the number of positions of data. XKEY negates all key commands.

2. Summary Information Commands - To negate these commands, enter the command preceded by X. For example, XALL negates all summary information commands, XOBSERV negates OBSERV, etc.

3. Summarization Criteria Commands - To negate these commands enter the command preceded by X. The criteria then default to 'BB' unless a new summarization criteria command is entered
4. Report Type Commands - The report type stays the same until a new report type code is entered. Other command data is not altered.
5. Program Direction Commands - These commands perform a particular funtion and are negated by the entry of a new program direction command or any other command.

"Example Interactive Session"

```
WNA206
SAROAD TERMINAL SYSTEM (V.2)  DATE: 08/10/78      TIME: 12:58:27

NADB-STE-INX DISABLED--CONTINUING
NADB-AL-SFBK DISABLED--CONTINUING
NADB-AL-SFPI DISABLED--CONTINUING
NADB-AL-SFSI DISABLED--CONTINUING
NADB-PARMFL  DISABLED--CONTINUING
ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
NO

FUNCTION?
YS

AIR POLLUTION YEARLY DATA SUMMARY REQUESTS

COMMAND LIST---YES OR NO?

YES

THE VALID REPORT TYPES ARE:

'KR'                KEYS QUALIFYING REPORT
'YR'                YEARLY SUMMARIES REPORT

THE VALID SITE-POLLUTANT COMMANDS ARE:

'STATE=??'          THE STATE DESIRED
'AREA=????'         THE CODE NUMBER FOR THE CITY OR COUNTY
'SITE=???'          THE SITE NUMBER WITHIN THE AREA
'AGENCY=?'          THE CODE FOR THE SPONSORING AGENCY
'PROJECT=??'        THE CODE FOR THE TYPE OF SAMPLING
'POLLUTANT=?????'   THE CODE FOR THE DESIRED POLLUTANT
'METHOD=??'         THE CODE FOR THE SAMPLING METHOD
'INTERVAL=?'        THE CODE FOR THE SAMPLING INTERVAL
'BYEAR=??'          BEGINNING YEAR DESIRED
'BQUARTER=??'       NOT USED. ENTER **.
'BDAY=??'           NOT USED. ENTER **.
'EYEAR=??'          ENDING YEAR DESIRED
'EQUARTER=??'       NOT USED. ENTER **.
'EDAY=??'           NOT USED. ENTER **.
'KEY=???...'        THE COMPLETE OR PARTIAL KEY IN THE ORDER GIVEN ABOVE

THE VALID SUMMARY INFORMATION COMMANDS ARE:

'ALL'               ALL STATISTICS ARE REQUIRED
'OBSERV'            THE NUMBER OF OBSERVATIONS
'MIN'               THE MINIMUM VALUE ENCOUNTERED
'MAX'               THE MAXIMUM VALUE ENCOUNTERED
'MTIME'             TIME MAXIMUM OCCURRED (MM:DA:HR)
'SMAX'              SECOND MAXIMUM VALUE
'TS'                TIME SECOND MAXIMUM OCCURRED (MM:DA:HR)
'%OBSERV'           THE PERCENT OF POSSIBLE OBSERVATIONS THAT ARE PRESENT
'ZSUB'              ONE HALF THE MINIMUM DETECTABLE
'ZCNT'              THE NUMBER OF TIMES VALUES OCCURRED THAT WERE LESS
                    THAN THE MINIMUM DETECTABLE

FOR INTERVALS OTHER THAN 3, 8 AND 24 HOUR RUNNING AVERAGES--
```

```
'AMEAN'          THE ARITHMETIC MEAN
'GMEAN'          THE GEOMETRIC MEAN
'ASTDEV'         THE ARITHMETIC STANDARD DEVIATION
'GSTDEV'         THE GEOMETRIC STANDARD DEVIATION
'PVIOL'          NUMBER OF PRIMARY VIOLATIONS
                 (BLANK IF NO STANDARD)
'SVIOL'          NUMBER OF SECONDARY VIOLATIONS
                 (BLANK IF NO STANDARD)

FOR 3, 8 AND 24 HOUR RUNNING AVERAGES--

'NPRI'           NUMBER OF NON-OVERLAPPING PRIMARY VIOLATIONS
'NSEC'           NUMBER OF NON-OVERLAPPING SECONDARY VIOLATIONS
'OP'             NUMBER OF OVERLAPPING VALUES THAT EXCEEDED
                 THE PRIMARY STANDARD
'OS'             NUMBER OF OVERLAPPING VALUES THAT EXCEEDED
                 THE SECONDARY STANDARD

VALID SUMMARIZATION CRITERIA COMMANDS ARE:

'CR'             SELECT ONLY CRITERIA DATA
'NC'             SELECT ONLY NON-CRITERIA DATA
'BB'             SELECT BOTH CRITERIA AND NON-CRITERIA DATA.
                 BLANK STATISTICS FOR NON-CRITERIA DATA.
'BF'             SELECT BOTH CRITERIA AND NON-CRITERIA DATA.
                 FLAG NON-CRITERIA DATA.

THE VALID COMMANDS FOR PROGRAM DIRECTION ARE:

'FIND'      (YR) GETS THE FIRST SEQUENTIAL RECORD OF THE
                 YEARLY    SUMMARY INFORMATION CONTAINING
                 THE USER INPUT KEY.
            (KR) GETS ALL THE RECORD KEYS OF THE YEARLY
                 SUMMARY FILE CONTAINING THE USER INPUT KEY
'NEXT ??'   (YR) 1. GETS THE NEXT SEQUENTIAL RECORD OF THE YEARLY
                 SUMMARY INFORMATION OF THE SUBSET CONTAINING THE USER
                 INPUT KEY. ?? IS THE NUMBER OF RECORDS WANTED.
            (YR) 2. IF NO MATCH ON 'FIND' COMMAND, A NEW KEY MUST
                 BE INPUT.
'?KEY'           ALLOWS USER TO LOOK AT CURRENT USER KEY
'XKEY'           FILLS USER KEY WITH ALL ASTERISKS
'HELP'           LISTS ALL COMMANDS.
'END'            SIGNALS END OF SESSION. PROGRAM ENDS.

START ENTERING COMMANDS

COMMAND?

KR

KR = KEYS QUALIFYING REPORT

COMMAND?

KE=50**********4240191777000077999

COMPLETE KEY=50**********4240191777000077999999

COMMAND?
```

FI

KEYS QUALIFYING REPORT

	ST	AREA	SITE	A	PR	POLL	ME	I	BEG DATE	END DATE
KEY ENTERED:	50	****	***	*	**	42401	91	7	7700**	7799**

	ST	AREA	SITE	A	PR	POLL	ME	I	DATE
KEYS MATCHING:	50	0040	001	F	01	42401	91	7	77/00
	50	0280	007	F	02	42401	91	7	77/00
	50	0480	002	F	02	42401	91	7	77/00
	50	0500	004	F	02	42401	91	7	77/00
	*50	0620	005	F	02	42401	91	7	77/00
	50	0620	006	F	02	42401	91	7	77/00
	50	0660	001	F	01	42401	91	7	77/00
	50	0700	003	F	01	42401	91	7	77/00
	50	0760	002	F	02	42401	91	7	77/00
	*50	1040	001	F	01	42401	91	7	77/00
	*50	1100	004	F	01	42401	91	7	77/00
	*50	1100	005	F	01	42401	91	7	77/00
	*50	1100	006	F	05	42401	91	7	77/00
	50	1220	001	F	01	42401	91	7	77/00
	50	1220	002	F	01	42401	91	7	77/00
	50	1240	001	F	02	42401	91	7	77/00
	50	1340	001	F	02	42401	91	7	77/00
	50	1420	003	F	01	42401	91	7	77/00
	50	1560	003	F	02	42401	91	7	77/00
	50	1760	005	F	02	42401	91	7	77/00
	*50	2000	003	F	02	42401	91	7	77/00
	50	2040	003	F	01	42401	91	7	77/00
	50	2060	001	F	01	42401	91	7	77/00
	*50	2120	001	H	01	42401	91	7	77/00
	50	2120	004	H	01	42401	91	7	77/00

NO. MATCHING KEYS: 25

* = DATA DOES NOT MEET SUMMARY CRIT.-OAQPS GUIDELINE 1.2-04

COMMAND?

YR

YR = YEARLY SUMMARIES REPORT

COMMAND?

ALL

ALL

COMMAND?

BF

BF

```
COMMAND?

KE=502120******42401917770000779999

COMPLETE KEY=502120******42401917770000779999

COMMAND?

FI


SITECODE=502120001H01   WHEELING      WEST VIRGINIA
POLLYME=4240191         UNITS=01      INT=7     YR=77
SULFUR    DIOXIDE       GAS BUBBLER   PARAROSANILINE-SULFAMIC ACID
# OBSERVATIONS=                                  43
MAXIMUM=                                        115
MINIMUM=                                          3
ARITH. MEAN=                                     29 *
GEOM. MEAN                                       22 *
ARITH. STD-DEV.=                             20.400 *
GEOM. STD-DEV.=                               2.266 *
PERCENT OBSERVATIONS=
SUBSTITUTE VALUE=                                 3
# SUBSTITUTIONS MADE=                             3
# PRIMARY VIOLATIONS=                             0
# SECONDARY VIOLATIONS=                           0
TIME MAXIMUM OCCURRED=                       03:08:00
TIME SECOND MAXIMUM OCCURRED=                02:14:00
SECOND MAXIMUM VALUE=                           62

* = VALUE FROM DATA NOT MEETING SUMMARY CRIT.-OAQPS GUILDLINE 1.2-040

COMMAND?

XALL

XALL

COMMAND?

MAX

MAX

COMMAND?

AMEAN

AMEAN

COMMAND?

PVIOL
```

```
PVIOL

COMMAND?

NE

NEXT HIGHER SEQUENTIAL RECORD AFTER USER INPUT KEY


SITECODE=502120004H01   WHEELING                  ,WEST VIRGINIA
POLL/ME=4240191         UNITS=01     INT=7     YR=77
SULFUR    DIOXIDE       GAS BUBBLER  PARAROSANILINE-SULFAMIC ACID
MAXIMUM=                                         58
ARITH. MEAN=                                     14
# PRIMARY VIOLATIONS=                             0

COMMAND?

AREA=0620

AREA=0620

COMMAND?

SITE=006

SITE=006

COMMAND?

?KE

V V   V  VV V    V VV V V V V V
500620006***4240191777000077999 9

COMMAND?

FI


SITECODE=500620006F02   HANCOCK CO                ,WEST VIRGINIA
POLL/ME=4240191         UNITS=01     INT=7     YR=77
SULFUR    DIOXIDE       GAS BUBBLER  PARAROSANILINE-SULFAMIC ACID
MAXIMUM=                                         315
ARITH. MEAN=                                      62
# PRIMARY VIOLATIONS=                              0

COMMAND?

XKE

V V   V  VV V    V VV V V V V V
*******************************
```

```
COMMAND?
KR

KR = KEYS QUALIFYING REPORT
COMMAND?

KE=182380***G**42101***750000779999

COMPLETE KEY=182380***G**42101***750000779999

COMMAND?
FI


KEYS QUALIFYING REPORT

                 ST  AREA  SITE A  PR  POLL   ME  I BEG DATE END DATE
KEY ENTERED:     18  2380  ***  G  **  42101  **  *  7500**   7799**

                 ST  AREA  SITE A  PR  POLL   ME  I  DATE
KEYS MATCHING:   18  2380  011  G  01  42101  11  1  75/00
                 18  2380  011  G  01  42101  11  1  76/00
                *18  2380  011  G  01  42101  11  1  77/00
                 18  2380  011  G  01  42101  11  Z  75/00
                 18  2380  011  G  01  42101  11  Z  76/00
                 18  2380  011  G  01  42101  11  Z  77/00
                 18  2380  019  G  01  42101  11  1  75/00
                *18  2380  019  G  01  42101  11  1  76/00
                *18  2380  019  G  01  42101  11  1  77/00
                 18  2380  019  G  01  42101  11  Z  75/00
                 18  2380  019  G  01  42101  11  Z  76/00
                 18  2380  019  G  01  42101  11  Z  77/00
                *18  2380  020  G  01  42101  11  1  77/00
                 18  2380  020  G  01  42101  11  Z  77/00
                 18  2380  025  G  03  42101  11  1  75/00
                 18  2380  025  G  03  42101  11  1  76/00
                *18  2380  025  G  03  42101  11  1  77/00
                 18  2380  025  G  03  42101  11  Z  75/00
                 18  2380  025  G  03  42101  11  Z  76/00
                 18  2380  025  G  03  42101  11  Z  77/00
                 18  2380  026  G  01  42101  11  1  75/00
                 18  2380  026  G  01  42101  11  1  76/00
                 18  2380  026  G  01  42101  11  1  77/00
                 18  2380  026  G  01  42101  11  Z  75/00
                 18  2380  026  G  01  42101  11  Z  76/00
                 18  2380  026  G  01  42101  11  Z  77/00
                 18  2380  029  G  01  42101  11  1  75/00
                 18  2380  029  G  01  42101  11  1  76/00
                *18  2380  029  G  01  42101  11  1  77/00
                 18  2380  029  G  01  42101  11  Z  75/00
                 18  2380  029  G  01  42101  11  Z  76/00
                 18  2380  029  G  01  42101  11  Z  77/00
                *18  2380  031  G  05  42101  11  1  75/00
                *18  2380  031  G  05  42101  11  1  76/00
```

```
 18  2380  031  G  05  42101  11  Z  75/00
 18  2380  031  G  05  42101  11  Z  76/00
*18  2380  032  G  05  42101  11  1  75/00
*18  2380  032  G  05  42101  11  1  76/00
 18  2380  032  G  05  42101  11  Z  75/00
 18  2380  032  G  05  42101  11  Z  76/00
*18  2380  034  G  01  42101  11  1  77/00
 18  2380  034  G  01  42101  11  Z  77/00

NO. MATCHING KEYS:        42

* = DATA DOES NOT MEET SUMMARY CRIT.-OAQPS GUIDELINE 1.2-04

COMMAND?

YR

YR = YEARLY SUMMARIES REPORT

COMMAND?

XAMEAN

XAMEAN

COMMAND?

XPVIOL

XPVIOL

COMMAND?

XMAX

XMAX

COMMAND?

KE=182380020G014210111*770000779999

COMPLETE KEY=182380020G014210111*770000779999

COMMAND?

FI


SITECODE=182380020G01   LOUISVILLE            ,KENTUCKY
POLL/ME=4210111         UNITS=05     INT=1     YR=77
CARBON    MONOXIDE      INSTRUMENTAL  NONDISPERSIVE INFRA-RED


* = VALUE FROM DATA NOT MEETING SUMMARY CRIT.-OAQPS GUILDLINE 1.2-040
```

```
COMMAND?

ALL

ALL

COMMAND?

NE

NEXT HIGHER SEQUENTIAL RECORD AFTER USER INPUT KEY


SITECODE=182380020G01   LOUISVILLE              ,KENTUCKY
POLL/ME=4210111         UNITS=05     INT=Z     YR=77
CARBON    MONOXIDE      INSTRUMENTAL  NONDISPERSIVE INFRA-RED
# OBSERVATIONS=                                 1647
MAXIMUM=                                          5.3
MINIMUM=                                           .3
SUBSTITUTE VALUE=                                  .3
# SUBSTITUTIONS MADE=                               0
# PRIMARY VIOLATIONS=                               0
# SECONDARY VIOLATIONS=                             0
# NON-OVLP PRI-VIOLATIONS =                         0
# NON-OVLP SEC-VIOLATIONS =                         0
TIME MAXIMUM OCCURRED=                     04:12:04
TIME SECOND MAXIMUM OCCURRED=              04:14:11
SECOND MAXIMUM VALUE=                             5.1
# OVLP VALS EXCEEDING PRIMARY=                      0
# OVLP VALS EXCEEDING SECONDARY=                    0

COMMAND?

XKE

V V   V  VV V    V VV V V V V V
*****************************

COMMAND?

STATE=55

STATE=55

COMMAND?

POLLUTANT=11101

POLLUTANT=11101

COMMAND?

BYEAR=77

BYEAR=77
```

```
COMMAND?
KR
KR = KEYS QUALIFYING REPORT
COMMAND?
FI


KEYS QUALIFYING REPORT

                 ST  AREA  SITE A  PR  POLL   ME  I BEG DATE END DATE
KEY ENTERED:     55  ****  ***  *  **  11101  **  *  77****   ******

                 ST  AREA  SITE A  PR  POLL   ME  I  DATE
KEYS MATCHING:   55  0010  002  F  02  11101  91  7  77/00
                 55  0010  004  F  01  11101  91  7  77/00
                 55  0170  003  F  02  11101  91  7  77/00
                 55  0170  008  F  02  11101  91  7  77/00

NO. MATCHING KEYS:        4

COMMAND?
YR
YR = YEARLY SUMMARIES REPORT
COMMAND?
KE=550170008F021110191777 0000779999

COMPLETE KEY=550170008F021110191777000077999 9

COMMAND?
FI


SITECODE=550170008F02   ST. CROIX              ,VIRGIN ISLANDS
POLL/ME=11 0191         UNITS=01    INT=7    YR=77
SUSPENDED PART.         HI-VOL  GRAVIMETRIC
# OBSERVATIONS=                                 71
MAXIMUM=                                       377
MINIMUM=                                         7
ARITH. MEAN=                                    64
GEOM. MEAN                                      52
ARITH. STD-DEV.=                            50.391
GEOM. STD-DEV.=                              1.983
PERCENT OBSERVATIONS=
SUBSTITUTE VALUE=                                1
# SUBSTITUTIONS MADE=                            0
# PRIMARY VIOLATIONS=                            1
```

```
# SECONDARY VIOLATIONS=                    2
TIME MAXIMUM OCCURRED=                 05:03:00
TIME SECOND MAXIMUM OCCURRED=          04:30:00
SECOND MAXIMUM VALUE=                    183


COMMAND?
END

YEARLY SUMMARY REQUESTS COMPLETED.
ENTER NEXT FUNCTION YOU WISH TO ACCESS
FUNCTION?
END


END SESSION
```

SAROAD REMOTE BATCH CONSTRUCTION (S,RB,SB)

Description

The remote batch construction function is a SAROAD remote batch function which allows the user to interactively construct SAROAD remote batch jobs. The jobs which may be initiated include:

- o YEARLY FREQUENCY DISTRIBUTION REPORT (NA211)
- o QUARTERLY FREQUENCY DISTRIBUTION REPORT (NA213)
- o RAW DATA <24 HOUR LISTING CURRENT DATA ONLY (NA219/D)
- o YEARLY INVENTORY (NA202)
- o YEARLY REPORT BY QUARTER (NA212)
- o QUARTERLY FREQUENCY DISTRIBUTION FROM CHANGES (NA214)

Commands

When the function is first entered, the user may ask for a listing of the available functional commands if one is needed. After this the user will enter the commands desired for report desired, sort sequence, and selection criteria. These commands will be entered after the prompt, COMMAND?

VALID COMMANDS ARE:

REPORT=??,??,??,.....?? - REPORTS WANTED. ?? REPRESENTS THE REPORT ID. ID'S & CORRESPONDING REPORTS ARE:

QF - QUARTERLY FREQUENCY
YF - YEARLY FREQUENCY
RL - RAW DATA <24-HOURS
IN - YEARLY INVENTORY OF DATA

YQ - YEAR BY QUARTER

QC - QUARTERLY FREQUENCY DISTRIBUTION FROM CHANGES

SELECT SIGNALS THAT SELECT DATA WILL BE ENTERED

SELECT DATA IS ENTERED IN THE FOLLOWING ORDER:

STATE (2 POSITIONS) - CODE FOR THE STATE DESIRED
AREA (4 POSITIONS) - CODE FOR THE AREA DESIRED
SITE (3 POSITIONS) - SITE NUMBER WITHIN THE AREA
AGENCY (1 POSITION) - CODE FOR SPONSORING AGENCY
PROJECT (2 POSITIONS) - CODE FOR TYPE OF SAMPLING
POLLUTANT (5 POSITIONS) - CODE FOR DESIRED POLLUTANT
METHOD (2 POSITIONS) - CODE FOR SAMPLING METHOD
INTERVAL (1 POSITION) - CODE FOR SAMPLING INTERVAL
BEGIN-DATE (6 POSITIONS) - YYMMDD FOR THE DATE YYQQ (LEFT JUSTIFIED) FOR THE QUARTER
END-DATE (6 POSITIONS) - SAME FORMAT AS BEGIN-DATE
AQCR (3 POSITIONS) - CODE FOR AQCR DESIRED
COUNTY (4 POSITIONS) - CODE FOR COUNTY DESIRED
AQMA (4 POSITIONS) - CODE FOR AQMA DESIRED

SORT=???,???,???,....? - SORT SEQUENCE DESIRED, THE FIRST TWO POSITIONS OF ??? REPRESENT THE SORT CODE AND THE LAST POSITION REPRESENTS THE SEQUENCE CODE. VALID SORT AND SEQUENCE CODES ARE SHOWN BELOW:

VALID SORT CODES

CODE	MEANING	CODE	MEANING
01	STATE CODE	09	UNITS
02	AREA CODE	10	INTERVAL CODE
03	SITE CODE	11	YEAR
04	AGENCY CODE	12	MONTH/QUARTER
05	PROJECT CODE	13	DAY
06	AQCR CODE	14	HOUR
07	POLLUTANT CODE	15	POLLUTANT VALUE
08	METHOD CODE	16	COUNTY CODE

VALID SEQUENCE CODES

CODE	MEANING
BLANK	ASCENDING (DEFAULT)
A	ASCENDING
+	ASCENDING
D	DESCENDING
-	DESCENDING

HELP PROVIDES USER A LIST OF VALID COMMANDS.

END SIGNALS END OF SORT AND SELECT DATA INPUT.

The following paragraphs discuss each of the commands available to the user. Commands may be entered in any sequence and reentered as often as desired prior to the END command.

REPORT = command: The user may specify reports desired by inputting two character code shown above, e.g., QF for quarterly frequency report. Multiple reports which will use the same sort and select data may be entered using this command by entering REPORT=CODE FOR REPORT 1, CODE FOR REPORT 2,ETC. At least one valid report must be specified by the user. Duplicate reports using the same sort and select data will not be accepted. The REPORT command may be entered as many times as desired however only the last valid entry before the END command will be considered. Report commands will be validated and an error message printed if errors are identified.

The sort sequence command is entered by entering the command SORT= followed by a position sort code and a sequence code, comma, another 2 position sort code and a sequence code, comma,...etc. Valid sort codes are two digit numeric values from Ø1 thru 16, valid sequence codes are "A", "+", or blank for ascending, and "D" or "-" for descending. The SAROAD sort card will be validated and the card image printed back. In addition, the interpreted sort sequence will be displayed. If there are any errors in the sort input, the sort will not be entered, errors will be identified and the following message displayed - "PREVIOUS SORT IGNORED". The SORT= command may be entered at any time in response to the COMMAND prompt. Only the last valid sort entered will be used. The SORT command is not mandatory. If the SORT command is not entered, the following sequence will be defaulted to: State-Area-Site-Agency-project, Pollutant-Method, Interval-Year-Month-Quarter.

The SELECT command will signify that the user is going to enter select card data. All data entered after the SELECT command until TERM is entered will be selected data. The first select card will be entered following the instruction "ENTER 43 CHARACTER SELECT CARD DATA, X, OR TERM and the prompt

```
          PP
          RR
SSAAAASSSAJJPPPPPMMIBBBBBBEEEEEEAAACCCCAAAA,X,OR TERM?
```

When a select card is entered, a validity check will be performed. The select card will be printed back in the following manner:

```
SELECT CARD IS:  XXXXXXXXXXXXXXXX...XXX
```

The select card will be validated, and if an error is detected the message *** IN ERROR *** will be added at the end of the select card printed back. The fields in error will be identified by arrows under the field in error. An example of a select card in error is shown below:

```
SELECT CARD IS:  XXXXXXXXXXXXXXX ***IN ERROR***
                 ↑↑↑
```

If the select card field is filled with asterisks (no blanks are allowed), all data for that particular item is extracted. Otherwise only the data for the indicated item will be retrieved. For example, if the state field is filled with asterisks all states will be reported. If 'Ø7' is entered, only Connecticut will be reported. If the 'POLLUTANT' field is filled with asterisks, all pollutants will be reported. If '12142' is entered, only Mercury pollutant will be reported.

The following rules must be followed in inputting select card information:

1) At least one valid select card must be entered.
2) A maximum of 99 valid select cards may be entered for a given run.
3) All select card fields must be filled. Those fields that are not to be selected on except date fields should be filled with the appropriate number of asterisks; for example, area: ****.
4) For date fields if the user wants all years he would enter 000000 in begin-date and 999999 in end-date. One year would be selected by entering year followed by 0000 in begin-year and year followed by 9999 in end-year.

The user will be returned to the SSAAAA.....,X, or TERM? prompt until TERM is entered. If X is entered the previous select card will be ignored.

TERM will signify that all desired select cards have been entered and the user is returned to the 'COMMAND' prompt. Note: The select command may be reentered after TERM if the user decides to change the select cards, however, all cards must be reentered.

The HELP command may be entered in response to any COMMAND? prompt. The HELP command provides the user a list of valid commands.

When the user has entered all sort, select and report information that he desires the END command should be entered.

When the END command is entered the sort and select data will be printed back for the user to verify in the following manner:

```
SAROAD SORT CARD=(XXX,XXX,XXX......)
     SORT SEQUENCE IS
          ASCENDING STATE CODE
          ASCENDING PROJECT CODE
          DESCENDING POLLUTANT CODE

SELECT CARDS ENTERED:

ST AREA SITE A PR POLL ME I BEGDTE ENDDTE AQCR CNTY AQMA
XX XXXX XXXX X XX XXXX XX X XXXXXX XXXXXX XXXX XXXX XXXX
XX XXXX XXXX X XX XXXX XX X XXXXXX XXXXXX XXXX XXXX XXXX
```

Structured Entries

When all desired commands have been entered (signified by user entry of the END command) and the sort and select data has been printed back. The user will be asked, "SORT AND SELECT DATA CORRECT? (YES OR NO). If NO is entered the user will be returned to the ATS master program. If YES is entered remote batch construction will proceed.

Next the report code for the given report will be requested. A list of the valid report codes may be obtained by the user before entering by responding YES to the question DO YOU NEED A LIST OF REPORT-CONTROL-CODES (YES OR NO?) The report code will be checked for validity and printed back for the user to verify. The user may change the report code by responding NO to the prompt. REPORT CODE CORRECT? (YES OR NO). In order to interactively construct remote batch runs, certain RUN card information is required. This required information includes priority, options, run identifier, account number, project code, and run time. The account number and project code will be automatically retrieved from the RUN card with which the user originally signed onto the terminal. Account number and project code therefore cannot be altered except by signing on anew. Similarly the RESTART option (R) will be automatically assigned. The remainder of the required RUN card information (run identifier, run time, and priority) as well as certain SYM card information (terminal id and number of copies requested) which may vary for each report requested will be requested for each report chosen.

The run identifier is a maximum of six characters long. The first two characters are the NCC assigned bin number and last four are any characters the user wishes to assign to uniquely identify his run. It is

possible to have runs with the same identifier but it is not recommended since tracing runs becomes much more difficult. If the run identifier is not entered, the run identifier from the run card the user signed on the terminal with will be used.

The run id will be entered following the instruction "ENTER YOUR RUN ID (MAX. 6 CHAR.)" and the prompt, "RUNID?".

The run time is a maximum of three digits long, and must be entered (there is no "default" time). The user must estimate the SUP time in minutes which will be required to complete his request. The run time will be entered following the instruction "ENTER YOU RUN TIME (MINUTES) MAX. 3 CHAR." and the prompt "RUN TIME?". If the run time is invalid, the message ***INVALID RUN TIME*** REENTER will be displayed and the user must reenter the run time.

NCC has set up a system of priority codes which classify runs and enable the system to operate more efficiently. These codes change from time to time and therefore are not listed here. A valid priority of one alphabetic character must be entered by the user. The priority will be entered following the instruction "ENTER RUN PRIORITY CODE" and the prompt "PRIORITY?". If a valid priority code is not entered the message "*** INVALID PRIORITY *** REENTER." will be displayed and the user must reenter.

The user must specify the terminal identifier - a location to which all of the remote batch output will be routed. This location can be a low-speed, medium-speed or high-speed terminal. Terminal id is a maximum of six characters long. If no terminal id is entered or the user enters PR, the output is routed to the central UNIVAC 1110 site. Terminal id

will be entered after the message "ENTER IDENTIFICATION NUMBER FOR THE TERMINAL TO WHICH THE PRINT SHOULD BE ROUTED." and the prompt "TERMINAL ID?".

The user may specify the number of copies of the output he desires for each run. A maximum of sixty-three copies may be requested. If no number is entered one copy only will be produced. The number of copies will be entered after the message "ENTER NUMBER OF COPIES OF OUTPUT DESIRED" and the prompt "COPIES?". If number of copies is not within the acceptable range the message "***INVALID NO. COPIES***REENTER" will be displayed and the user must reenter another number.

As each of the five entries is made, the subprogram will display them to the user. Upon completion of all entries, the subprogram will print a summary of run card and sym card information and the user can elect to accept or change this information. If accepted, the user will then be asked to submit or cancel the remote batch run. If submitted, a message is returned by the 1110 system indicating the run identifier and whether or not the run was accepted. If the run is accepted, it goes into the 1110 backlog and is scheduled for processing just as any other batch job.

After the first selected batch run has been initiated, the report code and runcard/symcard information will be requested for the second report selected and so on. After all the reports selected have been initiated the user will be asked "DO YOU WANT TO SUBMIT ANY MORE SAROAD BATCH JOBS. (YES OR NO).

If YES is entered the user will be returned to the beginning of the SB function. If NO is entered control will be returned to the ATS master program.

Special Notes

The commands can be entered in their entirety or be abbreviated to the first two characters of the command. For example, REPORT = QF or RE = QF will be accepted.

At least one report must be selected and at least one valid selection card must be entered.

A maximum of 99 select cards may be entered for a given initiation.

This function must be used with care. There is a potential for producing large volumes of output.

The output of the batch job requires a 132 print position line. If the user's printer is limited to 120 characters, the output should be routed to the UNIVAC 1110 central site for later mailing to the user.

"Example Interactive Session"

```
QNA206
SAROAD TERMINAL SYSTEM (V.2)  DATE: 08/10/78      TIME: 11:09:24

ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
NO

FUNCTION?
SB

SAROAD REMOTE BATCH FUNCTION

COMMAND LIST---YES OR NO?

YES

VALID COMMANDS ARE:
REPORT=??,??,??,....?? -REPORTS WANTED. ?? REPRESENTS THE REPORT ID.
                        ID'S AND CORRESPONDING REPORTS ARE:

                           QF -QUARTERLY FREQUENCY
                           YF -YEARLY FREQUENCY
                           RL -RAW DATA < 24-HOURS
                           IN -YEARLY INVENTORY OF DATA
                           YQ -YEAR BY QUARTER REPORT
                           QC -QUARTERLY FREQ DISTRIBUTION FROM CHANGES

SELECT                  SIGNALS THAT SELECT DATA WILL BE ENTERED

                       SELECT DATA IS ENTERED IN THE FOLLOWING ORDER:

                         STATE(2 POSITIONS)- CODE FOR THE STATE DESIRED
                         AREA(4 POSITIONS)- CODE FOR THE AREA DESIRED
                         SITE(3 POSITIONS)- SITE NUMBER WITHIN THE AREA
                         AGENCY(1 POSITION)- CODE FOR SPONSORING AGENCY
                         PROJECT(2 POSITIONS)- CODE FOR TYPE OF SAMPLING
                         POLLUTANT(5 POSITIONS)- CODE FOR DESIRED POLLUT
                         METHOD(2 POSITIONS)- CODE FOR SAMPLING METHOD
                         INTERVAL(1 POSITION)- CODE FOR SAMPLING INTVL
                         BEGIN-DATE(6 POSITIONS)- YYMMDD FOR THE DATE
                                                  YYQQ(LEFT JUSTIFIED)
                                                  FOR THE QUARTER
                         END-DATE(6 POSITIONS)- SAME FORMAT AS BEGIN-DTE
                         AQCR(3 POSITIONS)- CODE FOR AQCR DESIRED
                         COUNTY(4 POSITIONS)- CODE FOR COUNTY DESIRED
                         AQMA(4 POSITIONS)- CODE FOR AQMA DESIRED

SORT=???,???,......???, -SORT SEQUENCE DESIRED.  THE FIRST 2 POSITIONS
                        REPRESENT THE SORT CODE AND THE LAST POSITION
                        REPRESENTS THE SEQUENCE CODE.  VALID SORT AND
                        SEQUENCE CODES ARE SHOWN BELOW:

VALID SORT CODES                                  VALID SEQUENCE CODES

CODE  MEANING          CODE  MEANING              CODE  MEANING

 01   STATE CODE        09   UNITS CODE           BLANK ASCENDING (DEF)
 02   AREA CODE         10   INTERVAL CODE          A   ASCENDING
```

```
 03   SITE CODE          11   YEAR                    +    ASCENDING
 04   AGENCY CODE        12   MONTH/QUARTER
 05   PROJECT CODE       13   DAY                     D DESCENDING
 06   AQCR CODE          14   HOUR                    -    DESCENDING
 07   POLLUTANT CODE     15   POLLUTANT VALUE
 08   METHOD CODE        16   COUNTY CODE

HELP                     PROVIDES USER A LIST OF VALID COMMANDS.

END                      SIGNALS END OF SORT AND SELECT DATA INPUT.

START ENTERING COMMANDS

COMMAND?
REPORT=QF,RL

REPORT IS: QF,RL

COMMAND?
SORT=01A,02A,03A,04A,05A,07A

SAROAD SORT CARD=(01A02A03A04A05A07A                    )
SORT SEQUENCE IS:
   ASCENDING STATE CODE
   ASCENDING AREA CODE
   ASCENDING SITE CODE
   ASCENDING AGENCY CODE
   ASCENDING PROJECT CODE
   ASCENDING POLLUTANT CODE

COMMAND?
SELECT

ENTER 43 CHARACTER SELECT CARD DATA,X,OR TERM

           PP
           RR
 SSAAAASSSAJJPPPPPMMIBBBBBBEEEEEEAAACCCCAAAA,X,OR TERM?
0103800056021110191775000075999********** ****

SELECT CARD IS: 0103800056021110191775000075999**********

 SSAAAASSSAJJPPPPPMMIBBBBBBEEEEEEAAACCCCAAAA,X,OR TERM?
060580002F0142101***750000759999**********

SELECT CARD IS: 060580002F0142101***750000759999**********

 SSAAAASSSAJJPPPPPMMIBBBBBBEEEEEEAAACCCCAAAA,X,OR TERM?
364340004H0144201117500007599 99*****

SELECT CARD IS: 364340004H0144201117500007599 99*****   IN ERROR
                                              ^^^^^^   ^^^^

 SSAAAASSSAJJPPPPPMMIBBBBBBEEEEEEAAACCCCAAAA,X,OR TERM?
364340004H0144201117500007599 99**********

SELECT CARD IS: 364340004H0144201117500007599 99**********

 SSAAAASSSAJJPPPPPMMIBBBBBBEEEEEEAAACCCCAAAA,X,OR TERM?
```

```
361220019A054260214175020075040****.****.****
SELECT CARD IS: 361220019A054260214175020075040****.****..*

 SSAAAASSSAJJPPPPPMMIBBBBBBEEEEEEAAACCCCAAAA,X,OR TERM?
X

PREVIOUS SELECT CARD IGNORED
 SSAAAASSSAJJPPPPPMMIBBBBBBEEEEEEAAACCCCAAAA,X,OR TERM?
TERM

COMMAND?
END

SORT AND SELECT DATA SPECIFIED IS:

SAROAD SORT CARD=(01A02A03A04A05A07A                    )
SORT SEQUENCE IS:
   ASCENDING STATE CODE
   ASCENDING AREA CODE
   ASCENDING SITE CODE
   ASCENDING AGENCY CODE
   ASCENDING PROJECT CODE
   ASCENDING POLLUTANT CODE

SELECT CARDS ENTERED:

ST AREA SITE A PR POLL  ME I BEGDTE ENDDTE AQCR CNTY AQMA
01 0380 005  G 02 11101 91 7 750000 759999 ***  **** ****
06 0580 002  E 01 42101 ** * 750000 759999 ***  **** ****
36 4340 004  H 01 44201 11 1 750000 759999 ***  **** ****

SORT AND SELECT CARDS CORRECT? YES OR NO?
YES

QUARTERLY FREQUENCY REPORT

REPORT-CODE-LIST---YES OR NO?
YES

VALID REPORT CODES AND THEIR MEANING ARE AS FOLLOWS:
REPORT CODE          MEANING
     1 (OR BLANK)    NO SELECTION ON SAROAD SUMMARIZATION CRITERIA
     2               SELECT ONLY DATA WHICH MEETS SUMMARIZATION CRITERIA
     3               SELECT ONLY DATA WHICH FAILS SUMMARIZATION CRITERIA

ENTER REPORT CODE
REPORT CODE?
1

REPORT CODE = 1
CORRECT (YES OR NO?)
YES

ENTER YOUR RUNID (MAX. 6 CHAR.)
RUNID?
```

```
03JGS1

RUNID = 03JGS1

ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR.
RUN TIME?

15

RUN TIME = 15

ENTER YOUR RUN PRIORITY CODE (1 CHAR.)
PRIORITY?

R

PRIORITY = R

ENTER IDENTIFICATION NUMBER FOR THE TERMINAL
TO WHICH THE PRINT SHOULD BE ROUTED.
TERMINAL ID?

PR

TERMINAL ID = PR

ENTER NUMBER OF COPIES OF OUTPUT DESIRED (1-63)
COPIES?

1

NO. COPIES = 01

RUN CARD & PRINT INFORMATION AS SPECIFIED IS:

RUN CARD=
PRIORITY:R RUNID:03JGS1 ACCT:[redacted]     PROJ:[redacted]          RUNTIME:15

TERMINAL ID = PR
NO. COPIES  = 01

DO YOU WANT TO CHANGE THE RUN CARD/PRINT INFO?
( YES OR NO )

NO

DO YOU WANT TO SUBMIT THE RUN AS SPECIFIED?
( YES OR NO )

YES

RAW DATA < 24-HOUR REPORT

REPORT-CODE-LIST---YES OR NO?
YES

VALID REPORT CODES AND THEIR MEANING ARE AS FOLLOWS:
REPORT CODE          MEANING
     BLANK           PRODUCE AN HOURLY LISTING.
```

```
2-8                PRODUCE A LISTING  OF RUNNING AVERAGES FOR THE
                    SPECIFIED INTERVAL OF 2-8 HOURS

ENTER REPORT CODE
REPORT CODE?
[ ]

REPORT CODE = BLANK
CORRECT (YES OR NO?)
[YES]

ENTER YOUR RUNID (MAX. 6 CHAR.)
RUNID?
[03JGS2]

RUNID = 03JGS2

ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR.
RUN TIME?

[15]

RUN TIME = 15

ENTER YOUR RUN PRIORITY CODE (1 CHAR.)
PRIORITY?

[R]

PRIORITY = R

ENTER IDENTIFICATION NUMBER FOR THE TERMINAL
TO WHICH THE PRINT SHOULD BE ROUTED.
TERMINAL ID?

[PR]

TERMINAL ID = PR

ENTER NUMBER OF COPIES OF OUTPUT DESIRED (1-63)
COPIES?

[1]

NO. COPIES = 01

RUN CARD & PRINT INFORMATION AS SPECIFIED IS:

RUN CARD=
PRIORITY:R RUNID:03JGS2 ACCT:[redacted]      PROJ:[redacted]          RUNTIME:15

TERMINAL ID = PR
NO. COPIES  = 01

DO YOU WANT TO CHANGE THE RUN CARD/PRINT INFO?
( YES OR NO )
```

```
NO

DO YOU WANT TO SUBMIT THE RUN AS SPECIFIED?
( YES OR NO )

YES

DO YOU WANT TO SUBMIT ANY MORE BATCH RUNS?
NO

ENTER NEXT FUNCTION YOU WISH TO ACCESS
FUNCTION?
END

END SESSION
```

4.2.3 NEDS Terminal System (NTS)

INTRODUCTION

The NEDS Terminal System (NTS) provides both remote batch and interactive access to data in NEDS point and area source user files. The general operating procedures for NTS are basically the same as for the SAROAD Terminal System (STS) described in the previous subject. Descriptions of the master program and all available functions follow, and sample interactive sessions and sample outputs are included. Questions regarding this system, other than how to use a specific type of terminal are to be referred to:

National Air Data Branch (MD-14)
U.S. Environmental Protection Agency
Research Triangle Park, N.C. 27711
Phone: (919) 541-5582 (FTS 629-5582)

Questions on accounting information, use of a terminal, or the status of the UNIVAC 1110 are to be referred to:

National Computer Center (MD-34)
U.S. Environmental Protection Agency
Research Triangle Park, N.C. 27711
Phone (919) 541-3649 (FTS 629-3649)

REQUIRED ACCOUNTING INFORMATION

In order to use the NEDS terminal system, the user must be registered at the National Computer Center (NCC), Research Triangle Park, N.C. The accounting symbols assigned to the user plus other information necessary to submit batch jobs will be requested by the terminal system. The information required is:

i. account number.

ii. project code.

iii. terminal identification code. (This information is used for routing the printout generated by batch jobs. It can be either the user's site or the central computer site.)

iv. priority code. (This is one of a system of codes established by NCC.)

v. run identification code. (This code is composed of an NCC-assigned bin number and up to four additional characters specified by the user.)

vi. estimated run time
(The user must furnish an estimate to be entered on the @RUN card. This estimate and the priority code are related. Sample estimates for the batch runs are given in the functional sections).

vii. utilization identification code.

Almost all of the codes require interaction with the National Computer Center. If the user has questions relating to these items, please call User Services, FTS (919) 629-3649.

COMPUTER INSTRUCTIONS FOR ENTERING NTS

In order to use NTS, the user must know how to dial the computer, establish contact, and identify himself to the operating system. The procedure varies slightly from terminal to terminal so no attempt is made here to instruct the user on terminal usage. If there is a need for instruction in this area, please contact User Services, NCC as noted above.

When contact with the UNIVAC 1110 has been established and the user's terminal identification has been accepted, the operating system will print a message identifying the operating system. At this point the user must enter an @RUN card to begin his session. Please note that, because of the NTS design, the user must specify the CARD parameter on the RUN card if the remote batch portion of the NTS is to be used. No cards will actually be punched.

A sample RUN card is:

@RUN RUN-ID ACCT-NO,PROJ,U-ID,TIME,PAGES/CARDS

where:

RUN-ID is the users run identifier, which usually consists of a bin number and four user-assigned characters to identify the run.

ACCT-NO is the users registered UNIVAC 1110 account number.

PROJ is the users registered UNIVAC 1110 project code.

U-ID is the users registered UNIVAC 1110 utilization identification code.

TIME is the estimated SUP time the terminal session will last (on 9/30/75 NCC had established 15 minutes as a maximum time limit).

PAGES are the estimated number of pages for the terminal session.

CARDS are the estimated number of cards to be punched by the system. This entry should be 999 if the remote batch portion of NTS is to be used.

Once the user's RUN card has been accepted, the date and time the user signed on is displayed on the terminal. The user is then requested to provide a password to identify himself as a valid system user. Only valid passwords registered with NCC will be accepted. After the system has accepted the password, and the user can start entering instructions. When the user is ready to use the NEDS Terminal System, the following sequence of instructions is entered.

```
@ASG,A      NADB*NADB-ABS/SDS.
@COPY,A     NADB*NADB-ABS.NE206
@FREE       NADB*NADB-ABS.
@NE206
```

The user will enter the master program and interaction with the system will begin. (All responses entered by the user within NTS must be in capital letters.) When the user is finished with the system, the END command is entered. Control is returned to the operating system and the user is free to access any UNIVAC 1110 functions desired, re-enter the @NE206, or sign off the UNIVAC system. To sign off, the user enters @FIN, waits for the accounting information to print, and then enters @@TERM.

Should the 1110 system go down or should the line drop during an NTS session, the user has to follow regular sign on procedures to re-enter the system. If the user was building remote batch jobs at the time computer contact was broken, only the job being constructed at that time is lost. This is due to the dynamic submission of batch runs by the NTS at the time the user requests the run be submitted.

NTS MASTER PROGRAM

The NTS master program is designed as a processor. This means that all the files required for the system are dynamically assigned by the program. If there are any problems encountered in assigning a file, a message is printed but processing continues. If a file is unavailable, only those functions using that particular file are not operable. The messages and their meanings are listed below.

i. file name WAITING TO ROLL FILE IN

The file specified has been rolled out by the 1110 Operating System and the terminal system is waiting for the file to be restored to mass storage.

ii. file name DESTROYED

The file specified has been marked as having been destroyed by the 1110 Operating System. The system will continue but any function using the specified file will not be operational. Call NCC, User Services Section.

iii. file name DISABLED--CONTINUING

The file specified was in use when the 1110 system crashed. There is usually no problem with using the file.

iv. file name IN EXCLUSIVE USE

The file specified is in exclusive use by another run. This usually happens when NADB is updating the file. The system continues, but functions requiring the specified file will be inoperable. A later attempt may provide access to a function requiring this file.

v. file name FACILITY REJECTED

The file specified does not exist. It may have been removed by the 1110 Operating System or may have been deleted in preparation for an update that then failed. Call NADB, Data Processing Section.

The user is asked if a CRT terminal is being used. A CRT terminal is a cathode-ray-type terminal such as a UNISCOPE 100 or a HAZELTINE 2000. The interactive functions are designed to utilize either a 120-character print line or a 72-character print line. If you answer YES to the CRT question, a 72-character line is used. If answer is NO, a 120-character line is used.

Next, the user is asked whether instructions are needed for using the system. If YES is entered, a brief discussion of the system and the function list are provided. Each function entered then prints a brief description

of itself thereafter. If NO is entered, it is assumed that the user is familiar with the system and less instructional information is displayed. If the user enters NO and then decides he needs a list of the functions, he can enter HELP after the FUNCTION? prompt.

When the FUNCTION? prompt is printed, the user is free to enter any valid NTS function. If an invalid entry is encountered, a message is printed and the FUNCTION? prompt is printed again. If the user has finished using NTS, he enters ENDS after the FUNCTION? prompt and control is returned to the UNIVAC 1110 operating system.

If an interactive function is specified, control is immediately passed to the appropriate subprogram. Interaction between the user and the data files via commands given to the subprogram continues until the END command is entered. The subprogram then returns control to the master program and a new function is requested.

If a remote batch function is requested, the master program first checks to see if this is the first remote function requested during the current terminal session.

If this is not the first batch function requested, control is passed to the appropriate subprogram. The subprogram interacts with the user to construct remote batch runs. When the final END command for the subprogram is encountered, a summary of the job constructed is printed for user review. The user has the option of submitting or cancelling the constructed run. If the run is submitted, the subprogram dynamically submits the run to the UNIVAC 1110 system. The job enters the job queue at this point and is eligible for execution. (As jobs are submitted to the UNIVAC operating system, a message is returned indicating the run identifier

and whether the run was accepted or not). After the job is submitted or cancelled, control is returned to the master program.

The first remote batch function requested during a terminal session causes the master program to request some fixed accounting information. The information requested is then used for all batch runs constructed during the terminal session. The information requested is:

i. project code. At the prompt, PROJ?, the user should enter his valid UNIVAC project code.

ii. terminal identifier. The user can select a location where all of the remote batch output will be routed. This location can be a low-speed, medium-speed or high-speed terminal. To route the output to the central UNIVAC 1110 site the user enters PR. The location selected is entered after the TERMINAL ID? prompt.

iii. account number. Account numbers must be registered with NCC before run submissions will be accepted. The account number is entered after the ACCT #? prompt.

No validity or edit checks are made for the above three entries by NTS. At the point an actual batch run is submitted to the 1110 operating system, a check is made by that system against the valid account and project code combinations. If the combination entered is not valid, the run will not be accepted.

After the initial information is entered for the first access of a batch function, control is passed to the appropriate subprogram and the session proceeds as described above.

The following sections describe the actual functions available in the NEDS Terminal System. When the FUNCTION? prompt is displayed, the user is free to enter any valid NTS function. Valid responses are:

NB - NEDS Remote Batch Construction
NI - NEDS Interactive Function
ES - NEDS Emission Summary Report
HELP - Description of Functions
END - End of Terminal Session

Functions of NB, ES and NI are described in detail in the following sections. The HELP function may be used to get a display of valid functions. END is used at the completion of the terminal session to exit from NTS and return control to the UNIVAC 1110 operating system.

NEDS REMOTE BATCH CONSTRUCTION (NB)

Description

This function allows the user to interactively construct NEDS remote batch jobs. The jobs which may be initiated include:

- o MISSING DATA ITEMS REPORT (NE2ØØ)
- o CONDENSED POINT SOURCE LISTING (NE2Ø7)
- o FULL POINT SOURCE LISTING (NE215)
- o PLANT NAME LIST (NE252)
- o POTENTIAL EMISSIONS REPORT (NE255)
- o SCC SUMMARY REPORT (NE257)

First, a brief description of the NEDS remote batch function will be printed. Then the user will be asked if he needs a list of valid commands. The question will appear thus:

```
IF YOU NEED A LISTING OF THE VALID COMMANDS, ENTER YES.
OTHERWISE ENTER NO.
YES OR NO?
```

If the user has indicated in the master program that instructions are not required, the description of the procedure will be omitted and the command list query abbreviated as follows:

```
COMMAND LIST------YES OR NO?
```

If the user reply is YES, i.e. a command list is needed, the following list and description of commands will be displayed:

VALID COMMANDS ARE:

REPORT+??,??,...?? REPORTS WANTED. ?? REPRESENTS THE REPORT CODE. ONE TO SIX CODES, WITHOUT DUPLICATION & IN ANY ORDER, MAY BE ENTERED. VALID REPORT CODES ARE:

MD = MISSING DATA ITEMS REPORT
CP = CONDENSED POINT SOURCE LISTING
FP = FULL POINT SOURCE LISTING
PN = PLANT NAME LIST
PE = POTENTIAL EMISSIONS REPORT
SS = SCC SUMMARY REPORT

POLL=? -POLLUTANT CODE. A NUMBER SPECIFYING ONE OF FIVE POLLUTANTS TO BE SELECTED. (NO VALUE SPECIFIED MEANS "SELECT ALL") VALID POLLUTANT CODES ARE:

1 = PARTICULATE
2 = SULFUR DIOXIDE
3 = NITROGEN OXIDE
4 = VOLATILE ORGANIC COMPOUNDS
5 = CARBON MONOXIDE

MIN=?????? -MINIMUM VALUE. A SIX DIGIT NUMBER SPECIFYING A MINIMUM VALUE TO BE SELECTED OF THE ABOVE POLLUTANT. (IF NO VALUE SPECIFIED, ZERO IS ASSUMED) NUMBER MUST BE RIGHT JUSTIFIED.

SORT=??,??,...?? - SORT SEQUENCE. A MAXIMUM OF TWENTY SORT OPTIONS ARE AVAILABLE. ORDER OF ENTRY IS HIERARCHICAL BROAD TO SPECIFIC. DEFAULT SORT SEQUENCE IS STATE, COUNTY PLANT NUMBER, POINT NUMBER, SCC VALID SORT CODES ARE SHOWN BELOW:

01 = STATE	11 = POLLUTANT VALUE
02 = COUNTY	12 = YEAR OF RECORD
03 = PLANT NUMBER	13 = CONTROL EQUIPMENT
04 = POINT NUMBER	14 = CONTROL EFFICIENCY
05 = SCC	15 = SULFUR CONTENT
06 = OWNERSHIP	16 = ASH CONTENT
07 = SIC	17 = CITY
08 = ESTIMATION METHOD	18 = UTM COORDINATES
09 = AQCR	19 = OPERATING RATE
10 = PLANT NAME	20 = CONFIDENTIALITY

A INDICATES ASCENDING SORT SEQUENCE, D INDICATES DESCENDING SORT SEQUENCE.
EXAMPLE ENTRY: SORT= AØ1,AØ2,DØ5

CONF=... - CONFIDENTIALITY CODE. IF INCORRECTLY ENTERED OR OMITTED, ONLY NON-CONFIDENTIAL DATA WILL BE REPORTED.

SIG=? - THE NUMBER OF SIGNIFICANT DIGITS TO BE USED FOR REPORTED DATA. (NO VALUE SPECIFIED = 3)

UNITS-? - THE DIGIT 1 IF METRIC UNITS ARE DESIRED FOR REPORTED DATA. (STANDARD IS ENGLISH)

SELECT - SIGNIFIES THAT CARD IMAGE DATA FOR THE STANDARD NEDS SELECT CARD(S) WILL NOW BE ENTERED. FIELDS NOT APPLYING MUST BE ASTERISK FILLED. SELECT CARD DATA MUST BE ENTERED IN THE FOLLOWING ORDER:

STATE CODE - 2 CHARACTERS.
COUNTY CODE - 4 CHARACTERS.
PLANT CODE - 4 CHARACTERS
POINT CODE - 2 CHARACTERS
SCC - 8 CHARS. SOURCE CLASSIFICATION CODE CONSISTS OF 4 SUBFIELDS ANY ONE OF WHICH MAY BE SPECIFIED OR ASTERISK-FILLED.
OWNERSHIP - 1 CHARACTER:
P = PRIVATE
L = LOCAL GOVERNMENT
S = STATE GOVERNMENT
F = FEDERAL GOVERNMENT
U = UTILITY
SIC - 4 CHARS. STANDARD INDUSTRIAL CLASSIFICATION CODE. (SEE "STANDARD INDUSTRIAL CLASSIFICATION MANUAL" OFFICE OF MANAGEMENT & BUDGET)
EST. METHOD - 1 CHARACTER. ESTIMATION METHOD:
0 = NOT APPLICABLE
1 = STACK TESTS OR OTHER EMISSIONS MEASUREMENT
2 = MATERIAL BALANCE
3 = CALCULATED USING EPA EMISSION FACTOR
4 = GUESS

5 = SPECIAL EMISSION FACTOR
DIFFERENT FROM EPA
FACTOR
6 = NEW FACILITY, NOT OPERATIONAL
7 = CLOSED FACILITY

AQCR - 3 CHARS. AIR QUALITY CONTROL REGION.

HELP - WILL PRINT THIS LIST OF VALID COMMANDS.

END - ENDS COMMAND ENTRIES. ALL DESIRED COMMAND DATA HAS BEEN ENTERED.

THE ENTIRE COMMAND CAN BE ENTERED OR THE COMMAND CAN BE ABBREVIATED TO THE FIRST TWO LETTERS OF THE COMMAND. FOR EXAMPLE, UNITS=1 & UN=1 BOTH INDICATE METRIC UNITS ARE DESIRED.

As soon as this list is printed (or immediately if no list is requested) the user will be asked to indicate whether he wishes to create an input file for the reports to be specified, or utilize one already in existence. The user will next be asked to identify the input file by entering up to six tape reel numbers.

If the user has indicated that he wishes to use a pre-existing input file, only the REPORT, HELP or END commands will be considered valid. After the END command is entered, the subprogram will begin requesting the variable information for each report specified.

If a new input file is to be created, the user will be directed to START ENTERING COMMANDS and will receive the COMMAND? prompt. Commands may be entered in any sequence and reentered as often as desired prior to the END command. If duplicate commands are given only the last such command will be recognized. The following paragraphs discuss each of the commands in detail.

"REPORT" COMMAND

Provided all reports will utilize the same input file, i.e. the same set of control and select cards, up to six report types can be requested via the REPORT command. The codes indicating these reports (see above list of valid commands) can be entered in any order but no duplicate codes in any one REPORT command are allowed. At least one report must be requested, and the REPORT command must be given at least once before the END command, or remote batch construction will terminate. The report code(s) will be validated and an error message printed if errors are detected.

CONTROL CARD COMMANDS

The commands "POLL", "MIN", "SORT", "CONF", "SIG", and "UNITS" are used to construct the standard NEDS control card. All of these commands are optional inasmuch as all have default values (see above list of valid commands). The control card commands will be validated and an error message printed if errors are detected.

"SELECT" COMMAND

The SELECT command signifies to the subprogram that the user is now ready to enter a set of one to ninety-nine select cards common to all reports requested (or to be requested). From the time the SELECT command is entered until the user enters the expression "TERM" (or "TE") all data entered is considered select card data. Upon the entry of the SELECT command, the user will receive the instruction "ENTER 29 CHARACTER SELECT CARD IMAGE, X, OR TERM" followed by the prompt:

```
PP
SSCCCCPPPPTTSSSSSSSSOSSSSEAAA,X,OR TERM?
```

The user must then key in an exact card image using the prompt message itself as an alignment guide. Fields not applying must be asterisk-filled. Blanks are not allowed. If the user has indicated that he wishes to create a new input file for the specified reports, at least one select card must have been so constructed before the END command is given or remote batch construction will terminate.

When a select card is entered a validity check will be made by the subprogram. If no errors are detected, the entry will be displayed thus;

```
SELECT CARD IS:  XXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

and the select card prompt will again be given. This cycle will repeat until (1) ninety-nine select cards have been entered or (2) the user enters "TERM". The entry of "X" will cancel the previous select card entry and upon the subsequent prompt the user may enter its replacement or terminate SELECT entries.

If an error is detected the message *** IN ERROR *** will be added at the end of the select card printed back. The fields in error will be identifield by ↑↑↑ under the field in error. An example of a select card in error is shown below:

```
SELECT CARD IS:  XXXXXXXXXXXXXXX ***IN ERROR***
                 ↑↑
```

If the select card field is filled with asterisks (no blanks are allowed) all data for that particular item is extracted. Otherwise only the data for the indicated item will be retrieved. For example, if the state field is filled with asterisks all states will be reported. If 'Ø7' is entered only Connecticut will be reported. If 'POLL = 1 is entered only particulate will be reported.

The following rules must be followed in inputting select card information:

1) At least one valid select card must be entered.
2) A maximum of 99 valid select cards may be entered for a given run.
3) All select card fields must be filled. Those fields that are not to be selected on should be filled with the appropriate number of asterisks; for example, plant: ****.
4) At least one field must be selected on.

Select card data should be prepared with care, since some report types will generate very large amounts of print depending on the select criteria.

When the user enters "TERM" the subprogram will return to the COMMAND? prompt. The SELECT command may be reentered at any time thereafter until the END command is given, but this will effectively erase all previous select card entries. The entire set of desired select cards must be entered each time the SELECT command is given.

The HELP command may be entered in response to any COMMAND? prompt. This will cause the list of valid commands to be printed followed once again by the COMMAND? prompt.

Only when the user is certain he has entered all appropriate report codes and control and select data should the END command be given. The command data is then fixed until the runs are submitted. When the END command is given the subprogram will ascertain whether or not valid report codes and at least one valid select card has been entered. If these entries have not been made remote batch construction will terminate and control will be returned to the NTS master program. If this necessary command data has been entered, all command data as specified or implied by the user will be displayed for final verification as in the following example:

```
REPORTS SPECIFIED:
   PLANT NAME LIST
   FULL POINT SOURCE LISTING
   CONTROL CARD DATA:
   SORT SEQUENCE = Ø1 Ø2 Ø3 Ø4 Ø5
   SIGNIFICANT DIG = 5
   METRIC UNITS
```

```
SELECT CARDS ENTERED:
ST CNTY PLNT PT ....SCC....O SIC. E AQCR
Ø4 6ØØØ **** ** * ** *** ** * **** * ***
Ø5 352Ø **** ** * ** *** ** * **** * ***
** **** **** ** * ** *** ** P **** * ØØ1
```

The user will then be asked, "COMMAND DATA CORRECT? (YES OR NO)".

If NO is entered remote batch construction will cease and control will be returned to the NTS master program. If YES is entered, the variable information for each report type specified will be requested.

VARIABLE ENTRIES

Some report programs require a program control card and other user entries in order to specify various options. Upon user request, a description of the control card options will be printed if the specified report is one of these. The user must then enter this control information as the subprogram may request. If the report program will create output files, unique tape reel numbers will also be requested.

In order to interactively construct remote batch runs, certain RUN card information is required. This required information includes priority, options, run identifier, account number, project code, and run time. The account number and project code will be automatically retrieved from the RUN card with which the user originally signed onto the terminal. Account number and project code therefore cannot be altered except by signing on anew. Similarly the RESTART option(R), core size, tapes and disks will be

automatically assigned by the subprogram. The remainder of the required RUN card information (run identifier, run time, and priority) as well as certain SYM card information (terminal id and number of copies requested) which may vary for each run will be requested within the subprogram.

The run identifier is a maximum of six characters long. The first two characters are the NCC assigned bin number and the last four are any characters the user wishes to assign to uniquely identify his run. It is possible to have runs with the same identifiers but it is not recommended since tracing runs becomes much more difficult. If the run identifier is not entered, the run identifier from the run card the user signed on the terminal with will be used. The run id will be entered following the instruction "ENTER YOUR RUN ID (MAX. 6 CHAR.)" and the prompt, "RUNID?".

The run time is a maximum of three digits long, and must be entered (there is no "default" time). The user must estimate the SUP time in minutes which will be required to complete his request. The run time will be entered following the instruction "ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR." and prompt "RUN TIME?".

If the run time is invalid, the message "***INVALID RUN TIME***REENTER" will be displayed and the user must reenter the run time.

NCC has set up a system of priority codes which classify runs and enable the system to operate more efficiently. These codes change from time to time and therefore are not listed here.

A valid priority code of one alphabetic character must be entered by the user. The priority will be entered following the instruction "ENTER RUN PRIORITY CODE" and the prompt "PRIORITY?". If a valid priority code is not entered the message "*** INVALID PRIORITY. REENTER.***" will be displayed and the user must reenter priority.

The user must specify the terminal identifier - a location to which all of the remote batch output will be routed. This location can be a low-speed, medium-speed or high-speed terminal. Terminal id is a maximum of six characters long. If no terminal id is entered or the user enters PR the output is routed to the central UNIVAC 1110 site. Terminal id will be entered after the message "ENTER IDENTIFICATION NUMBER FOR THE TERMINAL TO WHICH THE PRINT SHOULD BE ROUTED" and prompt "TERMINAL ID?".

The user may specify the number of copies of the output he desires for each run. A maximum of sixty-three copies may be requested. If no number is entered one copy only will be produced. The number of copies will be entered after the message "ENTER NUMBER OF COPIES OF OUTPUT DESIRED" and the prompt "COPIES?".

If number of copies is not within the acceptable range the "****INVALID NO. COPIES*** REENTER" will be displayed and the user must reenter another number.

As each of these five entries is made, the subprogram will display them to the user. Upon completion of all entries, the subprogram will print a summary of run card and sym card information and the user will then be asked to submit or cancel the remote batch run.

As each of the five RUN card and SYM card entries are made, the subprogram will display them to the user. Upon completion of all variable entries, the subprogram will print a summary of RUN card and SYM card information and the user can elect to accept or change this information. If accepted, the user will then be asked to submit or cancel the remote batch run.

After each selected batch run has been submitted or cancelled, RUN card/SYM card and program control information (if any) will be requested for the next report selected until all specified reports have been submitted or disapproved (cancelled) by the user.

After all the reports specified have been submitted or cancelled the runs will be initiated and scheduled for processing in sequence. The user will be asked:

> DO YOU WANT TO CONSTRUCT ANY MORE NEDS REMOTE BATCH RUNS IN THIS FUNCTION? (YES OR NO). If YES is entered the subprogram will return to the beginning and entirely new runs may then be constructed as before. If NO is entered control will be returned to the master program and the "NB" or any other valid function can be accessed.

SPECIAL NOTES

The commands can be entered in their entirety or be abbreviated to the first two characters of the command. For example, REPORT = MD or RE = MD will be accepted.

At least one report must be selected and at least one valid selection card must be entered.

A maximum of 99 select cards may be entered for a given initiation.

This function must be used with care. There is a potential for producing a large volume of output.

The output of the batch job requires a 132 print position line. If the user's printer is limited to 120 characters, the output should be routed to the UNIVAC 1110 central site for later mailing to the user.

NEDS Emission Summary Report (ES)

Description

The emission summary function is a NEDS remote batch function which allows the user to retrieve a summary report by category on varying geographical areas. A sample of the report format is included in Section 2, Chapter 1, Subject 2.

Commands

After the preliminary responses have been entered, the user receives the prompt, COMMAND? The command word can be entered in its entirety or can be abbreviated to the first two characters of the word. The commands are:

	COMMAND	DESCRIPTION
i.	report=?	Report selection category wanted. Various options are open to the user to limit his retrieval to a manageable size. The option desired is chosen by specifying the selection class corresponding to it. The options are: 1. State summary report. As many states as are desired can be entered. 2. County summary report. As many state/county combinations as desired may be entered.

3. State by county summary report. As many states as desired can be entered.

4. EPA Region summary report. As many regions as desired may be requested.

5. AQCR summary report. As many AQCR's as are desired may be entered.

6. National summary report. No further input is required.

ii. end — Terminate command entries. This command, following the COMMAND? prompt, signals the end of control specifications for this function.

When the user selects a category for entering selections, he enters a loop which allows him to enter as many combinations as desired. For each category, when this loop is entered and after each entry (except END) a prompt is printed indicating the information required. These prompts differ from category to category but basically they are: combination, X or END. The combinations reflect the category. For example, category two is the state/county category. The messages, ENTER 6 CHARAC-STATE/COUNTY CODE, X OR END and SC,X, or END? are printed. SC represents state/county. The combination entered must be of the correct length or it is rejected. The entry, X, causes the previous combination entered to

be ignored. This mechanism allows users to delete erroneous information entered. END signifies that all combinations desired have been entered.

When the END command is entered after the COMMAND? prompt, a summary of the command entries is printed. The user has the option of approving these specifications or cancelling the remote batch run. If approved, the user will then supply the structured entries for run card and print information.

Structured Entries

In order to interactively construct remote batch runs, certain RUN card information is required. This required information includes priority, options, run identifier, account number, project code, and run time. The account number and project code will be automatically retrieved from the RUN card with which the user originally signed onto the terminal. Account number and project code therefore cannot be altered except by signing on anew. Similarly the RESTART option (R) will be automatically assigned by the subprogram. The remainder of the required RUN card information (run identifier, run time, and priority) as well as certain SYM card information (terminal id and number of copies requested) which may vary for each run will be requested within the subprogram.

The run identifier is a maximum of six characters long. The first two characters are the NCC assigned bin number and the last four are any characters the user wishes to assign to uniquely identify his run. It is possible to have runs with the same identifiers but it is not recommended since tracing runs becomes much more difficult. If the run identifier is not entered, the run identifier from the run card the user signed on the terminal with will be used. The run id

will be entered following the instruction "ENTER YOUR RUN ID (MAX. 6 CHAR.)" and the prompt, "RUNID?".

The run time is a maximum of three digits long, and must be entered (there is no "default" time). The user must estimate the SUP time in minutes which will be required to complete his request. The run time will be entered following the instruction "ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR." and prompt "RUN TIME?".

If the run time is invalid, the message "***INVALID RUN TIME*** REENTER" will be displayed and the user must reenter the run time.

NCC has set up a system of priority codes which classify runs and enable the system to operate more efficiently. These codes change from time to time and therefore are not listed here. A valid priority of one alphabetic character must be entered by the user. The priority will be entered following the instruction "ENTER RUN PRIORITY CODE" and the prompt "PRIORITY?" If a valid priority code is not entered the message '*** INVALID PRIORITY***REENTER' will be displayed and the user must reenter priority.

The user must specify the terminal identifier - a location to which all of the remote batch output will be routed. This location can be a low-speed or medium-speed terminal. Terminal id is a maximum of six characters long. If no terminal id is entered or the user enters PR the output is routed to the central UNIVAC 1110 site. Terminal id will be entered after the message "ENTER IDENTIFICATION NUMBER FOR THE TERMINAL TO WHICH THE PRINT SHOULD BE ROUTED" and prompt "TERMINAL ID?"

The user may specify the number of copies of the output he desires for each run. A maximum of sixty-three copies may be requested. If no number is entered one copy will be produced. The number of copies will be entered after the message "ENTER NUMBER OF COPIES OF OUTPUT DESIRED" and the prompt "COPIES?"

If number of copies is not within the acceptable range the message "***INVALID NO. COPIES***REENTER" will be displayed and the user must reenter another number.

As each of these five entries is made, the subprogram will display them to the user. Upon completion of all entries, the subprogram will print a summary of run card and sym card information and the user can elect to accept or change this information. If accepted, the user will then be asked to submit or cancel the remote batch run. If submitted a message is returned by the 1110 system indicating the run identifier and whether or not the run was accepted. If the run is accepted, it goes into the 1110 backlog and is scheduled for processing just as any other batch job. Control is passed back to the NTS master program and any NTS function can be requested at that time.

Special Notes

The commands can be entered in their entirety or be abbreviated to the first two characters of the command. For example, REPORT=1 and RE=1 are equally acceptable.

A report must be selected and at least one combination entered or no batch job will be submitted.

The output of the batch job requires a 132 print position line. If the user's printer is limited to 120 characters, the output should be routed to the UNIVAC 1110 central site for later mailing to the user.

NEDS QUICK LOOK INTERACTIVE FUNCTION (NI)

The NEDS Quick Look function provides interactive access to NEDS point and area source files. The user has the ability, given flexible selection and sort criteria, to select records and choose either a formatted report giving a count of records selected, developing his own free formatted report with data items specified by the user, cataloging a file of selected records, or initiating a batch run of one of the standard NEDS report programs with the file of selected records as input. Any or all of these options may be used in any run.

COMPUTER INSTRUCTIONS FOR USING QUICK LOOK

To use the Quick Look function the user must first sign on to the operating system and enter the information necessary to use NTS, as described earlier. After the user has entered the NTS program, the Quick Look capability may be accessed by selecting the 'NI' function. Selection of the NI function transfers control to the NEDS Quick Look control subprogram. Upon entering this program, the user will be asked two questions. Based on user response to these questions, program control is established for internal program use.

The following presents these questions, possible answers and consequent program action.

1. Q - DO YOU NEED SYSTEM USE INFORMATION
   A - N (Do not display)
   A - Y Display the following

   NEDS Quick Look System provides the capability of extracting specified records from either the NEDS Point Source User File or the NEDS Area Source User File and creating a user specified report from these records in the NTS system. The entry PS is point source, the entry AS is area source.

2. Q - SELECT POINT SOURCE, AREA SOURCE PROCESSING OR RETURN TO NTS MASTER

   A - PS (Transfer to Point Source Selection Subprogram)
   A - AS (Transfer to Area Source Selection Subprogram)
   A - NTS (Transfer to NTS Master Program)

If the user selects PS or AS, he may then proceed with the selection of either point source or area source records. If NTS is selected, the Quick Look function is terminated and control is returned to the NTS master program.

POINT SOURCE DATA SELECTION

If the user chooses the PS option, control is transferred to the point source selection subprogram. The general purpose of this program is to accept selection criteria as specified by the user and using these selections, extract records from the Point Source User File for reporting.

Each selection may consist of one or more selection elements so long as the total number of elements for all selections does not exceed ninty-nine. If a specific selection is to be restricted by more than one file data field, then one element per data field will be required to specify the selection criteria. A description of the correct way to input a selection element entry is shown as follows:

A valid selection element entry consists of a field code, qualifier, field value, and connector (connector optional).

-----Field code is the number corresponding to the required Point Source field (01 thru 89).

-----Qualifier is used to show the relationship between the field value and the file data to be extracted (LT GT EQ ALL)

-----Field value (s) is the actual value(s) used in record selection--- can be up to six values on explicit selection

-----Connector is used to connect two sets of qualifier and field value in order to create a value range and to string multiple explicit values. (AND OR)

EXAMPLES

```
01  EQ  15
01  EQ  15  OR  16  OR  17
01  GT  15  AND  LT  21
01  LT  5
01  GT  48
25  ALL
```

Sample selections containing one and more than one selection element are shown as follows:

```
SELECTION 1
     01  EQ  1
     02  EQ  542
SELECTION 2
     01  EQ  2
     02  EQ  396
SELECTION 3
     01  GT  28
```

In order to obtain all the information needed by the system, a series of inquires are made of the user. Based on his responses, the selection criteria is stored for internal use and program control is routed to accommodate user specification.

The following list of questions, answers and system responses is given in chronological order of occurrances.

1. Q - DO YOU WISH TO SEE FIELD CODE DESCRIPTION TABLE?
   A - Y (Display tables as on following pages)
   A - N (Do not display table)
2. Q - ENTER SELECTION ELEMENT
   A - (Example) 1 EQ Ø1 or Ø5
   A - HELP (Display description of valid selection element entry)
   A - FIELD-CD (Display field code and field description table)

The previously entered selection element is edited for valid field code, qualifier, field value, and connector. Also not more than six field values can be entered for a single field code. If any of these edits is failed, the appropriate error message is displayed and the user is allowed to re-enter the selection element.

If the selection element as entered is valid, the number of elements is incremented and checked for a maximum of 99 possible entries. If more than 99 entries have been made, the user is alerted as to this condition and all elements of the final, incomplete selection(s) are blanked out. No additional selection elements may be entered at this point. Those selections that have been completely entered and accepted may be processed, however.

All selection entries must be limited to 72 characters in length. This is the normal length of print lines on CRT terminals. Users preparing input on 80 column punched cards or terminals with print lines longer than 72 characters are cautioned not to exceed using 72 characters for selection entries. Entries exceeding 72 characters in length will be truncated.

POINT SOURCE
FIELD CODE DESCRIPTION TABLE

01 STATE
02 COUNTY CODE
03 PLANT IDENTIFICATION NUMBER
04 POINT IDENTIFICATION NUMBER
05 SOURCE CLASSIFICATION NUMBER
06 AQCR NUMBER
07 YEAR PLANT INFO LAST UPDATED (CARD 1)
08 CITY CODE
09 UTM ZONE
10 ESTABLISHMENT NAME AND ADDRESS
11 PERSONAL CONTACT
12 OWNERSHIP CODE
13 YEAR POINT INFO LAST UPDATED (CARD 2)
14 STANDARD INDUSTRIAL CLASSIFICATION CODE
15 IPP PROCESS CODE
16 HORIZONTAL UTM COORDINATE (KM)
17 VERTICAL UTM COORDINATE (KME)
18 STACK HEIGHT (FT)
19 STACK DIAMETER (FT)
20 STACK TEMPERATURE (DEG F)
21 FLOW RATE (FT 3/MIN)
22 PLUME HEIGHT
23 FIRST POINT WITH COMMON STACK CODE
24 LAST POINT WITH COMMON STACK CODE
25 YEAR CONTROL INFO LAST UPDATED (CARD 3)
26 BOILER DESIGN CAPACITY (10 6 BTU/HR)

27 PRIMARY CONTROL EQUIPMENT PARTICULATES
28 SECONDARY CONTROL EQUIPMENT PARTICULATES
29 PRIMARY CONTROL EQUIPMENT SO2
30 SECONDARY CONTROL EQUIPMENT SO2
31 PRIMARY CONTROL EQUIPMENT NOX
32 SECONDARY CONTROL EQUIPMENT NOX
33 PRIMARY CONTROL EQUIPMENT VOC
34 SECONDARY CONTROL EQUIPMENT VOC
35 PRIMARY CONTROL EQUIPMENT CO
36 SECONDARY CONTROL EQUIPMENT CO
37 EST CONTROL EFFICIENCY PARTICULATE (%)
38 EST CONTROL EFFICIENCY SO2 (%)
39 EST CONTROL EFFICIENCY NOX (%)
40 EST CONTROL EFFICIENCY VOC (%)
41 EST CONTROL EFFICIENCY CO (%)
42 YEAR PRODUCTION INFO LAST UPDATED (CARD4)
43 % ANNUAL THRU PUT (DEC-FEB)
44 % ANNUAL THRU PUT (MAR-MAY)
45 % ANNUAL THRU PUT (JUN-AUG)
46 % ANNUAL THRU PUT (SEP-NOV)
47 NORMAL OPERATING HOURS PER DAY
48 NORMAL OPERATING DAYS PER WEEK
49 NORMAL OPERATING WEEKS PER YEAR
50 EST EMISSIONS PARTICULATES (TONS/YEAR)

51 EST EMISSIONS SO2 (TONS/YEAR)
52 EST EMISSIONS NOX (TONS/YEAR)
53 EST EMISSIONS VOC (TONS/YEAR)
54 EST EMISSIONS CO (TONS/YEAR)
55 ESTIMATION METHOD PARTICULATE
56 ESTIMATION METHOD SO2
57 ESTIMATION METHOD NOX
58 ESTIMATION METHOD VOC
59 ESTIMATION METHOD CO
60 % SPACE HEAT
61 YEAR REGULATORY INFO LAST UPDATED (CARD 5)
62 ALLOWABLE EMISSIONS PARTICULATE (TONS/YR)
63 ALLOWABLE EMISSIONS SO (TONS/YR)
64 ALLOWABLE EMISSIONS NO (TONS/YR)
65 ALLOWABLE EMISSIONS VOC (TONS/YR)
66 ALLOWABLE EMISSIONS VOC (TONS/YR)
67 COMPLIANCE STATUS
68 COMPLIANCE SCHEDULE - YEAR
69 COMPLIANCE SCHEDULE - MONTH
70 COMPLIANCE STATUS UPDATE - YEAR
71 COMPLIANCE STATUS UPDATE - MONTH
72 COMPLIANCE STATUS UPDATE - DAY
73 EMERGENCY CONTROL ACT PROGRAM STATUS
74 CONTROL REGULATION NUMBER 1
75 CONTROL REGULATION NUMBER 2
76 CONTROL REGULATION NUMBER 3
77 YEAR EMISSIONS INFO LAST UPDATED (CARD6)
78 FUEL, PROCESS, SOLID WASTE OPERATING RATE

79 MAXIMUM DESIGN RATE
80 % SULFUR CONTENT
81 % ASH CONTENT
82 HEAT CONTENT (10^6 BTU)
83 SOURCE CODE
84 CONFIDENTIALITY OF DATA
85 PARTICULATE EMISSIONS (TONS/YEAR)
86 SO2 EMISSIONS (TONS/YEAR)
87 NOX EMISSIONS (TONS/YEAR)
88 VOC EMISSIONS (TONS/YEAR)
89 CO EMISSIONS (TONS/YEAR)

There are two special selection capabilities that have been provided for the source classification code - field code Ø5.

NUMBER 1

If the user specifies field code 05 (SCC) equals any one of the following combinations,

Ø5 EQ 9 * * * * * * * (1)
Ø5 EQ 9 9 9 * * * * * (2)
Ø5 EQ 9 9 9 9 9 9 * * (3)
Ø5 EQ 9 9 9 9 9 9 9 9 (4)

the record selection against the NEDS Point Source User File will be based on the non-asterisk part of the selection. For example, the selection Ø5 EQ 3Ø1***** will select all records with SCCs beginning with 301. Selection 1******* will select all records with SCCs beginning with 1.

If this selection capability is used SCCs containing asterisks should be the final element in a selection entry. SCCs in format (4) above must precede those with format (3), and (3) before (2), (2) before (1), to assure proper record selection.

NUMBER 2

The above selection capability may or may not be used in combination with the second special selection capability provided for SCC selection.

If the user specifies field code 05 (SCC) equals a specific value, he may in addition, specify PL or PO as part of the selection value.

If PL is specified and a record match is found with the full or partial specified field value then all records for that plant are extracted.

If PO is specified and a record match is found with the full or partial specified field value then all records for that point are extracted.

It should be noted, that there is one restriction if the plant/point specification is used. If used the SCC PL/PO element should be the final element in a selection entry or the only element in a selection.

Example 1:

Ø1 EQ Ø1

Ø5 EQ 1Ø1ØØ2Ø1PO

This selection will retrieve all SCC records with SCC 1Ø1ØØ2Ø1 in State Ø1 plus all other SCC records at points that have SCC 1Ø1ØØ2Ø1. This type of selection may be used to retrieve all record for boilers using multiple fuels, for example.

Example 2:

Ø1 EQ Ø1

Ø5 EQ 1Ø1ØØ2Ø1 PL

This selection will retrieve all records at all facilities in State Ø1 that have SCC 1Ø1ØØ2Ø1. This type of selection may be used to retrieve all emission points at all facilities that have a particular process, for example.

3: Q - MORE ELEMENTS IN CURRENT SELECTION?
A - Y
A - N
A - DISPLAY (All elements of current selection are displayed)

If the answer is yes, more elements are to be added to the selection element. The user may then enter additional selection elements.

If the answer is no, the elements within the current selection entry will be examined to determine if State code has been specified as part of the selection criteria. If not, a message is displayed to the user and he is given the opportunity to add one or more fields to his selection criteria.

If State code is not included as a selection element, the entire point source user file must be read to make the selection. This may require substantial time and eventual high cost of retrieval. Therefore, users should consider including State code as part of the selection criteria or consider submitting national selections as batch, rather than interactive runs to reduce cost of retrieval.

4. Q - ARE THERE MORE SELECTION ENTRIES?
   A - Y
   A - N
   A - DISPLAY (All selection entries are displayed)

If the answer is yes, again the table is checked for maximum number of entries as described previously. If the answer is no, the user has indicated that all selection criteria has been entered and record selection can begin.

At this point the Quick Look selection program will display the message "Processing File Selection". Depending on the number and complexity of selections requested, some waiting time may be required before control is returned to the user.

As the file is read, each element within the current selection is compared to the file data to determine if the record meets the selection criteria. If the record meets the selection criteria, the record is written to the Selected Point Source User File.

This procedure continues until all applicable file records are compared to the specified selection entries for possible selection.

A count is kept of the number of records selected and written to the Selected Point Source User File and which selection criteria entry(s) caused this record to be extracted from the Point Source User File. At this point in processing, all Selected User File records have been written, and the user is presented with a list of possible options which are now open to him.

These options are:

1. Return to NTS Master (will not catalog file)
2. Redo selection parameters
3. Review formatted count reports
4. Go to Batch Initiation (catalog selected file)
5. Go to Point Source Reporting processing
6. Catalog Selected Point Source File and return to NEDS Quick Look Master.

The user must enter the number which corresponds to his choice of processing options. This entry is edited for possible invalid entry. If the choice is invalid, the user is notified and can reenter his choice. A list of the valid selections and the corresponding program logic is shown as follows:

1. Transfer control back to the NTS Master Program - both the selection criteria and selected file records are not retained.

2. Blank out the selection criteria entries, delete all selected file records and return to selection criteria entry procedure.

3. Display the Formatted Count Report and then allow user to enter another option number. If this option is chosen a formatted report is displayed showing the number of records selected for each selection. See the sample Quick Look runs later in this section for report examples.

4. The Selected Point Source User File is catalogued as an index sequential file in the same sequence with the same file keys as the complete Point Source User File. The file name will be unique based on time/day which has been catalogued or after the file is now catalogued, control is transferred to Batch Initiation Processing.

5. The Selected Point Source File is sorted by State, county, plant, point, SCC and retained as a sequential file. Control is transferred to the Point Source Reporting processing.

6. The Selected Area Source User File is catalogued as an index sequential file in the same sequence with the same file keys as the complete Area Source User File. This file name will be unique based on time/day which has been added to the catalogued file name. If this file had already been catalogued or after the file is now catalogued, control is transferred back to NEDS Quick Look Master Program.

   If prior to entering the above options, it is determined that no records have been selected, the user is given the opportunity to do one or more of the following:

   1. Return to NTS Master
   2. Redo selection parameters
   3. Review formatted count report.

   Based on user response to the above three options or the previously mentioned six options, the user has caused program control to be transferred to the next processing phase.

POINT SOURCE DATA REPORTING

If the user selects option 5 above, control is transferred to the point source reporting process. The primary function of the Point Source Reporting Process is to present either interactively or by remote printer the specified data from the previously selected Point Source User File records.

The user is asked a series of questions to establish where to present the report, which data fields to report, and what sequence they should be presented in. The questions and all valid responses are listed below:

1. Q - DO YOU WISH TO REVIEW REPORT INTERACTIVELY?
   A - Y
   A - N

The program will indicate the number of report lines that will be printed. If the response is NO, then the user is asked to enter a code to designate which remote printer should be used.

2. Q - ENTER REMOTE PRINTER CODE

The user indicates the appropriate remote printer code or enters PR if he wishes the report printed at the UNIVAC central site. After storing this information, the user is asked:

3. Q - ENTER NUMBER OF REPORT COPIES TO BE GENERATED
   The user has the option to have from 1 to 63 copies of the report printed.

4. Q - ENTER FIELD CODES OF FIELDS TO BE PRINTED (SEPARATE WITH COMMAS)

The field codes are entered separated by commas in the order to be displayed on the report. If it is desired to review the field code description table first, enter FIELD-CD at this point.

The labeling information for the report is built based on this information, and a tally of the number of characters to be printed is made. If this number of characters exceeds the maximum number of characters for the output device specified, the user is given the opportunity to request that the system 'drop' the last print field requested and each preceeding field until the output will 'fit' or start over and reenter the fields to be printed. After having established which fields are to be displayed the user can elect to sort the report records.

5. Q - DO YOU WISH TO SORT REPORT OUTPUT?
   A - Y (Specify sort sequence)
   A - N (Records are in order by Point Source User File key fields, i.e. sorted in order by STATE-COUNTY-PLANT-POINT-SCC.)

If the user chooses to sort the Selected File he is asked:

6. Q - ENTER FIELD CODE OF ALL FIELDS TO BE USED IN SORTING REPORT OUTPUT (SEPARATE WITH COMMAS AND USE A OR D WITH EACH FIELD CODE SPECIFYING ASCENDING OR DESCENDING SEQUENCE) Example 01A, 02A, 16D.

The response should be the field code(s) with a maximum of 20, separated by commas, of the sort fields in the order of the expected sort terminating each code with either an A or D for ascending or descending order. If A or D is not stated, A will be assumed.

The Selected User File is then either sorted or not, read to end of file and the required data fields reported in the order in which they were specified.

After completion of this process, the user can review more reports on another output device and sorted in another sequence. The above will be specified by responding to the following questions:

7. Q - DO YOU WISH TO CREATE ANOTHER REPORT?
8. Q - DO YOU WISH TO USE SAME OUTPUT DEVICE?
9. Q - DO YOU WISH TO USE SAME SORT SEQUENCE?

After having reviewed all required free formatted reports, the user is presented with a series of options which he can specify by entering the number of his choice. The options are:

1. Return to NTS master (will not catalog selected file).
2. Redo selection parameters.
3. Review Formatted Count Report.
4. Go to Batch Initiation (Catalog Selected File)
5. Review Free Formatted Select Report.
6. Catalog Selected Point Source File and return to NEDS Quick Look Master.

The selection of the following option numbers will produce the corresponding results.

1. Program Control will be transferred to the NTS Master Program Selected User File will not be catalogued.
2. Selected File will not be retained. Program control will be transferred to the Point Source Selection Subprogram.
3. The Formatted Count Report will be presented, and the user can select another option.
4. Selected File will be catalogued (if hasn't already been catalogued in this run) and control transferred to batch initiation processing.
5. Can return to specify yet another free formatted report layout.
6. Selected File will be catalogued (if hasn't already been catalogued in this run) and control transferred to NEDS Quick Look Master.

Based on one of the above options being selected, program control has been successfully transferred in order to accommodate the next user request.

AREA SOURCE DATA SELECTION

The area source source retrieval functions available in Quick Look operate in essentially the same manner as point source data selection. To access area source data, upon entering the Quick Look master program, the user may select AS. This will transfer control to the area source selection subprogram. Selection elements may be entered in the same manner as in selection of point source records.

First, a listing of the field code description table may be requested. For area sources, the following table will be displayed if the user so requests. Because the area source file contains a substantially larger number of data elements for each county file record than for each record and the NEDS point source file, a very lengthy field code description table will be produced. Therefore, because of the length of the table, it should not be requested unless genuinely necessary.

The discussion that follows presents in chronological order a list of questions, answers and system responses that would be expected to occur.

AREA SOURCE

FIELD CODE DESCRIPTION TABLE

- Each field code corresponds to a data element in the NEDS-USER-AR file.

- Field codes ØØØ1-ØØ75 relate to each of the input data fields on the NEDS area source form, Cards 1 through 5.

- Field codes ØØ76-ØØ78 are reserved for future storage of motor vehicle registration data for use in motor vehicle emission calculations. These do not contain data at present.

- Field code ØØ79-ØØ98 are reserved for addition of input data fields for new area source categories. These do not contain data at present.

- Field code Ø99 contains card 6 comments.

- Field codes Ø1ØØ - 11Ø7 relate to calculated emissions, emission calculation flags, and year of record of hand calculated emission estimates for each of the 84 possible area source categories. An emission calculation flag of 1 indicates emission estimates are hand calculated emissions entered through area source card 7. An emission calculation flag of 2 indicates emissions are computer calculated.

- Field codes 11Ø8-1112 relate to total county emissions of each pollutant.

0001 STATE
0002 COUNTY
0003 AQCR
0004 YEAR
0005 SIPEMISSION EST-PART
0006 SIPEMISSION EST-SOX
0007 SIPEMISSION EST-NOX
0008 SIPEMISSION EST-VOC
0009 SIPEMISSION EST-CO
0010 SUL CONT AUTH COAL
0011 SUL CONT BITUM COAL
0012 SUL CONT DIST OIL
0013 SUL CONT RESID OIL
0014 ASH CONT ANTH COAL
0015 ASH CONT BITM COAL
0016 RES COAL ANTHROCITE
0017 RES COAL BITUMINOUS
0018 RES OIL DISTILLATE
0019 RES OIL RESIDUAL
0020 RES GAS NATURAL
0021 RES FUEL WOOD TONS
0022 COMMCL COAL ANTH TON
0023 COMMCL COAL BITM TON
0024 COMMCL OIL DISTILL
0025 COMMCL OIL RESIDUAL
0026 COMMCL GAS NATURAL
0027 COMMCL FUEL WOOD
0028 INDUS COAL ANTH TONS
0029 INDUS COAL BITM TONS
0030 INDUSTRIAL COKE
0031 INDUS OIL DISTILL
0032 INDUS OIL RESIDUAL
0033 INDUS GAS NATURAL
0034 INDUS FUEL WOOD TONS
0035 INDUS PROCESS GAS
0036 RES INC ON SITE TONS
0037 IND INC ON SITE TONS
0038 COM INC ON SITE TONS
0039 RES OPEN BURN TONS
0040 IND OPEN BURN TONS
0041 COM OPEN BURN TONS
0042 GAS LIGHT VEHICLE
0043 GAS HEAVY VEHICLE
0044 GAS FUEL OFF HIWAY
0045 DISEL FUEL HEAVY VEH
0046 DISEL FUEL OFF HIWAY
0047 DISEL FUEL RAILROAD
0048 DENSITY CODE POP
0049 LTO MIL ACADEMY
0050 LTO CIVIL AIRCRAFT
0051 LTO COMM AIRCRAFT
0052 VESSEL COAL TONS
0053 VESSEL DISEL OIL GAL
0054 VESSEL RESID OIL GAL
0055 VESSEL GAS GAL
0056 EVA SOL PUR TON YR
0057 EVA GAS MARK GAL
0058 VEH MILE LIM ACC
0059 VEH MILE RUR RD
0060 VEH MILE SURB RD

0061 VEH MILE URBAN RD
0062 DIRT RD MILE TRAV
0063 DIRT AIR STRIPS LTO
0064 CONSTRUCTIONS ACRES
0065 MISC WIND EROS ACRES
0066 LANDTILL ACRES
0067 FOR FIRES ACRE BURN
0068 FOR FIRE QUANT TN/AC
0069 MAN BURN ACRES
0070 MAN BURN TON/ACRE
0071 AGRIC ACRE BURN
0072 AGRIC TON/ACRE BURN
0073 ORCHARD HEATERS
0074 FROST CONT DAY FR YR
0075 STRUCT FIRES #/YR
0076 # OF AUTOS
0077 # OF TRUCKS LT 6000
0078 # TRUCK 6 TO 10 THOU
0079 SPARE
0080 SPARE
0081 SPARE
0082 SPARE
0083 SPARE
0084 SPARE
0085 SPARE
0086 SPARE
0087 SPARE
0088 SPARE
0089 SPARE
0090 SPARE
0091 SPARE
0092 SPARE
0093 SPARE
0094 SPARE
0095 SPARE
0096 SPARE
0097 SPARE
0098 SPARE
0099 CARD 6 COMMENTS
0100 S. CAT. 01 TOTAL TSP
0101 S. CAT. 01 TOTAL SOX
0102 S. CAT. 01 TOTAL NOX
0103 S. CAT. 01 TOTAL VOC
0104 S. CAT. 01 TOTAL CO
0105 S. CAT. 01 TSP FLAG
0106 S. CAT. 01 SOX FLAG
0107 S. CAT. 01 NOX FLAG
0108 S. CAT. 01 VOC FLAG
0109 S. CAT. 01 COX FLAG
0110 YEAR OF RECORD
0111 COMMENTS
0112 S. CAT. 02 TOTAL TSP
0113 S. CAT. 02 TOTAL SOX
0114 S. CAT. 02 TOTAL NOX
0115 S. CAT. 02 TOTAL VOC
0116 S. CAT. 02 TOTAL COX
0117 S. CAT. 02 TSP FLAG
0118 S. CAT. 02 SOX FLAG
0119 S. CAT. 02 NOX FLAG
0120 S. CAT. 02 VOC FLAG

0121 S. CAT. 02 COX FLAG
0122 YEAR OF RECORD
0123 COMMENTS
0124 S. CAT. 03 TOTAL TSP
0125 S. CAT. 03 TOTAL SOX
0126 S. CAT. 03 TOTAL NOX
0127 S. CAT. 03 TOTAL VOC
0128 S. CAT. 03 TOTAL COX
0129 S. CAT. 03 TSP FLAG
0130 S. CAT. 03 SOX FLAG
0131 S. CAT. 03 NOX FLAG
0132 S. CAT. 03 VOC FLAG
0133 S. CAT. 03 COX FLAG
0134 YEAR OF RECORD
0135 COMMENTS
0136 S. CAT. 04 TOTAL TSP
0137 S. CAT. 04 TOTAL SOX
0138 S. CAT. 04 TOTAL NOX
0139 S. CAT. 04 TOTAL VOC
0140 S. CAT. 04 TOTAL COX
0141 S. CAT. 04TSP FLAG
0142 S. CAT. 04 SOXFLAG
0143 S. CAT. 04 NOXFLAG
0144 S. CAT. 04 VOCFLAG
0145 S. CAT. 04 COXFLAG
0146 YEARS OF RECORD
0147 COMMENTS
0148 S. CAT. 05 TOTAL TSP
0149 S. CAT. 05 TOTAL SOX
0150 S. CAT. 05 TOTAL NOX
0151 S. CAT. 05 TOTAL VOC
0152 S. CAT. 05 TOTAL COX
0153 S. CAT. 05 TSP FLAG
0154 S. CAT. 05 SOX FLAG
0155 S. CAT. 05 NOX FLAG
0156 S. CAT. 05 VOC FLAG
0157 S. CAT. 05 COX FLAG
0158 YEAR OF RECORD
0159 COMMENTS
0160 S. CAT. 06 TOTAL TSP
0161 S. CAT. 06 TOTAL SOX
0162 S. CAT. 06 TOTAL NOX
0163 S. CAT. 06 TOTAL VOC
0164 S. CAT. 06 TOTAL COX
0165 S. CAT. 06 TSP FLAG
0166 S. CAT. 06 SOX FLAG
0167 S. CAT. 06 NOX FLAG
0168 S. CAT. 06 VOC FLAG
0169 S. CAT. 06 COX FLAG
0170 YEAR OF RECORD 06
0171 COMMENTS 06
0172 S. CAT. 07 TOTAL TSP
0173 S. CAT. 07 TOTAL SOX
0174 S. CAT. 07 TOTAL NOX
0175 S. CAT. 07 TOTAL VOC
0176 S. CAT. 07 TOTAL COX
0177 S. CAT. 07 TSP FLAG
0178 S. CAT. 07 SOX FLAG
0179 S. CAT. 07 NOX FLAG
0180 S. CAT. 07 VOC FLAG

0181 S. CAT. 07 COX FLAG
0182 YEAR OF RECORD 07
0183 COMMENTS 07
0184 S. CAT. 08 TOTAL TSP
0185 S. CAT. 08 TOTAL SOX
0186 S. CAT. 08 TOTAL NOX
0187 S. CAT. 08 TOTAL VOC
0188 S. CAT. 08 TOTAL COX
0189 S. CAT. 08 TSP FLAG
0190 S. CAT. 08 SOX FLAG
0191 S. CAT. 08 NOX FLAG
0192 S. CAT. 08 VOC FLAG
0193 S. CAT. 08 COX FLAG
0194 YEAR OF RECORD 08
0195 COMMENTS 08
0196 S. CAT. 09 TOTAL TSP
0197 S. CAT. 09 TOTAL SOX
0198 S. CAT. 09 TOTAL NOX
0199 S. CAT. 09 TOTAL VOC
0200 S. CAT. 09 TOTAL COX
0201 S. CAT. 09 TSP FLAG
0202 S. CAT. 09 SOX FLAG
0203 S. CAT. 09 NOX FLAG
0204 S. CAT. 09 VOC FLAG
0205 S. CAT. 09 COX FLAG
0206 YEAR OF RECORD 09
0207 COMMENTS 09
0208 S. CAT. 10 TOTAL TSP
0209 S. CAT. 10 TOTAL SOX
0210 S. CAT. 10 TOTAL NOX
0211 S. CAT. 10 TOTAL VOC
0212 S. CAT. 10 TOTAL COX
0213 S. CAT. 10 TSP FLAG
0214 S. CAT. 10 SOX FLAG
0215 S. CAT. 10 NOX FLAG
0216 S. CAT. 10 VOC FLAG
0217 S. CAT. 10 COX FLAG
0218 YEAR OF RECORD 10
0219 COMMENTS 10
0220 S. CAT. 11 TOTAL TSP
0221 S. CAT. 11 TOTAL SOX
0222 S. CAT. 11 TOTAL NOX
0223 S. CAT. 11 TOTAL VOC
0224 S. CAT. 11 TOTAL COX
0225 S. CAT. 11 TSP FLAG
0226 S. CAT. 11 SOX FLAG
0227 S. CAT. 11 NOX FLAG
0228 S. CAT. 11 VOC FLAG
0229 S. CAT. 11 COX FLAG
0230 YEAR OF RECORD 11
0231 COMMENTS 11
0232 S. CAT. 12 TOTAL TSP
0233 S. CAT. 12 TOTAL SOX
0234 S. CAT. 12 TOTAL NOX
0235 S. CAT. 12 TOTAL VOC
0236 S. CAT. 12 TOTAL COX
0237 S. CAT. 12 TSP FLAG
0238 S. CAT. 12 SOX FLAG
0239 S. CAT. 12 NOX FLAG
0240 S. CAT. 12 VOC FLAG

0241 S. CAT. 12 COX FLAG
0242 YEAR OF RECORD 12
0243 COMMENTS 12
0244 S. CAT. 13 TOTAL TSP
0245 S. CAT. 13 TOTAL SOX
0246 S. CAT. 13 TOTAL NOX
0247 S. CAT. 13 TOTAL VOC
0248 S. CAT. 13 TOTAL COX
0249 S. CAT. 13 TSP FLAG
0250 S. CAT. 13 SOX FLAG
0251 S. CAT. 13 NOX FLAG
0252 S. CAT. 13 VOC FLAG
0253 S. CAT. 13 COX FLAG
0254 YEAR OF RECORD 13
0255 COMMENTS 13
0256 S. CAT. 14 TOTAL TSP
0257 S. CAT. 14 TOTAL SOX
0258 S. CAT. 14 TOTAL NOX
0259 S. CAT. 14 TOTAL VOC
0260 S. CAT. 14 TOTAL COX
0261 S. CAT. 14 TSP FLAG
0262 S. CAT. 14 SOX FLAG
0263 S. CAT. 14 NOX FLAG
0264 S. CAT. 14 VOC FLAG
0265 S. CAT. 14 COX FLAG
0266 YEAR OF RECORD 14
0267 COMMENTS 14
0268 S. CAT. 15 TOTAL TSP
0269 S. CAT. 15 TOTAL SOX
0270 S. CAT. 15 TOTAL NOX
0271 S. CAT. 15 TOTAL VOC
0272 S. CAT. 15 TOTAL COX
0273 S. CAT. 15 TSP FLAG
0274 S. CAT. 15 SOX FLAG
0275 S. CAT. 15 NOX FLAG
0276 S. CAT. 15 VOC FLAG
0277 S. CAT. 15 COX FLAG
0278 YEAR OF RECORD 15
0279 COMMENTS 15
0280 S. CAT. 16 TOTAL TSP
0281 S. CAT. 16 TOTAL SOX
0282 S. CAT. 16 TOTAL NOX
0283 S. CAT. 16 TOTAL VOC
0284 S. CAT. 16 TOTAL COX
0285 S. CAT. 16 TSP FLAG
0286 S. CAT. 16 SOX FLAG
0287 S. CAT. 16 NOX FLAG
0288 S. CAT. 16 VOC FLAG
0289 S. CAT. 16 COX FLAG
0290 YEAR OF RECORD 16
0291 COMMENTS 16
0292 S. CAT. 17 TOTAL TSP
0293 S. CAT. 17 TOTAL SOX
0294 S. CAT. 17 TOTAL NOX
0295 S. CAT. 17 TOTAL VOC
0296 S. CAT. 17 TOTAL COX
0297 S. CAT. 17 TSP FLAG
0298 S. CAT. 17 SOX FLAG
0299 S. CAT. 17 NOX FLAG
0300 S. CAT. 17 VOC FLAG

0301 S. CAT. 17 COX FLAG
0302 YEAR OF RECORD 17
0303 COMMENTS 17
0304 S. CAT. 18 TOTAL TSP
0305 S. CAT. 18 TOTAL SOX
0306 S. CAT. 18 TOTAL NOX
0307 S. CAT. 18 TOTAL VOC
0308 S. CAT. 18 TOTAL COX
0309 S. CAT. 18 TSP FLAG
0310 S. CAT. 18 SOX FLAG
0311 S. CAT. 18 NOX FLAG
0312 S. CAT. 18 VOC FLAG
0313 S. CAT. 18 COX FLAG
0314 YEAR OF RECORD 18
0315 COMMENTS 18
0316 S. CAT. 19 TOTAL TSP
0317 S. CAT. 19 TOTAL SOX
0318 S. CAT. 19 TOTAL NOX
0319 S. CAT. 19 TOTAL VOC
0320 S. CAT. 19 TOTAL COX
0321 S. CAT. 19 TSP FLAG
0322 S. CAT. 19 SOX FLAG
0323 S. CAT. 19 NOX FLAG
0324 S. CAT. 19 VOC FLAG
0325 S. CAT. 19 COX FLAG
0326 YEAR OF RECORD 19
0327 COMMENTS 19
0328 S. CAT. 20 TOTAL TSP
0329 S. CAT. 20 TOTAL SOX
0330 S. CAT. 20 TOTAL NOX
0331 S. CAT. 20 TOTAL VOC
0332 S. CAT. 20 TOTAL COX
0333 S. CAT. 20 TSP FLAG
0334 S. CAT. 20 SOX FLAG
0335 S. CAT. 20 NOX FLAG
0336 S. CAT. 20 VOC FLAG
0337 S. CAT. 20 COX FLAG
0338 YEAR OF RECORD 20
0339 COMMENTS 20
0340 S. CAT. 21 TOTAL TSP
0341 S. CAT. 21 TOTAL SOX
0342 S. CAT. 21 TOTAL NOX
0343 S. CAT. 21 TOTAL VOC
0344 S. CAT. 21 TOTAL COX
0345 S. CAT. 21 TSP FLAG
0346 S. CAT. 21 SOX FLAG
0347 S. CAT. 21 NOX FLAG
0348 S. CAT. 21 VOC FLAG
0349 S. CAT. 21 COX FLAG
0350 YEAR OF RECORD 21
0351 COMMENTS 21
0352 S. CAT. 22 TOTAL TSP
0353 S. CAT. 22 TOTAL SOX
0354 S. CAT. 22 TOTAL NOX
0355 S. CAT. 22 TOTAL VOC
0356 S. CAT. 22 TOTAL COX
0357 S. CAT. 22 TSP FLAG
0358 S. CAT. 22 SOX FLAG
0359 S. CAT. 22 NOX FLAG
0360 S. CAT. 22 VOC FLAG

0361 S. CAT. 22 COX FLAG
0362 YEAR OF RECORD 22
0363 COMMENTS 22
0364 S. CAT. 23 TOTAL TSP
0365 S. CAT. 23 TOTAL SOX
0366 S. CAT. 23 TOTAL NOX
0367 S. CAT. 23 TOTAL VOC
0368 S. CAT. 23 TOTAL COX
0369 S. CAT. 23 TSP FLAG
0370 S. CAT. 23 SOX FLAG
0371 S. CAT. 23 NOX FLAG
0372 S. CAT. 23 VOC FLAG
0373 S. CAT. 23 COX FLAG
0374 YEAR OF RECORD 23
0375 COMMENTS 23
0376 S. CAT. 24 TOTAL TSP
0377 S. CAT. 24 TOTAL SOX
0378 S. CAT. 24 TOTAL NOX
0379 S. CAT. 24 TOTAL VOC
0380 S. CAT. 24 TOTAL COX
0381 S. CAT. 24 TSP FLAG
0382 S. CAT. 24 SOX FLAG
0383 S. CAT. 24 NOX FLAG
0384 S. CAT. 24 VOC FLAG
0385 S. CAT. 24 COX FLAG
0386 YEAR OF RECORD 24
0387 COMMENTS 24
0388 S. CAT. 25 TOTAL TSP
0389 S. CAT. 25 TOTAL SOX
0390 S. CAT. 25 TOTAL NOX
0391 S. CAT. 25 TOTAL VOC
0392 S. CAT. 25 TOTAL COX
0393 S. CAT. 25 TSP FLAG
0394 S. CAT. 25 SOX FLAG
0395 S. CAT. 25 NOX FLAG
0396 S. CAT. 25 VOC FLAG
0397 S. CAT. 25 COX FLAG
0398 YEAR OF RECORD 25
0399 COMMENTS 25
0400 S. CAT. 26 TOTAL TSP
0401 S. CAT. 26 TOTAL SOX
0402 S. CAT. 26 TOTAL NOX
0403 S. CAT. 26 TOTAL VOC
0404 S. CAT. 26 TOTAL COX
0405 S. CAT. 26 TSP FLAG
0406 S. CAT. 26 SOX FLAG
0407 S. CAT. 26 NOX FLAG
0408 S. CAT. 26 VOC FLAG
0409 S. CAT. 26 COX FLAG
0410 YEAR OF RECORD 26
0411 COMMENTS 26
0412 S. CAT. 27 TOTAL TSP
0413 S. CAT. 27 TOTAL SOX
0414 S. CAT. 27 TOTAL NOX
0415 S. CAT. 27 TOTAL VOC
0416 S. CAT. 27 TOTAL COX
0417 S. CAT. 27 TSP FLAG
0418 S. CAT. 27 SOX FLAG
0419 S. CAT. 27 NOX FLAG
0420 S. CAT. 27 VOC FLAG

0421 S. CAT. 27 COX FLAG
0422 YEAR OF RECORD 27
0423 COMMENTS 27
0424 S. CAT. 28 TOTAL TSP
0425 S. CAT. 28 TOTAL SOX
0426 S. CAT. 28 TOTAL NOX
0427 S. CAT. 28 TOTAL VOC
0428 S. CAT. 28 TOTAL COX
0429 S. CAT. 28 TSP FLAG
0430 S. CAT. 28 SOX FLAG
0431 S. CAT. 28 NOX FLAG
0432 S. CAT. 28 VOC FLAG
0433 S. CAT. 28 COX FLAG
0434 YEAR OF RECORD 28
0435 COMMENTS 28
0436 S. CAT. 29 TOTAL TSP
0437 S. CAT. 29 TOTAL SOX
0438 S. CAT. 29 TOTAL NOX
0439 S. CAT. 29 TOTAL VOC
0440 S. CAT. 29 TOTAL COX
0441 S. CAT. 29 TSP FLAG
0442 S. CAT. 29 SOX FLAG
0443 S. CAT. 29 NOX FLAG
0444 S. CAT. 29 VOC FLAG
0445 S. CAT. 29 COX FLAG
0446 YEAR OF RECORD 29
0447 COMMENTS 29
0448 S. CAT. 30 TOTAL TSP
0449 S. CAT. 30 TOTAL SOX
0450 S. CAT. 30 TOTAL NOX
0451 S. CAT. 30 TOTAL VOC
0452 S. CAT. 30 TOTAL COX
0453 S. CAT. 30 TSP FLAG
0454 S. CAT. 30 SOX FLAG
0455 S. CAT. 30 NOX FLAG
0456 S. CAT. 30 VOC FLAG
0457 S. CAT. 30 COX FLAG
0458 YEAR OF RECORD 30
0459 COMMENTS 30
0460 S. CAT. 31 TOTAL TSP
0461 S. CAT. 31 TOTAL SOX
0462 S. CAT. 31 TOTAL NOX
0463 S. CAT. 31 TOTAL VOC
0464 S. CAT. 31 TOTAL COX
0465 S. CAT. 31 TSP FLAG
0466 S. CAT. 31 SOX FLAG
0467 S. CAT. 31 NOX FLAG
0468 S. CAT. 31 VOC FLAG
0469 S. CAT. 31 COX FLAG
0470 YEAR OF RECORD 31
0471 COMMENTS 31
0472 S. CAT. 32 TOTAL TSP
0473 S. CAT. 32 TOTAL SOX
0474 S. CAT. 32 TOTAL NOX
0475 S. CAT. 32 TOTAL VOC
0476 S. CAT. 32 TOTAL COX
0477 S. CAT. 32 TSP FLAG
0478 S. CAT. 32 SOX FLAG
0479 S. CAT. 32 NOX FLAG
0480 S. CAT. 32 VOC FLAG

0481 S. CAT. 32 COX FLAG
0482 YEAR OF RECORD 32
0483 COMMENTS 32
0484 S. CAT. 33 TOTAL TSP
0485 S. CAT. 33 TOTAL SOX
0486 S. CAT. 33 TOTAL NOX
0487 S. CAT. 33 TOTAL VOC
0488 S. CAT. 33 TOTAL COX
0489 S. CAT. 33 TSP FLAG
0490 S. CAT. 33 SOX FLAG
0491 S. CAT. 33 NOX FLAG
0492 S. CAT. 33 VOC FLAG
0493 S. CAT. 33 COX FLAG
0494 YEAR OF RECORD 33
0495 COMMENTS 33
0496 S. CAT. 34 TOTAL TSP
0497 S. CAT. 34 TOTAL SOX
0498 S. CAT. 34 TOTAL NOX
0499 S. CAT. 34 TOTAL VOC
0500 S. CAT. 34 TOTAL COX
0501 S. CAT. 34 TSP FLAG
0502 S. CAT. 34 SOX FLAG
0503 S. CAT. 34 NOX FLAG
0504 S. CAT. 34 VOC FLAG
0505 S. CAT. 34 COX FLAG
0506 YEAR OF RECORD 34
0507 COMMENTS 34
0508 S. CAT. 35 TOTAL TSP
0509 S. CAT. 35 TOTAL SOX
0510 S. CAT. 35 TOTAL NOX
0511 S. CAT. 35 TOTAL VOC
0512 S. CAT. 35 TOTAL COX
0513 S. CAT. 35 TSP FLAG
0514 S. CAT. 35 SOX FLAG
0515 S. CAT. 35 NOX FLAG
0516 S. CAT. 35 VOC FLAG
0517 S. CAT. 35 COX FLAG
0518 YEAR OF RECORD 35
0519 COMMENTS 35
0520 S. CAT. 36 TOTAL TSP
0521 S. CAT. 36 TOTAL SOX
0522 S. CAT. 36 TOTAL NOX
0523 S. CAT. 36 TOTAL VOC
0524 S. CAT. 36 TOTAL COX
0525 S. CAT. 36 TSP FLAG
0526 S. CAT. 36 SOX FLAG
0527 S. CAT. 36 NOX FLAG
0528 S. CAT. 36 VOC FLAG
0529 S. CAT. 36 COX FLAG
0530 YEAR OF RECORD 36
0531 COMMENTS 36
0532 S. CAT. 37 TOTAL TSP
0533 S. CAT. 37 TOTAL SOX
0534 S. CAT. 37 TOTAL NOX
0535 S. CAT. 37 TOTAL VOC
0536 S. CAT. 37 TOTAL COX
0537 S. CAT. 37 TSP FLAG
0538 S. CAT. 37 SOX FLAG
0539 S. CAT. 37 NOX FLAG
0540 S. CAT. 37 VOC FLAG

0541 S. CAT. 37 COX FLAG
0542 YEAR OF RECORD 37
0543 COMMENTS 37
0544 S. CAT. 38 TOTAL TSP
0545 S. CAT. 38 TOTAL SOX
0546 S. CAT. 38 TOTAL NOX
0547 S. CAT. 38 TOTAL VOC
0548 S. CAT. 38 TOTAL COX
0549 S. CAT. 38 TSP FLAG
0550 S. CAT. 38 SOX FLAG
0551 S. CAT. 38 NOX FLAG
0552 S. CAT. 38 VOC FLAG
0553 S. CAT. 38 COX FLAG
0554 YEAR OF RECORD 38
0555 COMMENTS 38
0556 S. CAT. 39 TOTAL TSP
0557 S. CAT. 39 TOTAL SOX
0558 S. CAT. 39 TOTAL NOX
0559 S. CAT. 39 TOTAL VOC
0560 S. CAT. 39 TOTAL COX
0561 S. CAT. 39 TSP FLAG
0562 S. CAT. 39 SOX FLAG
0563 S. CAT. 39 NOX FLAG
0564 S. CAT. 39 VOC FLAG
0565 S. CAT. 39 COX FLAG
0566 YEAR OF RECORD 39
0567 COMMENTS 39
0568 S. CAT. 40 TOTAL TSP
0569 S. CAT. 40 TOTAL SOX
0570 S. CAT. 40 TOTAL NOX
0571 S. CAT. 40 TOTAL VOC
0572 S. CAT. 40 TOTAL COX
0573 S. CAT. 40 TSP FLAG
0574 S. CAT. 40 SOX FLAG
0575 S. CAT. 40 NOX FLAG
0576 S. CAT. 40 VOC FLAG
0577 S. CAT. 40 COX FLAG
0578 YEAR OF RECORD 40
0579 COMMENTS 40
0580 S. CAT. 41 TOTAL TSP
0581 S. CAT. 41 TOTAL SOX
0582 S. CAT. 41 TOTAL NOX
0583 S. CAT. 41 TOTAL VOC
0584 S. CAT. 41 TOTAL COX
0585 S. CAT. 41 TSP FLAG
0586 S. CAT. 41 SOX FLAG
0587 S. CAT. 41 NOX FLAG
0588 S. CAT. 41 VOC FLAG
0589 S. CAT. 41 COX FLAG
0590 YEAR OF RECORD 41
0591 COMMENTS 41
0592 S. CAT. 42 TOTAL TSP
0593 S. CAT. 42 TOTAL SOX
0594 S. CAT. 42 TOTAL NOX
0595 S. CAT. 42 TOTAL VOC
0596 S. CAT. 42 TOTAL COX
0597 S. CAT. 42 TSP FLAG
0598 S. CAT. 42 SOX FLAG
0599 S. CAT. 42 NOX FLAG
0600 S. CAT. 42 VOC FLAG

0601 S. CAT. 42 COX FLAG
0602 YEAR OF RECORD 42
0603 COMMENTS 42
0604 S. CAT. 43 TOTAL TSP
0605 S. CAT. 43 TOTAL SOX
0606 S. CAT. 43 TOTAL NOX
0607 S. CAT. 43 TOTAL VOC
0608 S. CAT. 43 TOTAL COX
0609 S. CAT. 43 TSP FLAG
0610 S. CAT. 43 SOX FLAG
0611 S. CAT. 43 NOX FLAG
0612 S. CAT. 43 VOC FLAG
0613 S. CAT. 43 COX FLAG
0614 YEAR OF RECORD 43
0615 COMMENTS 43
0616 S. CAT. 44 TOTAL TSP
0617 S. CAT. 44 TOTAL SOX
0618 S. CAT. 44 TOTAL NOX
0619 S. CAT. 44 TOTAL VOC
0620 S. CAT. 44 TOTAL COX
0621 S. CAT. 44 TSP FLAG
0622 S. CAT. 44 SOX FLAG
0623 S. CAT. 44 NOX FLAG
0624 S. CAT. 44 VOC FLAG
0625 S. CAT. 44 COX FLAG
0626 YEAR OF RECORD 44
0627 COMMENTS 44
0628 S. CAT. 45 TOTAL TSP
0629 S. CAT. 45 TOTAL SOX
0630 S. CAT. 45 TOTAL NOX
0631 S. CAT. 45 TOTAL VOC
0632 S. CAT. 45 TOTAL COX
0633 S. CAT. 45 TSP FLAG
0634 S. CAT. 45 SOX FLAG
0635 S. CAT. 45 NOX FLAG
0636 S. CAT. 45 VOC FLAG
0637 S. CAT. 45 COX FLAG
0638 YEAR OF RECORD 45
0639 COMMENTS 45
0640 S. CAT. 46 TOTAL TSP
0641 S. CAT. 46 TOTAL SOX
0642 S. CAT. 46 TOTAL NOX
0643 S. CAT. 46 TOTAL VOC
0644 S. CAT. 46 TOTAL COX
0645 S. CAT. 46 TSP FLAG
0646 S. CAT. 46 SOX FLAG
0647 S. CAT. 46 NOX FLAG
0648 S. CAT. 46 VOC FLAG
0649 S. CAT. 46 COX FLAG
0650 YEAR OF RECORD 46
0651 COMMENTS 46
0652 S. CAT. 47 TOTAL TSP
0653 S. CAT. 47 TOTAL SOX
0654 S. CAT. 47 TOTAL NOX
0655 S. CAT. 47 TOTAL VOC
0656 S. CAT. 47 TOTAL COX
0657 S. CAT. 47 TSP FLAG
0658 S. CAT. 47 SOX FLAG
0659 S. CAT. 47 NOX FLAG
0660 S. CAT. 47 VOC FLAG

0661 S. CAT. 47 COX FLAG
0662 YEAR OF RECORD 47
0663 COMMENTS 47
0664 S. CAT. 48 TOTAL TSP
0665 S. CAT. 48 TOTAL SOX
0666 S. CAT. 48 TOTAL NOX
0667 S. CAT. 48 TOTAL VOC
0668 S. CAT. 48 TOTAL COX
0669 S. CAT. 48 TSP FLAG
0670 S. CAT. 48 SOX FLAG
0671 S. CAT. 48 NOX FLAG
0672 S. CAT. 48 VOC FLAG
0673 S. CAT. 48 COX FLAG
0674 YEAR OF RECORD 48
0675 COMMENTS 48
0676 S. CAT. 49 TOTAL TSP
0677 S. CAT. 49 TOTAL SOX
0678 S. CAT. 49 TOTAL NOX
0679 S. CAT. 49 TOTAL VOC
0680 S. CAT. 49 TOTAL COX
0681 S. CAT. 49 TSP FLAG
0682 S. CAT. 49 SOX FLAG
0683 S. CAT. 49 NOX FLAG
0684 S. CAT. 49 VOC FLAG
0685 S. CAT. 49 COX FLAG
0686 YEAR OF RECORD 49
0687 COMMENTS 49
0688 S. CAT. 50 TOTAL TSP
0689 S. CAT. 50 TOTAL SOX
0690 S. CAT. 50 TOTAL NOX
0691 S. CAT. 50 TOTAL VOC
0692 S. CAT. 50 TOTAL COX
0693 S. CAT. 50 TSP FLAG
0694 S. CAT. 50 SOX FLAG
0695 S. CAT. 50 NOX FLAG
0696 S. CAT. 50 VOC FLAG
0697 S. CAT. 50 COX FLAG
0698 YEAR OF RECORD 50
0699 COMMENTS 50
0700 S. CAT. 51 TOTAL TSP
0701 S. CAT. 51 TOTAL SOX
0702 S. CAT. 51 TOTAL NOX
0703 S. CAT. 51 TOTAL VOC
0704 S. CAT. 51 TOTAL COX
0705 S. CAT. 51 TSP FLAG
0706 S. CAT. 51 SOX FLAG
0707 S. CAT. 51 NOX FLAG
0708 S. CAT. 51 VOC FLAG
0709 S. CAT. 51 COX FLAG
0710 YEAR OF RECORD 51
0711 COMMENTS 51
0712 S. CAT. 52 TOTAL TSP
0713 S. CAT. 52 TOTAL SOX
0714 S. CAT. 52 TOTAL NOX
0715 S. CAT. 52 TOTAL VOC
0716 S. CAT. 52 TOTAL COX
0717 S. CAT. 52 TSP FLAG
0718 S. CAT. 52 SOX FLAG
0719 S. CAT. 52 NOX FLAG
0720 S. CAT. 52 VOC FLAG

0721 S. CAT. 52 COX FLAG
0722 YEAR OF RECORD 52
0723 COMMENTS 52
0724 S. CAT. 53 TOTAL TSP
0725 S. CAT. 53 TOTAL SOX
0726 S. CAT. 53 TOTAL NOX
0727 S. CAT. 53 TOTAL VOC
0728 S. CAT. 53 TOTAL COX
0729 S. CAT. 53 TSP FLAG
0730 S. CAT. 53 SOX FLAG
0731 S. CAT. 53 NOX FLAG
0732 S. CAT. 53 VOC FLAG
0733 S. CAT. 53 COX FLAG
0734 YEAR OF RECORD 53
0735 COMMENTS 53
0736 S. CAT. 54 TOTAL TSP
0737 S. CAT. 54 TOTAL SOX
0738 S. CAT. 54 TOTAL NOX
0739 S. CAT. 54 TOTAL VOC
0740 S. CAT. 54 TOTAL COX
0741 S. CAT. 54 TSP FLAG
0742 S. CAT. 54 SOX FLAG
0743 S. CAT. 54 NOX FLAG
0744 S. CAT. 54 VOC FLAG
0745 S. CAT. 54 COX FLAG
0746 YEAR OF RECORD 54
0747 COMMENTS 54
0748 S. CAT. 55 TOTAL TSP
0749 S. CAT. 55 TOTAL SOX
0750 S. CAT. 55 TOTAL NOX
0751 S. CAT. 55 TOTAL VOC
0752 S. CAT. 55 TOTAL COX
0753 S. CAT. 55 TSP FLAG
0754 S. CAT. 55 SOX FLAG
0755 S. CAT. 55 NOX FLAG
0756 S. CAT. 55 VOC FLAG
0757 S. CAT. 55 COX FLAG
0758 YEAR OF RECORD 55
0759 COMMENTS 55
0760 S. CAT. 56 TOTAL TSP
0761 S. CAT. 56 TOTAL SOX
0762 S. CAT. 56 TOTAL NOX
0763 S. CAT. 56 TOTAL VOC
0764 S. CAT. 56 TOTAL COX
0765 S. CAT. 56 TSP FLAG
0766 S. CAT. 56 SOX FLAG
0767 S. CAT. 56 NOX FLAG
0768 S. CAT. 56 VOC FLAG
0769 S. CAT. 56 COX FLAG
0770 YEAR OF RECORD 56
0771 COMMENTS 56
0772 S. CAT. 57 TOTAL TSP
0773 S. CAT. 57 TOTAL SOX
0774 S. CAT. 57 TOTAL NOX
0775 S. CAT. 57 TOTAL VOC
0776 S. CAT. 57 TOTAL COX
0777 S. CAT. 57 TSP FLAG
0778 S. CAT. 57 SOX FLAG
0779 S. CAT. 57 NOX FLAG
0780 S. CAT. 57 VOC FLAG

0781 S. CAT. 57 COX FLAG
0782 YEAR OF RECORD 57
0783 COMMENTS 57
0784 S. CAT. 58 TOTAL TSP
0785 S. CAT. 58 TOTAL SOX
0786 S. CAT. 58 TOTAL NOX
0787 S. CAT. 58 TOTAL VOC
0788 S. CAT. 58 TOTAL COX
0789 S. CAT. 58 TSP FLAG
0790 S. CAT. 58 SOX FLAG
0791 S. CAT. 58 NOX FLAG
0792 S. CAT. 58 VOC FLAG
0793 S. CAT. 58 COX FLAG
0794 YEAR OF RECORD 58
0795 COMMENTS 58
0796 S. CAT. 59 TOTAL TSP
0797 S. CAT. 59 TOTAL SOX
0798 S. CAT. 59 TOTAL NOX
0799 S. CAT. 59 TOTAL VOC
0800 S. CAT. 59 TOTAL COX
0801 S. CAT. 59 TSP FLAG
0802 S. CAT. 59 SOX FLAG
0803 S. CAT. 59 NOX FLAG
0804 S. CAT. 59 VOC FLAG
0805 S. CAT. 59 COX FLAG
0806 YEAR OF RECORD 59
0807 COMMENTS 59
0808 S. CAT. 60 TOTAL TSP
0809 S. CAT. 60 TOTAL SOX
0810 S. CAT. 60 TOTAL NOX
0811 S. CAT. 60 TOTAL VOC
0812 S. CAT. 60 TOTAL COX
0813 S. CAT. 60 TSP FLAG
0814 S. CAT. 60 SOX FLAG
0815 S. CAT. 60 NOX FLAG
0816 S. CAT. 60 VOC FLAG
0817 S. CAT. 60 COX FLAG
0818 YEAR OF RECORD 60
0819 COMMENTS 60
0820 S. CAT. 61 TOTAL TSP
0821 S. CAT. 61 TOTAL SOX
0822 S. CAT. 61 TOTAL NOX
0823 S. CAT. 61 TOTAL VOC
0824 S. CAT. 61 TOTAL COX
0825 S. CAT. 61 TSP FLAG
0826 S. CAT. 61 SOX FLAG
0827 S. CAT. 61 NOX FLAG
0828 S. CAT. 61 VOC FLAG
0829 S. CAT. 61 COX FLAG
0830 YEAR OF RECORD 61
0831 COMMENTS 61
0832 S. CAT. 62 TOTAL TSP
0833 S. CAT. 62 TOTAL SOX
0834 S. CAT. 62 TOTAL NOX
0835 S. CAT. 62 TOTAL VOC
0836 S. CAT. 62 TOTAL COX
0837 S. CAT. 62 TSP FLAG
0838 S. CAT. 62 SOX FLAG
0839 S. CAT. 62 NOX FLAG
0840 S. CAT. 62 VOC FLAG

0841 S. CAT. 62 COX FLAG
0842 YEAR OF RECORD 62
0843 COMMENTS 62
0844 S. CAT. 63 TOTAL TSP
0845 S. CAT. 63 TOTAL SOX
0846 S. CAT. 63 TOTAL NOX
0847 S. CAT. 63 TOTAL VOC
0848 S. CAT. 63 TOTAL COX
0849 S. CAT. 63 TSP FLAG
0850 S. CAT. 63 SOX FLAG
0851 S. CAT. 63 NOX FLAG
0852 S. CAT. 63 VOC FLAG
0853 S. CAT. 63 COX FLAG
0854 YEAR OF RECORD 63
0855 COMMENTS 63
0856 S. CAT. 64 TOTAL TSP
0857 S. CAT. 64 TOTAL SOX
0858 S. CAT. 64 TOTAL NOX
0859 S. CAT. 64 TOTAL VOC
0860 S. CAT. 64 TOTAL COX
0861 S. CAT. 64 TSP FLAG
0862 S. CAT. 64 SOX FLAG
0863 S. CAT. 64 NOX FLAG
0864 S. CAT. 64 VOC FLAG
0865 S. CAT. 64 COX FLAG
0866 YEAR OF RECORD 64
0867 COMMENTS 64
0868 S. CAT. 65 TOTAL TSP
0869 S. CAT. 65 TOTAL SOX
0870 S. CAT. 65 TOTAL NOX
0871 S. CAT. 65 TOTAL VOC
0872 S. CAT. 65 TOTAL COX
0873 S. CAT. 65 TSP FLAG
0874 S. CAT. 65 SOX FLAG
0875 S. CAT. 65 NOX FLAG
0876 S. CAT. 65 VOC FLAG
0877 S. CAT. 65 COX FLAG
0878 YEAR OF RECORD 65
0879 COMMENTS 65
0880 S. CAT. 66 TOTAL TSP
0881 S. CAT. 66 TOTAL SOX
0882 S. CAT. 66 TOTAL NOX
0883 S. CAT. 66 TOTAL VOC
0884 S. CAT. 66 TOTAL COX
0885 S. CAT. 66 TSP FLAG
0886 S. CAT. 66 SOX FLAG
0887 S. CAT. 66 NOX FLAG
0888 S. CAT. 66 VOC FLAG
0889 S. CAT. 66 COX FLAG
0890 YEAR OF RECORD 66
0891 COMMENTS 66
0892 S. CAT. 67 TOTAL TSP
0893 S. CAT. 67 TOTAL SOX
0894 S. CAT. 67 TOTAL NOX
0895 S. CAT. 67 TOTAL VOC
0896 S. CAT. 67 TOTAL COX
0897 S. CAT. 67 TSP FLAG
0898 S. CAT. 67 SOX FLAG
0899 S. CAT. 67 NOX FLAG
0900 S. CAT. 67 VOC FLAG

0901 S. CAT. 67 COX FLAG
0902 YEAR OF RECORD 67
0903 COMMENTS 67
0904 S. CAT. 68 TOTAL TSP
0905 S. CAT. 68 TOTAL SOX
0906 S. CAT. 68 TOTAL NOX
0907 S. CAT. 68 TOTAL VOC
0908 S. CAT. 68 TOTAL COX
0909 S. CAT. 68 TSP FLAG
0910 S. CAT. 68 SOX FLAG
0911 S. CAT. 68 NOX FLAG
0912 S. CAT. 68 VOC FLAG
0913 S. CAT. 68 COX FLAG
0914 YEAR OF RECORD 68
0915 COMMENTS 68
0916 S. CAT. 69 TOTAL TSP
0917 S. CAT. 69 TOTAL SOX
0918 S. CAT. 69 TOTAL NOX
0919 S. CAT. 69 TOTAL VOC
0920 S. CAT. 69 TOTAL COX
0921 S. CAT. 69 TSP FLAG
0922 S. CAT. 69 SOX FLAG
0923 S. CAT. 69 NOX FLAG
0924 S. CAT. 69 VOC FLAG
0925 S. CAT. 69 COX FLAG
0926 YEAR OF RECORD 69
0927 COMMENTS 69
0928 S. CAT. 70 TOTAL TSP
0929 S. CAT. 70 TOTAL SOX
0930 S. CAT. 70 TOTAL NOX
0931 S. CAT. 70 TOTAL VOC
0932 S. CAT. 70 TOTAL COX
0933 S. CAT. 70 TSP FLAG
0934 S. CAT. 70 SOX FLAG
0935 S. CAT. 70 NOX FLAG
0936 S. CAT. 70 VOC FLAG
0937 S. CAT. 70 COX FLAG
0938 YEAR OF RECORD 70
0939 COMMENTS 70
0940 S. CAT. 71 TOTAL TSP
0941 S. CAT. 71 TOTAL SOX
0942 S. CAT. 71 TOTAL NOX
0943 S. CAT. 71 TOTAL VOC
0944 S. CAT. 71 TOTAL COX
0945 S. CAT. 71 TSP FLAG
0946 S. CAT. 71 SOX FLAG
0947 S. CAT. 71 NOX FLAG
0948 S. CAT. 71 VOC FLAG
0949 S. CAT. 71 COX FLAG
0950 YEAR OF RECORD 71
0951 COMMENTS 71
0952 S. CAT. 72 TOTAL TSP
0953 S. CAT. 72 TOTAL SOX
0954 S. CAT. 72 TOTAL NOX
0955 S. CAT. 72 TOTAL VOC
0956 S. CAT. 72 TOTAL COX
0957 S. CAT. 72 TSP FLAG
0958 S. CAT. 72 SOX FLAG
0959 S. CAT. 72 NOX FLAG
0960 S. CAT. 72 VOC FLAG

0961 S. CAT. 72 COX FLAG
0962 YEAR OF RECORD 72
0963 COMMENTS 72
0964 S. CAT. 73 TOTAL TSP
0965 S. CAT. 73 TOTAL SOX
0966 S. CAT. 73 TOTAL NOX
0967 S. CAT. 73 TOTAL VOC
0968 S. CAT. 73 TOTAL COX
0969 S. CAT. 73 TSP FLAG
0970 S. CAT. 73 SOX FLAG
0971 S. CAT. 73 NOX FLAG
0972 S. CAT. 73 VOC FLAG
0973 S. CAT. 73 COX FLAG
0974 YEAR OF RECORD 73
0975 COMMENTS 73
0976 S. CAT. 74 TOTAL TSP
0977 S. CAT. 74 TOTAL SOX
0978 S. CAT. 74 TOTAL NOX
0979 S. CAT. 74 TOTAL VOC
0980 S. CAT. 74 TOTAL COX
0981 S. CAT. 74 TSP FLAG
0982 S. CAT. 74 SOX FLAG
0983 S. CAT. 74 NOX FLAG
0984 S. CAT. 74 VOC FLAG
0985 S. CAT. 74 COX FLAG
0986 YEAR OF RECORD 74
0987 COMMENTS 74
0988 S. CAT. 75 TOTAL TSP
0989 S. CAT. 75 TOTAL SOX
0990 S. CAT. 75 TOTAL NOX
0991 S. CAT. 75 TOTAL VOC
0992 S. CAT. 75 TOTAL COX
0993 S. CAT. 75 TSP FLAG
0994 S. CAT. 75 SOX FLAG
0995 S. CAT. 75 NOX FLAG
0996 S. CAT. 75 VOC FLAG
0997 S. CAT. 75 COX FLAG
0998 YEAR OF RECORD 75
0999 COMMENTS 75
1000 S. CAT. 76 TOTAL TSP
1001 S. CAT. 76 TOTAL SOX
1002 S. CAT. 76 TOTAL NOX
1003 S. CAT. 76 TOTAL VOC
1004 S. CAT. 76 TOTAL COX
1005 S. CAT. 76 TSP FLAG
1006 S. CAT. 76 SOX FLAG
1007 S. CAT. 76 NOX FLAG
1008 S. CAT. 76 VOC FLAG
1009 S. CAT. 76 COX FLAG
1010 YEAR OF RECORD 76
1011 COMMENTS 76
1012 S. CAT. 77 TOTAL TSP
1013 S. CAT. 77 TOTAL SOX
1014 S. CAT. 77 TOTAL NOX
1015 S. CAT. 77 TOTAL VOC
1016 S. CAT. 77 TOTAL COX
1017 S. CAT. 77 TSP FLAG
1018 S. CAT. 77 SOX FLAG
1019 S. CAT. 77 NOX FLAG
1020 S. CAT. 77 VOC FLAG

1021 S. CAT. 77 COX FLAG
1022 YEAR OF RECORD 77
1023 COMMENTS 77
1024 S. CAT. 78 TOTAL TSP
1025 S. CAT. 78 TOTAL SOX
1026 S. CAT. 78 TOTAL NOX
1027 S. CAT. 78 TOTAL VOC
1028 S. CAT. 78 TOTAL COX
1029 S. CAT. 78 TSP FLAG
1030 S. CAT. 78 SOX FLAG
1031 S. CAT. 78 NOX FLAG
1032 S. CAT. 78 VOC FLAG
1033 S. CAT. 78 COX FLAG
1034 YEAR OF RECORD 78
1035 COMMENTS 78
1036 S. CAT. 79 TOTAL TSP
1037 S. CAT. 79 TOTAL SOX
1038 S. CAT. 79 TOTAL NOX
1039 S. CAT. 79 TOTAL VOC
1040 S. CAT. 79 TOTAL COX
1041 S. CAT. 79 TSP FLAG
1042 S. CAT. 79 SOX FLAG
1043 S. CAT. 79 NOX FLAG
1044 S. CAT. 79 VOC FLAG
1045 S. CAT. 79 COX FLAG
1046 YEAR OF RECORD 79
1047 COMMENTS 79
1048 S. CAT. 80 TOTAL TSP
1049 S. CAT. 80 TOTAL SOX
1050 S. CAT. 80 TOTAL NOX
1051 S. CAT. 80 TOTAL VOC
1052 S. CAT. 80 TOTAL COX
1053 S. CAT. 80 TSP FLAG
1054 S. CAT. 80 SOX FLAG
1055 S. CAT. 80 NOX FLAG
1056 S. CAT. 80 VOC FLAG
1057 S. CAT. 80 COX FLAG
1058 YEAR OF RECORD 80
1059 COMMENTS 80
1060 S. CAT. 81 TOTAL TSP
1061 S. CAT. 81 TOTAL SOX
1062 S. CAT. 81 TOTAL NOX
1063 S. CAT. 81 TOTAL VOC
1064 S. CAT. 81 TOTAL COX
1065 S. CAT. 81 TSP FLAG
1066 S. CAT. 81 SOX FLAG
1067 S. CAT. 81 NOX FLAG
1068 S. CAT. 81 VOC FLAG
1069 S. CAT. 81 COX FLAG
1070 YEAR OF RECORD 81
1071 COMMENTS 81
1072 S. CAT. 82 TOTAL TSP
1073 S. CAT. 82 TOTAL SOX
1074 S. CAT. 82 TOTAL NOX
1075 S. CAT. 82 TOTAL VOC
1076 S. CAT. 82 TOTAL COX
1077 S. CAT. 82 TSP FLAG
1078 S. CAT. 82 SOX FLAG
1079 S. CAT. 82 NOX FLAG
1080 S. CAT. 82 VOC FLAG

1081 S. CAT. 82 COX FLAG
1082 YEAR OF RECORD 82
1083 COMMENTS 82
1084 S. CAT. 83 TOTAL TSP
1085 S. CAT. 83 TOTAL SOX
1086 S. CAT. 83 TOTAL NOX
1087 S. CAT. 83 TOTAL VOC
1088 S. CAT. 83 TOTAL COX
1089 S. CAT. 83 TSP FLAG
1090 S. CAT. 83 SOX FLAG
1091 S. CAT. 83 NOX FLAG
1092 S. CAT. 83 VOC FLAG
1093 S. CAT. 83 COX FLAG
1094 YEAR OF RECORD 83
1095 COMMENTS 83
1096 S. CAT. 84 TOTAL TSP
1097 S. CAT. 84 TOTAL SOX
1098 S. CAT. 84 TOTAL NOX
1099 S. CAT. 84 TOTAL VOC
1100 S. CAT. 84 TOTAL COX
1101 S. CAT. 84 TSP FLAG
1102 S. CAT. 84 SOX FLAG
1103 S. CAT. 84 NOX FLAG
1104 S. CAT. 84 VOC FLAG
1105 S. CAT. 84 COX FLAG
1106 YEAR OF RECORD 84
1107 COMMENTS 84
1108 TOT CNTY EMISS-PART
1109 TOT CNTY EMISS-SOX
1110 TOT CNTY EMISS-NOX
1111 TOT CNTY EMISS-VOC
1112 TOT CNTY EMISS-CO

1. Q - DO YOU WISH TO SEE FIELD CODE DESCRIPTION TABLE?
   A - Y (Display tables)
   A - N (Do not display table)
2. Q - ENTER SELECTION ELEMENT
   A - (Example) 1 EQ Ø1 or Ø5
   A - HELP (Display description of valid selection element entry)
   A - FIELD-CD (Display field code and field description table)

The previously entered selection element is edited for valid field code, qualifier, field value, and connector. Also not more than six field values can be entered for a single field code. If any of these edits is failed, the appropriate error message is displayed and the user is allowed to reenter the selection element. A maximum of 99 valid selection elements may be entered for any run.

3. Q - MORE ELEMENTS IN CURRENT SELECTION?
   A - Y
   A - N
   A - DISPLAY (All elements of current selection are displayed)

If the answer is no, the elements within the current selection entry will be examined to determine if state code has been specified as part of the selection criteria. If not, a message is displayed to the user and he is given the opportunity to add one or more fields to his selection criteria.

4. Q - ARE THERE MORE SELECTION ENTRIES?
   A - Y
   A - N
   A - DISPLAY (All selection entries are displayed)

If the answer is yes, again the table is checked for maximum number of entries as described previously. If the answer is no, the user has indicated that all selection criteria has been entered and record selection can begin.

As the file is read, each element within the current selection is compared to the file data to determine if the record meets the selection criteria. If the record meets the selection criteria as specified by all of the elements within the selection criteria, the record is written to the Select Area Source User File.

This procedure continues until all applicable file records are compared to the specified selection entries for possible selection.

A count is kept of the number of records selected and written to the Selected Area Source User File and which selection criteria entry(s) caused this record to be extracted from the Area Source User File. At this point in processing, all Selected User File records have been written, and the user is presented with a list of possible options which are now open to him.

These options are:

1. Return to NTS Master (will not catalog file)
2. Redo selection parameters.
3. Review formatted count report.
4. Go to Batch Initiation (catalog selected file)
5. Go to Area Source Reporting processing.
6. Catalog Selected Area Source File and return to NEDS Quick Look Master.

The user must enter the number which corresponds to his choice of processing options. This entry is edited for possible invalid entry. If the choice is invalid, the user is notified and can reenter his choice. A list of the valid selections and the corresponding program logic is shown as follows:

1. Transfer control back to the NTS Master Program - both the selection criteria and selected file records are not retained.

2. Blank out the selection criteria entries, delete all selected file records and return to selection criteria entry procedure.

3. Display the Formatted Count Report and then allow user to enter another option number.

4. Batch initiation is not a valid option for area source data reporting at present, since no area source report programs are currently available in The Quick Look remote batch construction subprogram. If option 4 is selected a message will be printed indicating that this option is not currently available and the user will be allowed to select another option.

5. The Selected Area Source File is sorted by State, county and AQCR and retained in an index-sequential file. Control is transferred to the Area Source Reporting Processing.

6. The Selected Area Source User File is catalogued as an index sequential file in the same sequence with the same file keys as the complete Area Source User File. This file name will be unique based on time/day which has been added to the cataloged file name. If this file had already been catalogued or after the file is now catalogued, control is transferred back to NEDS Quick Look Master Program.

   If prior to entering the above options, it is determined that no records have been selected, the user is given the opportunity to do one or more of the following:

   1. Return to NTS Master.
   2. Redo selection parameters.
   3. Review formatted count report.

   Based on user response to the above three options or the previously mentioned six options, the user has caused program control to be transferred to the next processing phase.

AREA SOURCE REPORT PROCESSING

Selection of option 5 above will transfer control to the area source report processing function. The user may develop a free formatted one-line report for each selected record in the same manner as described for point source report processing. Upon completion of report processing any of the following options may be selected:

1. Return to NTS master (will not catalog selected file)
2. Redo selection paramters.
3. Review Formatted Count Report.
4. Go to Batch Initiation (Catalog Selected File)
5. Review Free Formatted Select Report.
6. Catalog Selected Area Source File and return to NEDS Quick Look Master.

Based on one of the above options being selected, program control has been successfully transferred in order to accommodate the next user request.

INITIATION OF BATCH RUNS

The Quick Look system includes the capability to initate batch runs of several standard NEDS report programs. The runs may be based on files of selected records produced earlier in Quick Look processing, thus allowing the generation of a standard format NEDS report based on the more flexible selection criteria available with Quick Look.

At present standard NEDS reports available through Quick Look batch initiation are:

- Full Point Source Listing (NE215)
- Condensed Point Source Listing (NE2Ø7)
- Plant Name Report (NE252)
- Missing Data Items Report (NE2ØØ)
- Emission by SCC Report (NE257)

Users may also take advantage of Quick Look selection capabilities for other NEDS reports not available through batch initiation, by cataloging files of selected point and area source records and modifying runstreams for normal batch submittals to assign the specially selected point and/ or area source files instead of the full NEDS-USER (point source) or NEDS-USER-AR. (area source).

Upon selection of option 4 under Quick Look point source data selection, control is transferred to the NEDS remote batch construction subprogram. (Since no area source reports are currently available in the remote batch construction subprogram, selection of option 4 in Quick Look area source data selection is not a valid option at present). This program will construct the necessary run card and control cards to submit a batch run for any of the available batch programs. Upon entering this subprogram, the user will first be asked if he needs a list of valid commands. The question will appear as:

```
IF YOU NEED A LISTING OF THE VALID COMMANDS, ENTER YES.
OTHERWISE ENTER NO.
YES OR NO?
```

If the user has indicated in the master program that instructions are required, the description of the procedure will be omitted and the command list query abbreviated as follows:

```
COMMAND LIST------YES OR NO?
```

If the user reply is YES, i.e. a command list is needed, the following list and description of commands will be displayed:

VALID COMMANDS ARE:

REPORT=??,??,...??

-REPORTS WANTED. ?? REPRESENTS THE REPORT CODE. ONE TO SIX CODES, WITHOUT DUPLICATION & IN ANY ORDER, MAY BE ENTERED. VALID REPORT CODES ARE:

- MD = MISSING DATA ITEMS REPORT
- DP = CONDENSED POINT SOURCE LISTING
- FP = FULL POINT SOURCE LISTING
- PN = PLANT NAME LIST
- SS = SCC SUMMARY REPORT

SORT=??,??,...??

-SORT SEQUENCE. A MAXIMUM OF TWENTY SORT OPTIONS ARE AVAILABLE. ORDER OF ENTRY IS HIERARCHICAL BROAD TO SPECIFIC. DEFAULT SORT SEQUENCE IS STATE, COUNTY, PLANT NUMBER, POINT NUMBER, SCC. VALID SORT CODES ARE SHOWN BELOW:

01 = STATE
02 = COUNTY
03 = PLANT NUMBER
04 = POINT NUMBER
05 = SCC
06 = OWNERSHIP
07 = SIC
08 = ESTIMATION METHOD
09 = AQCR

10 = PLANT NAME
11 = POLLUTANT VALUE
12 = YEAR OF RECORD
13 = CONTROL EQUIPMENT
14 = CONTROL EFFICIENCY
15 = SULFUR CONTENT
16 = ASH CONTENT
17 = CITY
18 = UTM COORDINATES
19 = OPERATING RATE
20 = CONFIDENTIALITY

POLL=? - POLLUTANT CODE. A NUMBER SPECIFYING ONE OF FIVE POLLUTANTS TO BE SELECTED. (NO VALUE SPECIFIED MEANS "SELECT ALL") VALID POLLUTANT CODES ARE:

1 = PARTICULATE
2 = SULFUR DIOXIDE
3 = NITROGEN OXIDE
4 = VOLATILE ORGANIC COMPOUNDS
5 = CARBON MONOXIDE

CONF=... - CONFIDENTIALITY CODE. IF INCORRECTLY ENTERED OR OMITTED, ONLY NON-CONFIDENTIAL DATA WILL BE REPORTED.

SIG=? - THE NUMBER OF SIGNIFICANT DIGITS TO BE USED FOR REPORTED DATA. (NO VALUE SPECIFIED = 3)

UNITS=? - THE DIGIT 1 IF METRIC UNITS ARE DESIRED FOR REPORTED DATA. (STANDARD IS ENGLISH)

HELP - WILL PRINT THIS LIST OF VALID COMMANDS.

END - ENDS COMMAND ENTRIES. ALL DESIRED COMMAND DATA HAS BEEN ENTERED.

THE ENTIRE COMMAND CAN BE ENTERED OR THE COMMAND CAN BE ABBREVIATED TO THE FIRST TWO LETTERS OF THE COMMAND. FOR EXAMPLE, UNITS=1 & UN=1 BOTH INDICATE METRIC UNITS ARE DESIRED.

As soon as this list is printed (or immediately if no list is requested) the user will be asked to indicate the reports to be created.

"REPORT" COMMAND

Up to six report types can be requested via the REPORT command. The codes indicating these reports (see above list of valid commands) can be entered in any order but no duplicate codes in any one REPORT command are allowed. At least one report must be requested and the REPORT command must be given at least once before the END command, or remote batch construction will terminate. The report code(s) will be validated and an error message printed if errors are detected.

CONTROL CARD COMMANDS

The commands "SORT", "CONF", "SIG", and "UNITS" are used to construct the standard NEDS control card. All of these commands are optional inasmuch as all have default values (see above list of valid commands). The control card commands will be validated and an error message printed if errors are detected.

"SELECT" CARD

One select card filled, with asterisks, will be written automatically by the subprogram. This will cause all records from the catalogued selected file to be used by the report program(s).

The HELP command may be entered in response to any COMMAND? prompt. This will cause the list of valid commands to be printed followed once again by the COMMAND? prompt.

Only when the user is certain he has entered all appropriate report codes and control data should the END command be given. The command data is then fixed until the runs are submitted. When the END command is given the subprogram will ascertain whether or not valid report codes have been entered. If these entries have not been made, program control will be transferred to the beginning of Batch Initiation processing, where the user can either return to the NTS Master Program or reenter all commands for batch report generation. If this necessary command data has been entered, all command data as specified or implied by the user will be displayed for final verification as in the following example:

REPORTS SPECIFIED:

PLANT NAME LIST

FULL POINT SOURCE LISTING

CONTROL CARD DATA:

SORT SEQUENCE = Ø1, Ø2, Ø3, Ø4, Ø5

SIGNIFICANT DIG = 5

METRIC UNITS

The user will then be asked, "COMMAND DATA CORRECT? (YES OR NO)".

If NO is entered, program control will be transferred to the beginning of Batch Initiation processing, where the user can either return to the NTS Master Program or reenter all commands for batch report generation. If YES is entered, the variable information for each report type specified will be requested.

VARIABLE ENTRIES

Some report programs require a program control card and other user entries in order to specify various options. Upon user request, a description of the control card options will be printed if the specified report is one of these. The user must then enter this control information as the subprogram may request.

In order to interactively construct remote batch runs, certain RUN card information is required. This required information includes priority, options, run identifier, account number, project code, and run time. The account number and project code will be automatically retrieved from the RUN card with which

the user originally signed onto the terminal. Account number and project code therefore cannot be altered except by signing on anew. Similarly the RESTART option (R), core size, tapes and disks will be automatically assigned by the subprogram. The remainder of the required RUN card information (run identifier, run time, and priority) as well as certain SYM card information (terminal id and number of copies requested) which may vary for each run will be requested within the subprogram.

The run identifier is a maximum of six characters long. The first two characters are the NCC assigned bin number and the last four are any characters the user wishes to assign to uniquely identify his run. It is possible to have runs with the same identifiers but it is not recommended since tracing runs becomes much more difficult. If the run identifier is not entered, the run identifier from the run card the user signed on the terminal with will be used. The run id will be entered following the instruction "ENTER YOUR RUN ID (MAX. 6 CHAR.)" and the prompt "RUN TIME?".

The run time is a maximum of three digits long, and must be entered (there is no "default" time). The user must estimate the SUP time in minutes which will be required to complete his request. The run time will be entered following the instruction "ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR." and prompt "RUN TIME?".

If the run time is invalid, the message "***INVALID RUN TIME***REENTER" will be displayed and the user must reenter the run time.

NCC has set up a system of priority codes which classify runs and enable the system to operate more efficiently. These codes change from time to time and therefore are not listed here.

A valid priority of one alphabetic character must be entered by the user. The priority will be entered following the instruction "ENTER RUN PRIORITY CODE" and the prompt "PRIORITY?". If a valid priority code is not entered the message "***INVALID PRIORITY. REENTER.***" will be displayed and the user must reenter priority.

The user must specify the terminal identifier - a location to which all of the remote batch output will be routed. This location can be a low-speed, medium-speed or high-speed terminal. Terminal id is a maximum of six characters long. If no terminal id is entered or the user enters PR the output is routed to the central UNIVAC 1110 site. Terminal id will be entered after the message "ENTER IDENTIFICATION NUMBER FOR THE TERMINAL TO WHICH THE PRINT SHOULD BE ROUTED" and prompt "TERMINAL ID?".

The user may specify the number of copies of the output he desires for each run. A maximum of sixty-three copies may be requested. If no number is entered one copy only will be produced. The number of copies will be entered after the message "ENTER NUMBER OF COPIES OF OUTPUT DESIRED" and the prompt "COPIES?".

If number of copies is not within the acceptable range the message "***INVALID NO. COPIES***REENTER" will be displayed and the user must reenter another number.

As each of these five entries is made, the subprogram will display them to the user. Upon completion of all entries, the subprogram will print a summary of run card and sym card information and the user can elect to accept or change this information. If accepted, the user will then be asked to submit or cancel the remote batch run.

As each of the five RUN card and SYM card entries are made, the subprogram will display them to the user. Upon completion of all variable entries, the subprogram will print a summary of run card and sym card information and the user can elect to accept or change this information. If accepted, the user will then be asked to submit or cancel the remote batch run.

After each selected batch run has been submitted or cancelled, RUN card/SYM card and program control information (if any) will be requested for the next report selected until all specified reports have been submitted or disapproved (cancelled) by the user.

After all the reports specified have been submitted or cancelled the runs will be initiated and scheduled for processing in sequence. The user will be asked:

DO YOU WANT TO CONSTRUCT ANY MORE NEDS REMOTE BATCH RUNS IN THIS FUNCTION? (YES OR NO). If YES is entered the subprogram will return to the beginning and entirely new runs may then be constructed as before. If NO is entered control will be returned to the NTS master program.

The batch runs will be run in the sequence of request by the user. Prior to starting any of the batch jobs the user will be asked if he wishes to delete the selected catalogued file(s). If he responds yes, the last run after successful completion of all other runs, will delete the selected catalogued file(s).

An example of a batch initiation run is given later in this section.

NTS EXAMPLE RUNS

Example 1: NEDS Remote Batch Function, Runs for Missing Data Items Report, Condensed and Full Point Source Listings are submitted.

```
@NE206
NEDS TERMINAL SYSTEM (V.1)  DATE: 08/25/82      TIME: 16:04:41

ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
NO

FUNCTION ?
NB

NEDS REMOTE BATCH FUNCTION

THIS FUNCTION IS AN INTERACTIVE NEDS FUNCTION WHICH INITIATES NEDS
REMOTE BATCH JOBS.

IF YOU NEED A LISTING OF THE VALID COMMANDS, ENTER YES.  OTHERWISE
ENTER NO.
YES OR NO?
YES

VALID COMMANDS ARE :
REPORT=??,??,...??    - REPORTS WANTED.  ?? REPRESENTS THE REPORT CODE.
                        ONE TO SIX CODES, WITHOUT DUPLICATION & IN ANY
                        ORDER, MAY BE ENTERED.  VALID REPORT CODES ARE:
                          MD = MISSING DATA ITEMS REPORT
                          CP = CONDENSED POINT SOURCE LISTING
                          FP = FULL POINT SOURCE LISTING
                          PN = PLANT NAME LIST
                          PE = POTENTIAL  EMISSIONS REPORT
                          SS = SCC SUMMARY REPORT

POLL=?                - POLLUTANT CODE.  A NUMBER SPECIFYING ONE OF FIVE
                        POLLUTANTS TO BE SELECTED.  (NO VALUE SPECIFIED
                        MEANS 'SELECT ALL') VALID POLLUTANT CODES ARE:
                          1 = PARTICULATE
                          2 = SULFUR DIOXIDE
                          3 = NITROGEN OXIDE
                          4 = VOLATILE ORGANIC COMPOUNDS
                          5 = CARBON MONOXIDE
```

MIN=??????

- MINIMUM VALUE. A SIX DIGIT NUMBER SPECIFYING A MINIMUM VALUE TO BE SELECTED OF THE ABOVE POLLUTANT. (IF NO VALUE SPECIFIED, ZERO IS ASSUMED) NUMBER MUST BE RIGHT JUSTIFIED.

SORT=???,???,...???

- SORT SEQUENCE. A MAXIMUM OF TWENTY SORT OPTIONS ARE AVAILABLE. ORDER OF ENTRY IS HIERARCHICAL BROAD TO SPECIFIC. DEFAULT SORT SEQUENCE IS STATE,COUNTY,PLANT NUMBER,POINT NUMBER,SCC. VALID SORT CODES ARE 01-89. THESE FIELD CODES MUST BE ENTERED WITH AN A OR D (ASCENDING OR DESCENDING) FOLLOWED BY THE FIELD CODE 01-89 AND SEPARATED BY A COMMA. FOR EXAMPLE, A SORT ON AQCR (06) ASCENDING AND PARTICULATE CALCULATED EMISSIONS (85) DESCENDING IS SPECIFIED:

  SORT=A06,D85

CONF=...

- CONFIDENTIALITY CODE. IF INCORRECTLY ENTERED OR OMITTED, ONLY NON-CONFIDENTIAL DATA WILL BE REPORTED.

SIG=?

- THE NUMBER OF SIGNIFICANT DIGITS TO BE USED FOR REPORTED DATA. (NO VALUE SPECIFIED = 3)

UNITS=?

- THE DIGIT 1 IF METRIC UNITS ARE DESIRED FOR REPORTED DATA. (STANDARD IS ENGLISH)

SELECT

- SIGNIFIES THAT CARD IMAGE DATA FOR THE STANDARD NEDS SELECT CARD(S) WILL NOW BE ENTERED. FIELDS NOT APPLYING MUST BE ASTERISK FILLED. SELECT CARD DATA MUST BE ENTERED IN THE FOLLOWING ORDER:

```
STATE CODE - 2 CHARACTERS.
COUNTY CODE - 4 CHARACTERS.
PLANT CODE - 4 CHARACTERS.
POINT CODE - 2 CHARACTERS.
SCC - 8 CHARS.  SOURCE CLASSIFICATION CODE CON-
      SISTS OF 4 SUBFIELDS ANY ONE OF WHICH MAY
      BE SPECIFIED OR ASTERISK-FILLED.
      (SEE 'GUIDE FOR COMPILING A COMPREHENSIVE
      EMISSION INVENTORY' EPA PUB. APTD-1135)
OWNERSHIP   - 1 CHARACTER:
                P = PRIVATE
                L = LOCAL GOVERNMENT
                S = STATE GOVERNMENT
                F = FEDERAL GOVERNMENT
                U = UTILITY
SIC - 4 CHARS. STANDARD INDUSTRIAL CLASSIFICATION
      CODE. (SEE 'STANDARD INDUSTRIAL CLASSIFICA-
      TION MANUAL' OFFICE OF MANPOWER & BUDGET)
EST. METHOD - 1 CHARACTER. ESTIMATION METHOD:
                0 = NOT APPLICABLE
                1 = STACK TESTS OR OTHER
                    EMISSIONS MEASUREMENT
                2 = MATERIAL BALANCE
                3 = CALCULATED USING EMISSIONS
                4 = GUESS
                5 = EMISSION FACTOR USED TO
                    CALCULATE DIFFERS FROM
                    OFFICIAL EPA FACTOR
                6 = NEW FACILITY, NOT OPERATIONAL
                7 = CLOSED FACILITY
AQCR - 3 CHARS. AIR QUALITY CONTROL REGION.
       (SEE 'GUIDE FOR COMPILING A COMPREHENSIVE
       EMISSION INVENTORY' EPA PUB. APTD-1135)

HELP        - WILL PRINT THIS LIST OF VALID COMMANDS

END         - ENDS COMMAND ENTRIES. ALL DESIRED COMMAND DATA
              HAS BEEN ENTERED.
```

THE ENTIRE COMMAND CAN BE ENTERED OR THE COMMAND CAN BE ABBREVIATED TO THE FIRST TWO LETTERS OF THE COMMAND. FOR EXAMPLE, UNITS=1 & UN=1 BOTH INDICATE METRIC UNITS ARE DESIRED.

```
IF YOU WISH TO USE A PREVIOUSLY WRITTEN NEDS-SUBFILE AS INPUT
FOR YOUR SPECIFIED REPORTS ENTER YES.  OTHERWISE ENTER NO.
YES OR NO?
NO

ENTER THE TAPE REEL NUMBER(S) WHICH
WILL CONTAIN THE NEDS-SUBFILE......
(MAXIMUM = 6, SEPARATED BY SLASHES)
007784

REEL NUMBER(S) = 007784
START ENTERING COMMANDS

COMMAND?
RE=MD,CP,FP

REPORT IS: MD,CP,FP

COMMAND?
POLL=1

POLLUTANT = 1
COMMAND?
MIN=100

*** INVALID MINIMUM VALUE -COMMAND IGNORED
COMMAND?
MIN=000100

MINIMUM VALUE = 000100
COMMAND?
SIG=2

SIGNIFICANT DIG = 2
COMMAND?
SELECT
```

```
ENTER 29 CHARACTER SELECT CARD IMAGE,X,OR TERM.

            PP
 SSCCCCPPPPTTSSSSSSSSOSSSSEAAA,X,OR TERM?
040240**********************

SELECT CARD IS: 040240**********************

 SSCCCCPPPPTTSSSSSSSSOSSSSEAAA,X,OR TERM?
TERM

COMMAND?
END


REPORT(S) SPECIFIED:
MISSING DATA ITEMS REPORT
CONDENSED POINT SOURCE LISTING
FULL POINT SOURCE LISTING

CONTROL CARD DATA:
SORT SEQUENCE IS:
*** NO SORT CODES SPECIFIED-- DEFAULT SORT SEQUENCE USED ***
   ASCENDING  STATE CODE
   ASCENDING  COUNTY CODE
   ASCENDING  PLANT CODE
   ASCENDING  POINT CODE
   ASCENDING  SOURCE CLASSIFICATION CODE
POLLUTANT = PARTICULATE
MINIMUM VALUE = 000100
SIGNIFICANT DIGITS = 2

SELECT CARDS ENTERED:

ST CNTY PLNT PT ....SCC.... O SIC  E AQCR
01 0240 **** ** * ** *** ** * **** * ***
```

```
COMMAND DATA CORRECT? YES OR NO?
YES

MISSING DATA ITEMS REPORT

DO YOU NEED A LIST OF SUMMARIZATION CODES? (YES OR NO?)
YES

VALID SUMMARIZATION CODES ARE: 1 = NATIONAL
                               2 = STATE
                               3 = COUNTY (STATE/COUNTY)
                               4 = AQCR (NOT VALID FOR MDI REPORT)
                               5 = STATE/AQCR
                               6 =  PLANT (STATE/COUNTY/PLANT)
                               7 = POINT (STATE/COUNTY/PLANT/POINT

ENTER SUMMARIZATION TYPE CODE (1 CHAR.)
TYPE?
3

SUMMARY TYPE = 3
CORRECT (YES OR NO?)
YES

ENTER YOUR RUNID (MAX. 6 CHAR.)
RUNID?

03NEDS

RUNID = 03NEDS
```

```
ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR.
RUN TIME?

10

RUN TIME = 10

ENTER YOUR RUN PRIORITY CODE (1 CHAR.)
PRIORITY?

D

PRIORITY = D

ENTER UID (5 TO 8 CHAR.)
UID?

NEDSP

UID = NEDSP

ENTER IDENTIFICATION NUMBER FOR THE TERMINAL
TO WHICH THE PRINT SHOULD BE ROUTED.
TERMINAL ID?

PR

TERMINAL ID = PR

ENTER NUMBER OF COPIES OF OUTPUT DESIRED (1-63)
COPIES?

1

NO. COPIES = 01

THE VARIABLE INFORMATION FOR THE MISSING DATA ITEMS REPORT
AS SPECIFIED IS:

RUN CARD = RUNID: 03NEDS        PRIORITY: D        ACCT: 45044NERP
           PROJ:  NERP          UID:  NEDSP        RUN TIME:    10
```

```
TERMINAL ID = PR
NO. COPIES  = 01

DO YOU WANT TO CHANGE THE RUN CARD/PRINT INFO?
( YES OR NO )

NO

DO YOU WANT TO SUBMIT THE RUN AS SPECIFIED?
( YES OR NO )

YES

CONDENSED POINT SOURCE LISTING

ENTER YOUR RUNID (MAX. 6 CHAR.)
RUNID?

03NED1

RUNID = 03NED1

ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR.
RUN TIME?

3

RUN TIME = 3

ENTER YOUR RUN PRIORITY CODE (1 CHAR.)
PRIORITY?

D

PRIORITY = D

ENTER UID (5 TO 8 CHAR.)
UID?

NEDSP

UID = NEDSP

ENTER IDENTIFICATION NUMBER FOR THE TERMINAL
TO WHICH THE PRINT SHOULD BE ROUTED.
TERMINAL ID?
```

```
[PR]

TERMINAL ID = PR

ENTER NUMBER OF COPIES OF OUTPUT DESIRED (1-63)
COPIES?

[1]

NO. COPIES = 01

THE VARIABLE INFORMATION FOR THE CONDENSED POINT SOURCE LISTING
AS SPECIFIED IS:

RUN CARD = RUNID: 03NED1        PRIORITY: D        ACCT: 45044NERP
           PROJ:  NERP          UID:  NEDSP        RUN TIME:   3

TERMINAL ID = PR
NO. COPIES  = 01

DO YOU WANT TO CHANGE THE RUN CARD/PRINT INFO?
( YES OR NO )

[NO]

DO YOU WANT TO SUBMIT THE RUN AS SPECIFIED?
( YES OR NO )

[YES]

FULL POINT SOURCE LISTING

ENTER YOUR RUNID (MAX. 6 CHAR.)
RUNID?

[03NED2]

RUNID = 03NED2

ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR.
RUN TIME?
```

```
10

RUN TIME = 10

ENTER YOUR RUN PRIORITY CODE (1 CHAR.)
PRIORITY?

D

PRIORITY = D

ENTER UID (5 TO 8 CHAR.)
UID?

NEDSP

UID = NEDSP

ENTER IDENTIFICATION NUMBER FOR THE TERMINAL
TO WHICH THE PRINT SHOULD BE ROUTED.
TERMINAL ID?

PR

TERMINAL ID = PR

ENTER NUMBER OF COPIES OF OUTPUT DESIRED (1-63)
COPIES?

1

NO. COPIES = 01

THE VARIABLE INFORMATION FOR THE FULL POINT SOURCE LISTING
AS SPECIFIED IS:

RUN CARD = RUNID: 03NED2        PRIORITY: D        ACCT: 45044NERP
           PROJ:  NERP          UID:  NEDSP        RUN TIME:   10

TERMINAL ID = PR
NO. COPIES  = 01
```

```
DO YOU WANT TO CHANGE THE RUN CARD/PRINT INFO?
( YES OR NO )

NO

DO YOU WANT TO SUBMIT THE RUN AS SPECIFIED?
( YES OR NO )

YES

DO YOU WANT TO SUBMIT ANY MORE BATCH RUNS?

*TM*03NEDS,ACT=45044NERP    ,PROJ=NERP          ACCEPTED,CAT=3
NO

ENTER NEXT FUNCTION YOU WISH TO ACCESS
FUNCTION ?
END


END SESSION
```

Example 2: NEDS Emission Summary Listing. Run for a county summary report is submitted.

```
@NE206
NEDS TERMINAL SYSTEM (V.1)  DATE: 08/25/82      TIME: 13:06:53

ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
NO

FUNCTION ?
ES


NEDS EMISSION SUMMARY LISTING

COMMAND LIST---YES OR NO?

YES

VALID COMMANDS ARE:
'REPORT=?' - REPORT WANTED.  ?   REPRESENTS THE NUMBER OF THE
             REPORT WANTED. THE NUMBERS & CORRESPONDING REPORTS ARE:
              1 - STATE SUMMARY REPORT
              2 - COUNTY SUMMARY REPORT
              3 - STATE BY COUNTY SUMMARY REPORT
              4 - EPA REGION SUMMARY REPORT
              5 - AQCR SUMMARY REPORT
              6 - NATIONAL SUMMARY REPORT
'END'        - SIGNALS END OF REQUEST SPECIFICATIONS
THE ENTIRE COMMAND CAN BE ENTERED OR THE COMMAND CAN BE ABBREVIATED
TO THE FIRST TWO LETTERS OF THE COMMAND. FOR EXAMPLE, REPORT=1 &
RE=1 BOTH INDICATE A STATE REPORT IS DESIRED.
START ENTERING COMMANDS
```

```
COMMAND?

RE=2

ENTER 6 CHARACTER STATE/COUNTY CODE,X,OR END

SC,X,OR END?

010240

STATE/COUNTY=010240

SC,X,OR END?

010260

STATE/COUNTY=010260

SC,X,OR END?

END

CONTROL INFORMATION AS SPECIFIED IS:
REPORT TYPE=02

CONTROL CARDS ENTERED-

ST CNTY AQCR REGION

01 0240 999  99

01 0260 999  99

DO YOU WANT TO SUBMIT THE CONTROL INFORMATION
AS SPECIFIED  ( YES OR NO )

YES
```

```
ENTER YOUR RUNID (MAX. 6 CHAR.)
RUNID?

[03NED3]

RUNID = 03NED3

ENTER YOUR RUN TIME (MINUTES) MAX. 3 CHAR.
RUN TIME?

[3]

RUN TIME = 3

ENTER YOUR RUN PRIORITY CODE (1 CHAR.)
PRIORITY?

[D]

PRIORITY = D

ENTER UID (5 TO 8 CHAR.)
UID?

[NEDSP]

UID = NEDSP

ENTER IDENTIFICATION NUMBER FOR THE TERMINAL
TO WHICH THE PRINT SHOULD BE ROUTED.
TERMINAL ID?

[PR]

TERMINAL ID = PR

ENTER NUMBER OF COPIES OF OUTPUT DESIRED (1-63)
COPIES?

[1]

NO. COPIES = 01

RUN CARD & PRINT INFORMATION AS SPECIFIED IS:
```

```
RUN CARD = RUNID: 03NED3        PRIORITY: D        ACCT: 45044NERP
           PROJ:  NERP          UID:  NEDSP        RUN TIME:   3

TERMINAL ID = PR
NO. COPIES  = 04

DO YOU WANT TO CHANGE THE RUN CARD/PRINT INFO?
( YES OR NO )

NO

DO YOU WANT TO SUBMIT THE RUN AS SPECIFIED?
( YES OR NO )

YES

*TM*03NED3,ACT=45044NERP    ,PROJ=NERP          ACCEPTED,CAT=3

JOB WILL BE SUBMITTED UPON SUCCESSFUL COMPLETION OF THIS PROCEDURE

PLEASE CHOOSE NEXT FUNCTION YOU WISH TO ACCESS.
FUNCTION ?
END


END SESSION
```

Example 3: NEDS Quick Look. Point source data are selected, the File selection criteria list is reviewed, a one-line data selection report is generated and a file of selected user records is cataloged.

```
@NE206
NEDS TERMINAL SYSTEM (V.1)  DATE: 08/25/82        TIME: 13:15:04

ARE YOU USING A CRT TERMINAL? ( YES OR NO )
YES
DO YOU WISH FOR INSTRUCTIONS? ( YES OR NO )
NO

FUNCTION ?
NI
  NEDS QUICK LOOK

DO YOU NEED SYSTEM USE INFORMATION ?
  (Y OR N)
N
SELECT POINT SOURCE, AREA SOURCE  OR RETURN TO NTS MASTER
  ( PS, AS, OR NTS )
PS

DO YOU WISH TO SEE FIELD CODE DESCRIPTION TABLE?
  (Y OR N)
Y
01  STATE
02  COUNTY CODE
03  PLANT IDENTIFICATION NUMBER
04  POINT IDENTIFICATION NUMBER
05  SOURCE CLASSIFICATION NUMBER
06  AQCR NUMBER
07  YEAR PLANT INFO LAST UPDATED (CARD 1)
08  CITY CODE
09  UTM ZONE
10  ESTABLISHMENT NAME AND ADDRESS
11  PERSONAL CONTACT
```

12 OWNERSHIP CODE
13 YEAR POINT INFO LAST UPDATED (CARD 2)
14 STANDARD INDUSTRIAL CLASSIFICATION CODE
15 IPP PROCESS CODE
16 HORIZONTAL UTM COORDINATE (KM)
17 VERTICAL UTM COORDINATE (KM)
18 STACK HEIGHT (FT)
19 STACK DIAMETER (FT)
20 STACK TEMPERATURE (DEG F)
21 FLOW RATE (FT 3/MIN)
22 PLUME HEIGHT
23 FIRST POINT WITH COMMON STACK CODE
24 LAST POINT WITH COMMON STACK CODE
25 YEAR CONTROL INFO LAST UPDATED (CARD 3)
26 BOILER DESIGN CAPACITY (10 6 BTU/HR)
27 PRIMARY CONTROL EQUIPMENT PARTICULATES
28 SECONDARY CONTROL EQUIPMENT PARTICULATES
29 PRIMARY CONTROL EQUIPMENT SO2
30 SECONDARY CONTROL EQUIPMENT SO2
31 PRIMARY CONTROL EQUIPMENT NOX
32 SECONDARY CONTROL EQUIPMENT NOX
33 PRIMARY CONTROL EQUIPMENT VOC
34 SECONDARY CONTROL EQUIPMENT VOC
35 PRIMARY CONTROL EQUIPMENT CO
36 SECONDARY CONTROL EQUIPMENT CO
37 EST CONTROL EFFICIENCY PARTICULATE (%)
38 EST CONTROL EFFICIENCY SO2 (%)
39 EST CONTROL EFFICIENCY NOX (%)
40 EST CONTROL EFFICIENCY VOC (%)
41 EST CONTROL EFFICIENCY CO (%)
42 YEAR PRODUCTION INFO LAST UPDATED(CARD4)
43 % ANNUAL THRU PUT (DEC-FEB)
44 % ANNUAL THRU PUT (MAR-MAY)
45 % ANNUAL THRU PUT (JUN-AUG)
46 % ANNUAL THRU PUT (SEP-NOV)

47 NORMAL OPERATING HOURS PER DAY
48 NORMAL OPERATING DAYS PER WEEK
49 NORMAL OPERATING WEEKS PER YEAR
50 EST EMISSIONS PARTICULATES (TONS/YEAR)
51 EST EMISSIONS SO2 (TONS/YEAR)
52 EST EMISSIONS NOX (TONS/YEAR)
53 EST EMISSIONS VOC (TONS/YEAR)
54 EST EMISSIONS CO (TONS/YEAR)
55 ESTIMATION METHOD PARTICULATE
56 ESTIMATION METHOD SO
57 ESTIMATION METHOD NO
58 ESTIMATION METHOD VOC
59 ESTIMATION METHOD CO
60 % SPACE HEAT
61 YEAR REGULATORY INFO LAST UPDATED(CARD5)
62 ALLOWABLE EMISSIONS PARTICULATE(TONS/YR)
63 ALLOWABLE EMISSIONS SO (TONS/YR)
64 ALLOWABLE EMISSIONS NO (TONS/YR)
65 ALLOWABLE EMISSIONS VOC (TONS/YR)
66 ALLOWABLE EMISSIONS CO (TONS/YR)
67 COMPLIANCE STATUS
68 COMPLIANCE SCHEDULE - YEAR
69 COMPLIANCE SCHEDULE - MONTH
70 COMPLIANCE STATUS UPDATE - YEAR
71 COMPLIANCE STATUS UPDATE - MONTH
72 COMPLIANCE STATUS UPDATE - DAY
73 EMERGENCY CONTROL ACT PROGRAM STATUS
74 CONTROL REGULATION NUMBER 1
75 CONTROL REGULATION NUMBER 2
76 CONTROL REGULATION NUMBER 3
77 YEAR EMISSIONS INFO LAST UPDATED(CARD6)
78 FUEL,PROCESS,SOLID WASTE OPERATING RATE
79 MAXIMUM DESIGN RATE
80 % SULFUR CONTENT
81 %ASH CONTENT
82 HEAT CONTENT (10 L BTU)

```
83  SOURCE CODE
84  CONFIDENTIALITY OF DATA
85  PARTICULATE EMISSIONS (TONS/YEAR)
86  SO2 EMISSIONS (TONS/YEAR)
87  NOX EMISSIONS (TONS/YEAR)
88  VOC EMISSIONS (TONS/YEAR)
89  CO EMISSIONS (TONS/YEAR)
ENTER SELECTION ELEMENT
  (  OR HELP OR FIELD-CD OR END OR NONE  )
01 EQ 01
MORE ELEMENTS IN CURRENT SELECTION ?
 ( Y OR N OR DISPLAY )
Y
ENTER SELECTION ELEMENT
  (  OR HELP OR FIELD-CD OR END OR NONE  )
HELP
A VALID SELECTION ELEMENT ENTRY CONSISTS OF A FIELD CODE,
QUALIFIER, FIELD VALUE, AND CONNECTOR (CONNECTOR OPTIONAL).
-- FIELD CODE IS THE NUMBER CORRESPONDING TO THE REQUIRED
   POINT SOURCE FIELD  ( 01 THRU 89 ).
-- QUALIFIER IS USED TO SHOW THE RELATIONSHIP BETWEEN THE
   FIELD VALUE AND THE FILE DATA TO BE EXTRACTED
   ( LT  GT  EQ  ALL  )
-- FIELD VALUE (S) IS THE ACTUAL VALUE(S) USED IN RECORD
   SELECTION--CAN BE UP TO SIX VALUES ON EXPLICIT SELECTION
-- CONNECTOR IS USED TO CONNECT TWO SETS OF QUALIFIER AND
   FIELD VALUE IN ORDER TO CREATE A VALUE RANGE AND TO
   STRING MULTIPLE EXPLICIT VALUES. (AND OR)
EXAMPLES
       01  EQ  15
       01  EQ  15 OR 16 OR 17
       01  GT  15 AND LT 21
       01  LT  05
       01  GT  48
       25  ALL
ENTER SELECTION ELEMENT
  (  OR HELP OR FIELD-CD OR END OR NONE  )
02 EQ 0240
```

```
MORE ELEMENTS IN CURRENT SELECTION ?
 [ Y OR N OR DISPLAY ]
DISPLAY

 ELEMENTS OF CURRENT SELECTION
 ELEMENT NUMBER  001
01 EQ 01
 ELEMENT NUMBER  002
02 EQ 0240

MORE ELEMENTS IN CURRENT SELECTION ?
 [ Y OR N OR DISPLAY ]
Y
ENTER SELECTION ELEMENT
  [  OR HELP OR FIELD-CD OR END OR NONE  ]
03 GT 0010
MORE ELEMENTS IN CURRENT SELECTION ?
 [ Y OR N OR DISPLAY ]
N
ARE THERE MORE SELECTION ENTRIES ?
 [ Y OR N OR DISPLAY ]
Y
ENTER SELECTION ELEMENT
  [  OR HELP OR FIELD-CD OR END OR NONE  ]
01 EQ 01
MORE ELEMENTS IN CURRENT SELECTION ?
 [ Y OR N OR DISPLAY ]
Y
ENTER SELECTION ELEMENT
  [  OR HELP OR FIELD-CD OR END OR NONE  ]
02 EQ 0240
MORE ELEMENTS IN CURRENT SELECTION ?
 [ Y OR N OR DISPLAY ]
Y
ENTER SELECTION ELEMENT
  [  OR HELP OR FIELD-CD OR END OR NONE  ]
03 LT 0010
MORE ELEMENTS IN CURRENT SELECTION ?
 [ Y OR N OR DISPLAY ]
N
ARE THERE MORE SELECTION ENTRIES ?
 [ Y OR N OR DISPLAY ]
DISPLAY
```

```
      F I L E   S E L E C T I O N   C R I T E R I A   L I S T
                                                 *    NUMBER OF      *
    * * * *   SELECTION CRITERIA   * * * *       *  RECORDS SELECTED  *

     SELECTION NUMBER 004                                 000000
  ELEMENTS
01 EQ 01
02 EQ 0240
03 GT 0010

     SELECTION NUMBER 002                                 000000
  ELEMENTS
01 EQ 01
02 EQ 0240
03 LT 0010


ARE THERE MORE SELECTION ENTRIES ?
 [ Y OR N OR DISPLAY ]
[N]
PROCESSING FILE SELECTION
SELECT FROM THE FOLLOWING OPTIONS

1. TERMINATE RUN (RETURN TO NE206)
2. REDO SELECTION PARAMETERS
3. REVIEW FILE SELECTION CRITERIA LIST
4. BATCH INITIATION PROCESSING
5. CREATE DATA SELECTION REPORT
6. CATALOG SELECTED USER FILE RECORDS

 ENTER NUMBER OF OPTION SELECTED
[3]
```

```
      F I L E   S E L E C T I O N   C R I T E R I A   L I S T

                                                  *     NUMBER OF      *
    * * * *   SELECTION CRITERIA   * * * *        *  RECORDS SELECTED  *

     SELECTION NUMBER 001                                 000001
  ELEMENTS
01 EQ 01
02 EQ 0240
03 GT 0010

     SELECTION NUMBER 002                                 000026
  ELEMENTS
01 EQ 01
02 EQ 0240
03 LT 0010


SELECT FROM THE FOLLOWING OPTIONS

1. TERMINATE RUN (RETURN TO NE206)
2. REDO SELECTION PARAMETERS
3. REVIEW FILE SELECTION CRITERIA LIST
4. BATCH INITIATION PROCESSING
5. CREATE DATA SELECTION REPORT
6. CATALOG SELECTED USER FILE RECORDS

 ENTER NUMBER OF OPTION SELECTED


5

DO YOU WISH TO REVIEW REPORT INTERACTIVELY?
NUMBER OF REPORT LINES = 000027
  (Y OR N)
Y
ENTER FIELD CODE OF FIELDS TO BE PRINTED (SEPARATE WITH COMMAS)
01,02,03,04,05,10
DO YOU WISH TO SORT REPORT OUTPUT?
SEQUENCE IS CURRENTLY - STATE, COUNTY, PLANT, POINT, SCC
  (Y OR N)
N
```

N E D S U S E R P O I N T F I L E

D A T A S E L E C T I O N R E P O R T

DATE: 08/25/82 PAGE:

ST	CNTY	PLANT	PT	SCC	NAME-ADDRESS
01	0240	0001	01	30700104	UNION CAMP CORP BOX
01	0240	0001	01	30700199	UNION CAMP CORP BOX
01	0240	0001	02	30700105	UNION CAMP CORP BOX
01	0240	0001	02	30700199	UNION CAMP CORP BOX
01	0240	0001	03	30700106	UNION CAMP CORP BOX
01	0240	0001	03	30700199	UNION CAMP CORP BOX
01	0240	0001	04	30700103	UNION CAMP CORP BOX
01	0240	0001	04	30700199	UNION CAMP CORP BOX
01	0240	0001	05	30700107	UNION CAMP CORP BOX
01	0240	0001	05	30700199	UNION CAMP CORP BOX
01	0240	0001	06	10200601	UNION CAMP CORP BOX
01	0240	0001	06	10200902	UNION CAMP CORP BOX
01	0240	0001	07	10200501	UNION CAMP CORP BOX
01	0240	0001	07	10200601	UNION CAMP CORP BOX
01	0240	0001	96	30700199	UNION CAMP CORP BOX
01	0240	0001	97	30700199	UNION CAMP CORP BOX
01	0240	0001	98	30700199	UNION CAMP CORP BOX
01	0240	0001	99	30700199	UNION CAMP CORP BOX
01	0240	0002	01	30111103	MOLDED INDUSTRIAL FR
01	0240	0003	01	30299999	RING AROUND PRODTS R
01	0240	0003	02	30299998	RING AROUND PRODTS R
01	0240	0003	02	30299999	RING AROUND PRODTS R
01	0240	0003	96	30299999	RING AROUND PRODTS R
01	0240	0003	97	30299999	RING AROUND PRODTS R
01	0240	0003	98	30299998	RING AROUND PRODTS R
01	0240	0003	98	30299999	RING AROUND PRODTS R
01	0240	6001	01	30501199	PRATTVILLE READY MIX

```
DO YOU WISH TO CREATE ANOTHER REPORT ?
  (Y OR N)
N
SELECT FROM THE FOLLOWING OPTIONS

1. TERMINATE RUN (RETURN TO NE206)
2. REDO SELECTION PARAMETERS
3. REVIEW FILE SELECTION CRITERIA LIST
4. BATCH INITIATION PROCESSING
5. CREATE DATA SELECTION REPORT
6. CATALOG SELECTED USER FILE RECORDS

 ENTER NUMBER OF  OPTION SELECTED
2

DO YOU WISH TO SEE FIELD CODE DESCRIPTION TABLE?
  (Y OR N)
N
ENTER SELECTION ELEMENT
  (  OR HELP OR FIELD-CD OR END OR NONE  )
01 EQ 01
MORE ELEMENTS IN CURRENT SELECTION ?
 ( Y OR N OR DISPLAY )
Y
ENTER SELECTION ELEMENT
  (  OR HELP OR FIELD-CD OR END OR NONE  )
05 EQ 101002**
MORE ELEMENTS IN CURRENT SELECTION ?
 ( Y OR N OR DISPLAY )
Y
ENTER SELECTION ELEMENT
  (  OR HELP OR FIELD-CD OR END OR NONE  )
NONE
MORE ELEMENTS IN CURRENT SELECTION ?
 ( Y OR N OR DISPLAY )
N
```

```
ARE THERE MORE SELECTION ENTRIES ?
 [ Y OR N OR DISPLAY ]
N
PROCESSING FILE SELECTION
SELECT FROM THE FOLLOWING OPTIONS

1. TERMINATE RUN (RETURN TO NE206)
2. REDO SELECTION PARAMETERS
3. REVIEW FILE SELECTION CRITERIA LIST
4. BATCH INITIATION PROCESSING
5. CREATE DATA SELECTION REPORT
6. CATALOG SELECTED USER FILE RECORDS

 ENTER NUMBER OF OPTION SELECTED
6
PERMANENT FILE OF SELECTED RECORDS HAS BEEN CREATED
FILE NAME IS F00825162737
QUALIFIER IS  NERP
  NEDS QUICK LOOK

DO YOU NEED SYSTEM USE INFORMATION ?
  (Y OR N)
N
SELECT POINT SOURCE, AREA SOURCE  OR RETURN TO NTS MASTER
  [ PS, AS, OR NTS ]
NTS
END OF QUICK LOOK  - NI FUNCTION
FUNCTION ?
END


END SESSION
```

Routine publications are defined as publications of a more permanent nature than those usually associated with computer-based reporting. They are typically published at regular intervals, either quarterly or annually, and most are permanently bound, printed volumes. In some cases, they consist of updated, verified, and corrected emissions or air quality data reports; others are digests or summaries of edited raw data.

Although EPA publishes a large number of documents each year, in this section only those based on data from the NEDS, SAROAD, or other AEROS sub-systems are discussed. The preliminary reports are more informal in their organization, method of preparation, and type of binding; the final reports are prepared as permanent reference works. Some of the reports described in the following paragraphs are prepared by a computerized photo-typesetting process known as LINOTRON. Others are printed by a photo offset process directly from computer printout or typewriter copy.

Beginning in August 1981, most routine publications will be available only on microfiche. AEROS Manual reprints and AEROS Manual Updates will continue to be done in hard copy. Reference is made to page ii on guidelines of obtaining microfiche and publications. Any additional information, if needed, can be received by contacting:

AEROS Manual Project Officer (MD-14)
Requests and Information Section
National Air Data Branch
Environmental Protection Agency
Research Triangle Park, NC 27711

FTS: 629-5694
Commercial: (919) 541-5694

The emissions data publications are routine publications of emissions and fuel usage information. They are derived almost entirely from the NEDS data base. The publications included in this category are as follows:

National Emissions Report - a report of emissions of the criteria pollutants, broken down by emission category and by geographic region. (Available on Microfiche)

Fuel Usage Report - a report of fuel usage, broken down geographically and by fuel type and usage category. (Available on Microfiche)

GENERAL DESCRIPTION

This document, published annually by EPA, contains a NEDS emission summary report for each of the 55 "states" and each of the 247 Air Quality Control Regions (AQCR's) in the United States. The 1972 National Emissions Report (NER) was published in June 1974. The ordering of the tables of emissions that constitute the body of the document is as follows:

a. Summary for the United States.
b. Summary tables for each state in alphabetical order.
c. After each State Summary Table, the tables for each AQCR or portion of an (interstate) AQCR lying within that state are given in numerical order.
d. After the last individual state and its AQCR, the tables for all of the interstate AQCR's, each one in its entirety, appear in numerical order.

The individual tables are arranged according to the major categories of sources of emissions of the five pollutants for which national standards have been promulgated.* The five major source categories are:

a. Fuel Combustion
b. Industrial Processing
c. Solid Waste Disposal
d. Transportation
e. Miscellaneous

---

*A sixth substance, photochemical oxidants, is also considered to be a "criteria" pollutant because ambient air quality standards have been promulgated for it. Because it is a secondary or derived pollutant, however, no emissions standards exist as such.

The five "criteria" pollutants are:

a. Particulates
b. Sulfur Oxides
c. Nitrogen Oxides
d. Reactive Volatile Organic Compounds
e. Carbon Monoxide

The data in this document were compiled from source information of the National Emissions Data System (NEDS). Brief discussions of the NEDS basic elements used for the generation of the NER are included in the introduction to the document.

Sample Report

Figure 2.1.1.a gives examples of the national, state, and AQCR-wide summaries described above.

This is the second NEDS routine publication. It is published annually concurrently with the National Emissions Report (NER). The source document for this publication is the NEDS Annual Fuel Summary Report. See page 2.1.2-3 for an example of the format of the report. The NEDS Fuel Use Report presents data in the format of the NEDS Annual Fuel Summary Report for the nation and each of the 55 states and territories included in NEDS.

The Air Quality Data publications are routine publications of ambient air quality information. They are derived entirely from the SAROAD data base. The publications included in this category are:

Reports for Criteria Pollutants - Reports of air quality data, for quarter or full year. (Produced by LINOTRON).

Noncriteria Pollutants - These reports contain data for the metals and other components that are analyzed from the Hi-Vol filter. These reports are not published annually but contain several years of data beginning with 1957. The two current publications include data for years 1957-70 and 1971-75.

The third air quality publication that lists the air monitoring sites has been discontinued. This publication was produced in 1971-72 as "Directory of Air Monitoring Sites - 197x" where x = 1 or 2 and Directory of Air Quality Monitoring Sites Active in 197x" where x = 3 to 7. These publications will be available until the existing copies have been distributed.

General Description

These reports contain summary statistics for the criteria pollutants (particulate, carbon monoxide, sulfur dioxide, nitrogen dioxide, hydrocarbons, and ozone) summarized on a quarterly basis for each calendar quarter and annually for each calendar year. These reports are produced on a standard schedule based on the availability of the data from State agencies. The reports are produced by a computerized process that sets type called 'LINO-TRON'.

For each site and criteria pollutant that has been reported to SAROAD, the report contains the following information:

a. State name
b. AQCR number
c. Site location name (city or county)
d. Site number
e. Agency/Project codes
f. Number of observations
g. Minimum value reported
h. Percentiles (10, 30, 50, 70, 90, 95, 99)
i. Maximum value observed
j. Arithmetic mean
k. Arithmetic standard deviation
l. Geometric mean
m. Geometric standard deviation

The means and standard deviations are only printed for data that meet the summary criteria as defined in Section 2.3.0.

The Reports are organized according to the following hierarchy:

a. Pollutant type
b. Method of collection and analysis
c. Time interval
d. State
e. AQCR number
f. Site location
g. Site number
h. Agency type
i. Project classification type

The above describes the formats for the quarterly reports. The annual report contains two parts: (1) Part One - the format as described above and (2) Part Two - a format that contains some of the above information as well as additional data such as:

a. Number of violations of air quality standards
b. First and Second maximum values observed
c. Site address
d. County name in which the site is located.

Sample Reports

Figure 5.2.1.a is an example page from a quarterly report. Figure 5.2.1.b is an example page from Part I of an annual report and Figure 5.2.1.c is an example page from Part II.

PARTICULATE, micrograms per cubic meter (25 C)
HI-VOL GRAVIMETRIC, 24 hours

1977 Second Quarter

Site location	Site No.	Ag/ proj.	No. obs.	Min. obs.	Percentiles 10	30	50	70	90	95	99	Max. obs.	Arithmetic Mean	Arithmetic Std. dev.	Geometric Mean	Geometric Std. dev.
ALABAMA																
001 Clarke Co	001	F01	2	33.	33.	33.	33.	111.	111.	111.	111.	111.				
001 Demopolis	002	F01	9	44.	44.	51.	85.	106.	128.	128.	128.	128.	82.	32.50	75.62	1.52
001 Evergreen	001	F01	13	26.	26.	34.	40.	49.	56.	77.	77.	77.	43.	13.67	40.97	1.35
001 Selma	002	F01	7	43.	43.	68.	72.	77.	160.	160.	160.	160.	80.	38.46	73.43	1.52
002 Montgomery	007	F01	8	52.	52.	63.	80.	96.	111.	111.	111.	111.				
	008	F01	8	33.	33.	45.	57.	89.	123.	123.	123.	123.	68.	33.09	61.14	1.63
002 Opelika	001	F01	13	23.	38.	50.	58.	81.	102.	121.	121.	121.	65.	26.77	60.12	1.54
002 Phenix City	001	F01	11	33.	41.	45.	59.	99.	126.	137.	137.	137.	74.	37.47	66.02	1.67
002 Troy	002	F01	10	28.	28.	34.	48.	62.	71.	85.	85.	85.	52.	19.42	48.46	1.48
003 Alexander City	001	F01	7	31.	31.	38.	49.	51.	59.	59.	59.	59.	45.	10.05	44.29	1.26
003 Anniston	001	F01	13	52.	62.	63.	77.	104.	231.	1825.	1825.	1825.	224.	483.32	104.98	2.56
	002	F01	12	36.	39.	48.	69.	100.	104.	104.	104.	104.	72.	26.47	67.62	1.49
003 Childersburg	001	F01	12	37.	40.	41.	49.	63.	81.	105.	105.	105.	56.	20.69	53.43	1.39
003 Gadsden	002	F01	6	29.	29.	31.	38.	49.	144.	144.	144.	144.	56.	43.85	46.87	1.80
	003	F02	12	40.	51.	65.	103.	126.	148.	160.	160.	160.	99.	41.75	90.58	1.60
	004	F02	3	197.	197.	197.	225.	226.	226.	226.	226.	226.				
003 Sylacauga	001	F01	9	30.	30.	59.	68.	73.	92.	92.	92.	92.	65.	19.44	62.43	1.41
003 Talladega	001	F01	13	41.	52.	54.	78.	97.	116.	119.	119.	119.	78.	25.67	73.92	1.41
004 Bessemer	001	G01	73	37.	59.	80.	94.	129.	178.	191.	226.	226.	109.	45.71	100.18	1.52
004 Birmingham	005	G02	80	45.	77.	108.	136.	183.	317.	353.	441.	441.	169.	94.49	146.51	1.70
	010	G01	13	48.	57.	58.	85.	100.	123.	130.	130.	130.	84.	26.01	80.43	1.37
	011	G01	15	70.	77.	91.	113.	128.	245.	262.	262.	262.	128.	58.28	117.79	1.49
	012	G01	86	41.	62.	87.	98.	112.	145.	167.	200.	200.	103.	33.15	97.58	1.39
	019	G01	73	50.	89.	129.	156.	207.	278.	307.	341.	341.	171.	71.45	156.20	1.55
	020	G02	45	27.	47.	79.	95.	118.	178.	211.	285.	285.	107.	53.34	95.13	1.64
	021	G02	61	47.	55.	69.	85.	102.	135.	147.	238.	238.	91.	35.07	85.89	1.42
004 Center Point	002	G01	16	40.	48.	57.	62.	79.	87.	110.	110.	110.	68.	17.91	65.36	1.30
004 Clanton	002	F03	10	46.	46.	51.	66.	84.	105.	227.	227.	227.	83.	53.88	73.63	1.61
004 Fairfield	003	G02	72	43.	55.	72.	86.	110.	136.	150.	209.	209.	94.	32.43	88.85	1.41
004 Hueytown	002	G02	14	38.	43.	52.	58.	92.	101.	125.	125.	125.	70.	26.78	65.56	1.45
004 Irondale	002	G01	1	83.	83.	83.	83.	83.	83.	83.	83.	83.				
004 Jasper	001	F01	10	31.	31.	63.	100.	104.	150.	157.	157.	157.				
004 Leeds	003	G01	67	56.	105.	145.	166.	190.	255.	281.	356.	356.	173.	59.77	163.38	1.43
004 Oneonta	001	F01	9	41.	41.	64.	86.	92.	129.	129.	129.	129.	81.	30.29	75.25	1.49
004 Pell City	001	F01	3	53.	53.	53.	63.	73.	73.	73.	73.	73.				
004 Shelby Co	002	F01	6	37.	37.	48.	51.	55.	60.	60.	60.	60.				
004 Sumter Co	001	F01	2	119.	119.	119.	119.	300.	300.	300.	300.	300.				
004 Tarrant City	001	G01	60	45.	81.	119.	149.	175.	221.	238.	370.	370.	154.	58.86	142.76	1.50
004 Tuscaloosa	003	F01	6	45.	45.	79.	84.	130.	132.	132.	132.	132.	95.	33.13	89.31	1.49
005 Baldwin Co	002	F03	6	74.	74.	80.	87.	112.	130.	130.	130.	130.				
005 Brewton	001	F01	5	30.	30.	47.	91.	106.	132.	132.	132.	132.	81.	42.08	70.93	1.85
005 Chickasaw	002	G01	16	49.	55.	61.	69.	94.	103.	125.	125.	125.	78.	21.17	75.68	1.30
005 Mobile	001	G01	8	41.	41.	66.	75.	104.	142.	142.	142.	142.	89.	36.29	82.49	1.54
	002	G01	62	22.	34.	52.	61.	77.	95.	107.	141.	141.	65.	24.41	60.49	1.50
	006	G01	16	68.	74.	102.	114.	134.	182.	226.	226.	226.	127.	41.29	121.18	1.37
	008	G01	86	28.	45.	64.	93.	108.	139.	148.	350.	350.	92.	44.03	83.32	1.56
	009	G01	11	25.	35.	43.	48.	63.	84.	99.	99.	99.	56.	23.20	51.57	1.51
005 Mobile Co	013	G01	13	31.	37.	38.	53.	65.	67.	80.	80.	80.	51.	15.40	48.60	1.35
	021	G01	15	44.	45.	62.	73.	83.	102.	123.	123.	123.	74.	22.38	70.79	1.35
	024	G01	13	44.	54.	66.	80.	110.	117.	122.	122.	122.	86.	26.19	82.46	1.39
	025	G02	13	44.	47.	54.	63.	82.	89.	161.	161.	161.	73.	30.05	68.43	1.40
005 Mountain Brook	001	G03	16	29.	35.	42.	54.	63.	87.	122.	122.	122.	59.	23.58	54.90	1.45
006 Abbeville	001	F01	6	26.	26.	30.	31.	47.	57.	57.	57.	57.	38.	11.83	36.90	1.35
006 Andalusia	001	F01	6	42.	42.	44.	58.	69.	278.	278.	278.	278.	92.	91.84	70.36	2.01
006 Dothan	002	F01	11	32.	34.	86.	89.	111.	192.	206.	206.	206.	102.	54.71	88.34	1.79
006 Eufaula	001	F01	11	38.	43.	50.	65.	77.	100.	101.	101.	101.	66.	22.09	62.69	1.40
007 Athens	001	G01	15	38.	46.	53.	63.	104.	123.	131.	131.	131.	80.	32.69	73.51	1.52
	003	G01	15	54.	55.	60.	86.	105.	129.	224.	224.	224.	93.	43.11	86.31	1.48
007 Cullman	002	G01	13	48.	49.	72.	76.	94.	104.	121.	121.	121.	79.	21.57	76.48	1.32
007 Decatur	001	G01	64	31.	47.	70.	87.	110.	165.	188.	211.	211.	98.	44.23	88.75	1.57
	003	G01	13	45.	47.	59.	67.	103.	157.	159.	159.	159.	84.	39.47	77.25	1.53
	005	G01	15	53.	66.	70.	84.	121.	150.	179.	179.	179.	99.	37.41	93.26	1.44
	006	G02	15	41.	42.	69.	81.	110.	148.	188.	188.	188.	92.	41.67	83.66	1.56
007 Florence	003	F01	13	41.	42.	59.	74.	88.	106.	194.	194.	194.	80.	39.06	73.93	1.50
007 Guntersville	001	F01	9	48.	48.	59.	71.	76.	233.	233.	233.	233.	87.	57.51	77.01	1.62
007 Hartselle	001	G01	14	32.	39.	51.	60.	76.	113.	138.	138.	138.	72.	30.88	66.03	1.53
007 Huntsville	002	H01	15	40.	41.	60.	72.	89.	129.	137.	137.	137.	77.	29.31	72.06	1.45
	003	H01	16	40.	41.	57.	70.	98.	112.	128.	128.	128.	77.	26.89	71.98	1.45
	004	H01	15	40.	41.	48.	71.	80.	101.	106.	106.	106.	69.	24.15	64.82	1.43

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Figure 5.2.1.a Quarterly Report

PARTICULATE, micrograms per cubic meter (25 C)
HI-VOL GRAVIMETRIC, 24 hours

1976 Annual Report

Site location	Site No.	Ag/ proj.	No. obs.	Min. obs.	Percentiles 10	30	50	70	90	95	99	Max. obs.	Arithmetic Mean	Arithmetic Std. dev.	Geometric Mean	Geometric Std. dev.
ALABAMA																
001 Clarke Co	001	F01	36	8.	18.	22.	34.	44.	63.	85.	87.	87.	36.	18.93	31.57	1.69
001 Demopolis	002	F01	33	28.	34.	43.	68.	91.	134.	177.	220.	220.	78.	46.91	66.63	1.74
001 Evergreen	001	F01	33	11.	18.	25.	29.	44.	52.	61.	63.	63.				
001 Selma	002	F01	16	42.	46.	56.	64.	84.	117.	120.	120.	120.				
002 Montgomery	001	P01	27	21.	24.	30.	45.	55.	80.	80.	89.	89.	46.	19.29	41.97	1.54
	007	F01	45	25.	33.	38.	49.	70.	95.	109.	125.	125.	57.	24.86	51.88	1.51
002 Opelika	001	F01	41	10.	23.	33.	40.	48.	62.	69.	94.	94.	41.	17.38	37.82	1.56
002 Phenix City	001	F01	24	24.	27.	42.	46.	57.	76.	87.	98.	98.				
002 Troy	002	F01	54	12.	21.	30.	37.	48.	67.	75.	78.	78.	41.	16.79	37.18	1.56
003 Alexander City	001	F01	29	18.	20.	28.	39.	48.	59.	63.	68.	68.	38.	14.30	35.61	1.48
003 Anniston	001	F01	47	21.	28.	42.	53.	57.	80.	97.	110.	110.	53.	21.53	48.76	1.51
	002	F01	53	16.	21.	37.	43.	52.	79.	96.	192.	192.	49.	27.93	43.33	1.61
003 Childersburg	001	F01	55	12.	20.	34.	41.	53.	89.	98.	111.	111.	47.	23.61	41.67	1.67
003 Gadsden	001	P01	22	19.	37.	47.	59.	75.	96.	100.	112.	112.				
	002	F01	32	25.	29.	31.	38.	45.	63.	74.	80.	80.				
	003	F02	47	32.	48.	65.	86.	98.	143.	143.	171.	171.	88.	32.66	81.76	1.47
003 Sylacauga	001	F01	51	20.	28.	42.	57.	70.	88.	104.	114.	114.	58.	22.96	53.72	1.52
003 Talladega	001	F01	20	20.	31.	55.	59.	79.	130.	159.	160.	160.				
004 Bessemer	001	G01	294	18.	62.	89.	108.	135.	178.	197.	256.	458.	116.	48.93	106.75	1.52
004 Birmingham	003	G01	5	26.	26.	54.	74.	75.	94.	94.	94.	94.				
	003	P01	31	23.	36.	52.	60.	87.	114.	129.	137.	137.	70.	31.58	63.33	1.60
	005	G02	340	28.	64.	104.	141.	193.	280.	318.	430.	526.	161.	87.21	139.95	1.72
	010	G01	57	35.	44.	68.	82.	101.	120.	136.	161.	161.	85.	29.47	79.77	1.44
	011	G01	49	28.	39.	62.	87.	108.	139.	165.	341.	341.	95.	56.05	82.46	1.69
	012	G01	349	26.	52.	70.	88.	105.	145.	162.	199.	268.	93.	37.44	85.48	1.50
	019	G01	272	36.	85.	121.	157.	200.	284.	331.	396.	621.	173.	82.05	154.46	1.63
	020	G02	234	17.	36.	57.	75.	98.	159.	208.	281.	331.	88.	55.15	75.06	1.75
	021	G02	244	29.	46.	64.	77.	96.	125.	142.	162.	189.	82.	30.89	76.02	1.47
004 Center Point	002	G01	59	22.	28.	44.	55.	65.	82.	86.	110.	110.	56.	19.32	52.15	1.45
004 Clanton	002	F03	44	15.	20.	31.	37.	49.	67.	75.	82.	82.	41.	17.40	37.28	1.55
004 Fairfield	003	G02	340	21.	44.	61.	78.	98.	136.	148.	179.	200.	84.	34.96	76.66	1.54
004 Hueytown	002	G02	60	21.	29.	40.	51.	67.	79.	89.	97.	97.	54.	20.12	49.92	1.48
004 Irondale	002	G01	60	26.	39.	67.	82.	104.	146.	157.	191.	191.	89.	38.16	80.87	1.59
004 Jasper	001	F01	70	32.	48.	61.	79.	105.	141.	157.	264.	264.	90.	41.43	82.09	1.53
004 Leeds	003	G01	286	27.	74.	113.	145.	197.	294.	375.	571.	583.	170.	100.36	146.14	1.75
004 Oneonta	001	F01	33	22.	34.	47.	60.	69.	104.	130.	132.	132.				
004 Pell City	001	F01	35	25.	32.	41.	47.	54.	85.	109.	190.	190.	55.	30.16	50.04	1.51
004 Shelby Co	002	F01	28	23.	26.	41.	48.	68.	110.	111.	151.	151.				
004 Sumter Co	001	F01	34	15.	19.	23.	31.	34.	68.	79.	102.	102.				
004 Tarrant City	001	G01	295	23.	65.	95.	122.	163.	235.	277.	390.	446.	139.	72.99	121.87	1.69
004 Tuscaloosa	003	F01	34	20.	25.	38.	49.	69.	108.	178.	256.	256.				
005 Baldwin Co	002	F03	40	18.	39.	48.	61.	76.	85.	94.	99.	99.	63.	19.38	59.27	1.42
005 Brewton	001	F01	50	14.	22.	32.	43.	56.	70.	76.	80.	80.	45.	17.71	41.60	1.52
005 Chickasaw	002	G01	53	23.	35.	54.	68.	95.	112.	127.	167.	167.	74.	31.53	67.88	1.56
005 Mobile	001	G01	20	33.	33.	43.	67.	79.	96.	110.	130.	130.				
	001	P01	24	27.	30.	44.	49.	57.	78.	84.	97.	97.				
	002	G01	48	28.	33.	44.	57.	77.	103.	116.	169.	169.	65.	28.88	58.92	1.53
	006	G01	106	27.	51.	81.	107.	166.	232.	306.	407.	567.	135.	89.09	112.63	1.83
	008	G01	108	19.	48.	68.	92.	117.	146.	191.	213.	344.	97.	47.77	86.25	1.65
	009	G01	53	17.	21.	32.	38.	58.	75.	99.	116.	116.	46.	23.13	40.71	1.62
	011	G01	50	24.	39.	56.	68.	92.	133.	171.	251.	251.	84.	45.18	73.80	1.65
005 Mobile Co	013	G01	48	11.	25.	30.	40.	52.	97.	107.	169.	169.	48.	29.35	41.63	1.72
	021	G01	60	13.	28.	44.	64.	79.	110.	118.	148.	148.	65.	29.79	58.23	1.66
	024	G01	57	15.	36.	44.	51.	69.	107.	136.	241.	241.	64.	37.16	56.71	1.62
	025	G02	51	17.	25.	34.	46.	57.	82.	104.	156.	156.	53.	28.71	46.69	1.65
005 Mountain Brook	001	G03	57	21.	23.	35.	42.	48.	67.	72.	91.	91.	44.	15.69	40.99	1.43
005 Prichard	003	G01	57	31.	38.	63.	80.	109.	143.	173.	227.	227.	89.	41.94	80.64	1.59
005 Saraland	001	G01	45	21.	28.	35.	49.	63.	84.	93.	98.	98.				
006 Abbeville	001	F01	45	11.	15.	23.	28.	35.	49.	53.	62.	62.	30.	11.99	27.79	1.50
006 Andalusia	001	F01	24	16.	23.	33.	41.	47.	59.	71.	74.	74.				
006 Dothan	002	F01	42	10.	18.	36.	53.	66.	118.	118.	156.	156.	59.	34.44	49.46	1.88
006 Eufaula	001	F01	43	18.	27.	39.	45.	55.	72.	75.	88.	88.	47.	15.86	44.33	1.42
007 Athens	001	G01	55	12.	32.	47.	56.	76.	127.	139.	148.	148.	68.	34.16	59.82	1.67
	003	G01	53	13.	33.	42.	54.	68.	91.	102.	127.	127.	59.	24.43	53.77	1.56
007 Cullman	001	F01	12	28.	30.	65.	83.	100.	143.	150.	150.	150.				
	002	G01	54	26.	35.	48.	59.	83.	113.	138.	150.	150.	69.	31.48	62.80	1.56
007 Decatur	001	G01	243	25.	44.	64.	78.	94.	124.	142.	160.	224.	82.	31.69	76.12	1.49
	003	G01	53	12.	29.	43.	50.	67.	97.	117.	164.	164.	59.	29.26	52.52	1.63
	005	G01	67	24.	39.	52.	69.	101.	132.	137.	153.	153.	78.	35.87	69.89	1.61

Figure 5.2.1.b Yearly Reports

SUSPENDED PARTICULATE MATTER (UG/M3) ALABAMA 1976

METHOD : GRAVIMETRIC, 24-HOUR HI-VOLUME FILTER SAMPLE-91

SITE ID	LOCATION	AQCR	COUNTY	ADDRESS	#OBS	MAX 24-HR 1ST	MAX 24-HR 2ND	OBS> 260	OBS> 150	ARIT MEAN	GEOM MEAN
010020001F01	ABBEVILLE	006	HENRY CO	U S HIGHWAY 431	45	62	56			30	28
010060001F01	ALEXANDER CITY	003	TALLAPOOSA CO	ALEX CITY JR COL	29	68	63			38	36
010100001F01	ANDALUSIA	006	COVINGTON CO	300 WEST WATSON	24	74	71			42?	39?
010120001F01	ANNISTON	003	CALHOUN CO	309 E 8TH ST	47	110	100			53	49
010120002F01	ANNISTON	003	CALHOUN CO	BLUE MTN POSW OF	53	192	102		1	49	43
010160001601	ATHENS	007	LIMESTONE CO	ELM STREET	55	148	148			68	60
010160003601	ATHENS	007	LIMESTONE CO	HOBBS STREET	53	127	115			59	54
010260002F03	BALDWIN CO	005	BALDWIN CO	ROBERTSDALE	40	99	98			63	59
010340001601	BESSEMER	004	JEFFERSON CO	1800 FIRST AVE	294	458	348	2	52	116	107
010380003601	BIRMINGHAM	004	JEFFERSON CO	720 S 20TH SW	5	94	75			65?	59?
010380003P01	BIRMINGHAM	004	JEFFERSON CO	720 S 20TH ST	31	137	129			70	63
010380005602	BIRMINGHAM	004	JEFFERSON CO	2817 30TH AVE N	340	526	448	47	153	161	140
010380010601	BIRMINGHAM	004	JEFFERSON CO	2ND AVE & 52ND S	57	161	158		2	85	80
010380011601	BIRMINGHAM	004	JEFFERSON CO	14TH ST & PEARSO	49	341	270	2	3	95	82
010380012601	BIRMINGHAM	004	JEFFERSON CO	DOWNTOWN	349	268	232	1	30	93	85
010380019601	BIRMINGHAM	004	JEFFERSON CO	801 FINLEY AVE B	272	621	399	38	147	173	154
010380020602	BIRMINGHAM	004	JEFFERSON CO	SHERMAN HEIGHTS	234	331	323	5	27	88	75
010380021602	BIRMINGHAM	004	JEFFERSON CO	ENSLEY	244	189	173		7	82	76
010440001F01	BREWTON	005	ESCAMBIA CO	204 SEWELL STR	50	80	79			45	42
010570002601	CENTER POINT	004	JEFFERSON CO	942 HUFFMAN ROAD	59	110	101			56	52
010620002601	CHICKASAW	005	MOBILE CO	YOUNCE HARDWARE	53	167	153		2	74	68
010640001F01	CHILDERSBURG	003	TALLADEGA CO	NUNNELLY STATE T	55	111	102			47	42
010700002F03	CLANTON	004	CHILTON CO	1ST AVE & 5TH AV	44	82	78			41	37
010720001F01	CLARKE CO	001	CLARKE CO	CLARKE ST (GROVE	36	87	85			36	32
010920001F01	CULLMAN	007	CULLMAN CO	305 N 4TH AVE E	12	150	143			84?	74?
010920002601	CULLMAN	007	CULLMAN CO	ROOF OF CITY HAL	54	150	143			69	63
011040001601	DECATUR	007	MORGAN CO	FOURTH AVE & FRA	243	224	162		6	82	76
011040003601	DECATUR	007	MORGAN CO	HIGHWAY 20 WEST	53	164	130		1	59	53
011040005601	DECATUR	007	MORGAN CO	HIGHWAY 20 WEST	67	153	146		1	78	70
011040006D2	DECATUR	007	MORGAN CO	RIVERVIEW	74	232	178		6	93?	85?
011060002F01	DEMOPOLIS	001	MARENGO CO	S CEDAR ST	33	220	177		3	78	67
011080002F01	DOTHAN	006	HOUSTON CO	EAST HIGHLAND EL	42	156	133		1	59	49
011220001F01	EUFAULA	006	BARBOUR CO	HOLIDAY INN	43	88	78			47	44
011260001F01	EVERGREEN	001	CONECUH CO	CO HEALTH DEPT	33	63	61			35?	32?
011300003602	FAIRFIELD	004	JEFFERSON CO	5229 COURT B	340	200	185		15	84	77
011400003F01	FLORENCE	007	LAUDERDALE CO	610 W COLLEGE ST	59	179	175		4	78	70
011440001F01	FORT PAYNE	007	DE KALB CO	500 GRAND AVE	5	100	61			58?	55?
011480001P01	GADSDEN	003	ETOWAH CO	109 S 8TH ST	22	113	100			64?	59?
011480002F01	GADSDEN	003	ETOWAH CO	FIRE DEPT GOLDEN	32	80	74			42?	40?
011480003F02	GADSDEN	003	ETOWAH CO	WALNUT PARK FIRE	47	171	157		2	88	82
011680001F01	GUNTERSVILLE	007	MARSHALL CO	GUNTER AVENUE	33	144	83			53?	49?
011740001601	HARTSELLE	007	MORGAN CO	FROST STREET SW	58	101	92			45	41
011840002602	HUEYTOWN	004	JEFFERSON CO	1318 HUEYTOWN RO	60	97	94			54	50
011860001P01	HUNTSVILLE	007	MADISON CO	304 EUSTIS AVE	26	99	78			55?	52?
011860002H01	HUNTSVILLE	007	MADISON CO	5006 PULASKI PIK	60	94	79			45	43
011860003H01	HUNTSVILLE	007	MADISON CO	MADISON STREET	35	133	116			75?	71?
011860004H01	HUNTSVILLE	007	MADISON CO	11525 SO MEMORIA	60	128	95			52	49
011860006H01	HUNTSVILLE	007	MADISON CO	NOAA STATION (JE	60	107	101			44	41
011860007H01	HUNTSVILLE	007	MADISON CO	1201 BRIAR HOLLO	60	112	100			50	47

Figure 5.2.1.c

General Description

This publication, that is a complete directory of all site data for SAROAD monitoring sites in the United States, is published annually by NADB. The 1972 edition (EPA-450/2-73-006, September 1973) contains 800 pages, of which pages i-vi contain the title page, table of contents, etc.; pages 1-4 are the introduction including the two-page SAROAD Site Identification Form and the Agency Type and Project Classification Codes; and the remaining 790 pages constitute the body of the report. Future directories will include only sites active in year X, and the pollutants that were reported will also be given by site.

The sequencing of the site information is by State and location name, both in alphabetical order. Within a given location, the ordering is by Site Code Number and Agency Type Code. The arrangement of the information is as shown in paragraph 2.3.1.5, that contains the description of the SAROAD Site Description Inventory, except for some format differences as shown in the sample report.

Sample Report

Figure 5.2.2.a shows a sample page from the directory. The sequencing of the individual items may be seen in the data for Sites 020160001, in Fairbanks, Alaska. The ordering extends to the Agency Type Code and, in the case of the Fairbanks site, to the Project Classification Code.

Figure 5.2.2.b shows a sample page from the Directory of Air Quality Monitoring Sites Active in 1973. This figure shows the site descriptions and the list of pollutants reported for each site.

ALASKA

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LOCATION: ANCHORAGE                 COUNTY (0060): ANCHORAGE ED                          UTM ZONE: 6
SITECODE: 020040011101              SITE ADDR: 4647 LAKE OTIS PARKWAY                    UTM NORTHING: 4785768
AGENCY TYPE: DISTRICT               STATION TYPE (22): SUBURBAN - RESIDENTIAL            UTM EASTING: 347526
LATITUDE: 61 D. 10 M. 43 S. N       AQCR (008): COOK INLET                               ELEVATION ABOVE GROUND: 035 FT.
LONGITUDE: 149 D. 50 M. 08 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0140 FT.
SUPPORTING AGENCY: COOK INLET AIR RESOURCES MANAGEMENT DISTRICT
COMMENTS: THIS STATION IS NO LONGER IN OPERATION

LOCATION: ANCHORAGE                 COUNTY (0060): ANCHORAGE ED                          UTM ZONE: 6
SITECODE: 020040012101              SITE ADDR: CITY FIRE STATION 7TH & C STREET          UTM NORTHING: 6790141
AGENCY TYPE: DISTRICT               STATION TYPE (13): CENTER CITY - COMMERCIAL          UTM EASTING: 344608
LATITUDE: 61 D. 13 M. 00 S. N       AQCR (008): COOK INLET                               ELEVATION ABOVE GROUND: 014 FT.
LONGITUDE: 149 D. 53 M. 36 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0127 FT.
SUPPORTING AGENCY: COOK INLET AIR RESOURCES MANAGEMENT DISTRICT
COMMENTS:

LOCATION: ANCHORAGE DIVISION        COUNTY (0060): ANCHORAGE ED                          UTM ZONE: 6
SITECODE: 020040001101              SITE ADDR: FIRE STATION BOX 241 (EAGLE RIVER)        UTM NORTHING: 6801462
AGENCY TYPE: DISTRICT               STATION TYPE (12): CENTER CITY - RESIDENTIAL         UTM EASTING: 367168
LATITUDE: 61 D. 19 M. 50 S. N       AQCR (008): COOK INLET                               ELEVATION ABOVE GROUND: 017 FT.
LONGITUDE: 149 D. 33 M. 50 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0390 FT.
SUPPORTING AGENCY: COOK INLET AIR RESOURCES MANAGEMENT DISTRICT
COMMENTS:

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 6
SITECODE: 020160001A01              SITE ADDR: FAIRBANKS POST OFFICE 3RD + CUSHMAN       UTM NORTHING: 7189861
AGENCY TYPE: EPA/ATMOS. SURV.       STATION TYPE ( )                                     UTM EASTING: 465993
LATITUDE: 64 D. 50 M. 00 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 75 FT.
LONGITUDE: 147 D. 43 M. 00 S. W     DIFF. GMT:                                           ELEVATION ABOVE MSL: 515 FT.
SUPPORTING AGENCY: ARCTIC HEALTH RESEARCH LABORATORY
COMMENTS:

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 6
SITECODE: 020160001A50              SITE ADDR: FAIRBANKS POST OFFICE 3RD + CUSHMAN       UTM NORTHING: 7189861
AGENCY TYPE: EPA/ATMOS. SURV.       STATION TYPE ( )                                     UTM EASTING: 465993
LATITUDE: 64 D. 50 M. 00 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 75 FT.
LONGITUDE: 147 D. 43 M. 00 S. W     DIFF. GMT:                                           ELEVATION ABOVE MSL: 515 FT.
SUPPORTING AGENCY: ARCTIC HEALTH RESEARCH LABORATORY
COMMENTS:

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 06
SITECODE: 020160001G01              SITE ADDR: FAIRBANKS POST OFFICE BL 3RD & CUSHMAN    UTM NORTHING: 7191200
AGENCY TYPE: COUNTY                 STATION TYPE (14): CENTER CITY - MOBILE              UTM EASTING: 0046980O
LATITUDE: 64 D. 50 M. 44 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 006 FT.
LONGITUDE: 147 D. 43 M. 16 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0450 FT.
SUPPORTING AGENCY: FAIRBANKS NORTH STAR BOROUGH, DIV OF ENVIRONMENTAL SERVICES
COMMENTS: SITE ON SIDE OF TURNER ST WEST OF P O BUILDING NEAR 3RD AVE AND NEAR CENTER OF TOWN

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 06
SITECODE: 020160002G01              SITE ADDR: FEDERAL BLDG., 2ND & CUSHMAN, FAIRBANKS   UTM NORTHING: 7191200
AGENCY TYPE: COUNTY                 STATION TYPE (14): CENTER CITY - MOBILE              UTM EASTING: 00465800
LATITUDE: 64 D. 50 M. 44 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 010 FT.
LONGITUDE: 147 D. 43 M. 16 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0460 FT.
SUPPORTING AGENCY: FAIRBANKS NORTH STAR BOROUGH, DIV. OF ENVIRONMENTAL SERVICES
COMMENTS: SAMPLES TAKEN THRU TUBES TEN FEET ABOVE SIDEWALK ON EAST SIDE OF BUILDING NEAR MAIN STREETS OF TOWN. EQUIPMENT INC

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 06
SITECODE: 020160003G01              SITE ADDR: FEDERAL BLDG 2-3RD & CUSHMAN              UTM NORTHING: 7191200
AGENCY TYPE: COUNTY                 STATION TYPE (14): CENTER CITY - MOBILE              UTM EASTING: 00465800
LATITUDE: 64 D. 50 M. 44 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 074 FT.
LONGITUDE: 147 D. 43 M. 16 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0515 FT.
SUPPORTING AGENCY: FAIRBANKS NORTH STAR BOROUGH,DIV. OF ENVIRONMENTAL SERVICES
COMMENTS: SITE ON ROOF OF FAIRBANKS POST OFFICE BUILDING

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 06
SITECODE: 020160006G01              SITE ADDR: HUNTER SCHOOL 16TH 17TH & GILLAM WAY      UTM NORTHING: 7190000
AGENCY TYPE: COUNTY                 STATION TYPE (22): SUBURBAN - RESIDENTIAL            UTM EASTING: 00465500
LATITUDE: 64 D. 50 M. 5 S. N        AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 016 FT.
LONGITUDE: 147 D. 43 M. 53 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0450 FT.
SUPPORTING AGENCY: FAIRBANKS NORTH STAR BOROUGH, DIV. OF ENVIRONMENTAL SERVICES
COMMENTS: SITE ON ROOF OF SCHOOL'S SOUTH WEST WING

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 06
SITECODE: 020160008G01              SITE ADDR: UNIV PARK SCHOOL UNIV AVE                 UTM NORTHING: 7192200
AGENCY TYPE: COUNTY                 STATION TYPE (22): SUBURBAN - RESIDENTIAL            UTM EASTING: 00461300
LATITUDE: 64 D. 51 M. 14 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 015 FT.
LONGITUDE: 147 D. 48 M. 50 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0450 FT.
SUPPORTING AGENCY: FAIRBANKS NORTH STAR BOROUGH DIV. OF ENVIRONMENTAL SERVICES
COMMENTS: SITE ON ROOF OF MODULAR UNITS WEST OF SCHOOL

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 06
SITECODE: 020160009G01              SITE ADDR: JOY SCHOOL LEMETA STREET                  UTM NORTHING: 7193100
AGENCY TYPE: COUNTY                 STATION TYPE (22): SUBURBAN - RESIDENTIAL            UTM EASTING: 00465600
LATITUDE: 64 D. 51 M. 45 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 015 FT.
LONGITUDE: 147 D. 43 M. 33 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0450 FT.
SUPPORTING AGENCY: FAIRBANKS NORTH STAR BOROUGH,DIV. OF ENVIRONMENTAL SERVICES
COMMENTS: SITE ON ROOF OF MODULAR UNITS SOUTH WEST OF SCHOOL.

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 06
SITECODE: 020160010P01              SITE ADDR: 604 BARNETTE ST                           UTM NORTHING: 7190700
AGENCY TYPE: STATE                  STATION TYPE (13): CENTER CITY - COMMERCIAL          UTM EASTING: 00469700
LATITUDE: 64 D. 50 M. 27 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 052 FT.
LONGITUDE: 147 D. 43 M. 23 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0490 FT.
SUPPORTING AGENCY: ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
COMMENTS: STATE BUILDING ROOF

LOCATION: FAIRBANKS                 COUNTY (0180): FAIRBANKS ED                          UTM ZONE: 06
SITECODE: 020160011G01              SITE ADDR: WOOLWORTH'S 3RD & CUSHMAN                 UTM NORTHING: 7191200
AGENCY TYPE: COUNTY                 STATION TYPE (14): CENTER CITY - MOBILE              UTM EASTING: 00465800
LATITUDE: 64 D. 50 M. 44 S. N       AQCR (009): NORTHERN ALASKA                          ELEVATION ABOVE GROUND: 010 FT.
LONGITUDE: 147 D. 43 M. 16 S. W     DIFF. GMT: WEST 10 HOURS                             ELEVATION ABOVE MSL: 0460 FT.
SUPPORTING AGENCY: FAIRBANKS NORTH STAR BOROUGH, DIV. OF ENVIRONMENT SERVICES
COMMENTS: SITE IS LOCATED AT THE CENTER OF THE FIRST STORY ROOF OF WOOLWORTHSTORE JUST SOUTH OF THE FBKS. POST OFFICE. NEAR A

21
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Figure 5.2.2.a

ALABAMA

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SITE CODE: 010020001F01                    LATITUDE(D,M,S): 31 33 15 N          EPA REGION: 04          UTM ZONE: 16
SITE ADDRESS: U S HIGHWAY 431              LONGITUDE(D,M,S): 86 16 19 W      ELEV ABOVE GROUND: 0016   UTM NORTHING: 3492150
CITY OR AREA: ABBEVILLE                      CITY POPULATION:      2,096        ELEV ABOVE MSL: 0391    UTM EASTING: 0066580
COUNTY(FIPS): HENRY CO                       AQCR POPULATION:    234,149     TIME ZONE(PFF GMT): WEST 06 HOURS
STATION TYPE: RURAL - COMMERCIAL                  AQCR(006): SOUTHEAST ALABAMA
AGENCY TYPE: STATE                                SMSA(000): 0 NOT IN A STANDARD METROPOLITAN STATIST
SUPP. AGENCY: ALABAMA AIR POLLUTION CONTROL COMMISSION
ATOP HENRY CO HOSPITAL

    PARTICULATE                    HI-VOL  GRAVIMETRIC                          24-HOUR   UG/CU METER (25 C)      46 ORS

SITE CODE: 010060001F01                    LATITUDE(D,M,S): 32 55 48 N          EPA REGION: 04          UTM ZONE: 16
SITE ADDRESS: ALEX CITY JR COLLEGE         LONGITUDE(D,M,S): 85 56 28 W      ELEV ABOVE GROUND: 0016   UTM NORTHING: 3603800
CITY OR AREA: ALEXANDER CITY                 CITY POPULATION:     12,358        ELEV ABOVE MSL: 0491    UTM EASTING: 0065900
COUNTY(FIPS): TALLAPOOSA CO                  AQCR POPULATION:    400,993     TIME ZONE(PFF GMT): WEST 06 HOURS
STATION TYPE: SUBURBAN - RESIDENTIAL              AQCR(005): EAST ALABAMA
AGENCY TYPE: STATE                                SMSA(000): 0 NOT IN A STANDARD METROPOLITAN STATIST
SUPP. AGENCY: ALABAMA AIR POLLUTION CONTROL COMMISSION
ATOP SCIENCE BLDG ALEX CITY JR COLLEGE

    PARTICULATE                    HI-VOL  GRAVIMETRIC                          24-HOUR   UG/CU METER (25 C)      29 ORS

SITE CODE: 010100001F01                    LATITUDE(D,M,S): 31 18 20 N          EPA REGION: 04          UTM ZONE: 16
SITE ADDRESS: 300 WEST WATSON ST           LONGITUDE(D,M,S): 86 29 19 W      ELEV ABOVE GROUND: 0011   UTM NORTHING: 3463420
CITY OR AREA: ANDALUSIA                      CITY POPULATION:     10,079        ELEV ABOVE MSL: 0298    UTM EASTING: 0048653
COUNTY(FIPS): COVINGTON CO                   AQCR POPULATION:    234,149     TIME ZONE(PFF GMT): WEST 06 HOURS
STATION TYPE: SUBURBAN - RESIDENTIAL              AQCR(006): SOUTHEAST ALABAMA
AGENCY TYPE: STATE                                SMSA(000): 0 NOT IN A STANDARD METROPOLITAN STATIST
SUPP. AGENCY: ALABAMA STATE HEALTH DEPT DIV OF AIR POLLUTION CONTROL

    PARTICULATE                    HI-VOL  GRAVIMETRIC                          24-HOUR   UG/CU METER (25 C)      24 ORS

SITE CODE: 010120001F01                    LATITUDE(D,M,S): 33 39 23 N          EPA REGION: 04          UTM ZONE: 16
SITE ADDRESS: 909 E 8TH ST                 LONGITUDE(D,M,S): 85 49 28 W      ELEV ABOVE GROUND: 0030   UTM NORTHING: 3729412
CITY OR AREA: ANNISTON                       CITY POPULATION:     31,833        ELEV ABOVE MSL: 0778    UTM EASTING: 0068088
COUNTY(FIPS): CALHOUN CO                     AQCR POPULATION:    400,993     TIME ZONE(PFF GMT): WEST 06 HOURS
STATION TYPE: CENTER CITY - COMMERCIAL            AQCR(005): EAST ALABAMA
AGENCY TYPE: STATE                                SMSA(000): 0 NOT IN A STANDARD METROPOLITAN STATIST
SUPP. AGENCY: ALABAMA STATE HEALTH DEPT DIV OF AIR POLLUTION CONTROL

    PARTICULATE                    HI-VOL  GRAVIMETRIC                          24-HOUR   UG/CU METER (25 C)      47 ORS

SITE CODE: 010170002F01                    LATITUDE(D,M,S): 33 41 08 N          EPA REGION: 04          UTM ZONE: 16
SITE ADDRESS: BLUE MTN POST OFFICE         LONGITUDE(D,M,S): 85 50 16 W      ELEV ABOVE GROUND: 0018   UTM NORTHING: 3727730
CITY OR AREA: ANNISTON                       CITY POPULATION:     31,833        ELEV ABOVE MSL: 0810    UTM EASTING: 0068770
COUNTY(FIPS): CALHOUN CO                     AQCR POPULATION:    400,993     TIME ZONE(PFF GMT): WEST 06 HOURS
STATION TYPE: SUBURBAN - COMMERCIAL               AQCR(005): EAST ALABAMA
AGENCY TYPE: STATE                                SMSA(000): 0 NOT IN A STANDARD METROPOLITAN STATIST
SUPP. AGENCY: ALABAMA AIR POLLUTION CONTROL COMM
LOCATED ON ROOF OF BLUE MOUNTAIN POST OFFICE

    PARTICULATE                    HI-VOL  GRAVIMETRIC                          24-HOUR   UG/CU METER (25 C)      53 ORS

SITE CODE: 010160001G01                    LATITUDE(D,M,S): 34 49 10 N          EPA REGION: 04          UTM ZONE: 16
SITE ADDRESS: ELM STREET                   LONGITUDE(D,M,S): 86 58 25 W      ELEV ABOVE GROUND: 0003   UTM NORTHING: 3852823
CITY OR AREA: ATHENS                         CITY POPULATION:     14,360        ELEV ABOVE MSL: 0713    UTM EASTING: 0092913
COUNTY(FIPS): LIMESTONE CO                   AQCR POPULATION:    971,431     TIME ZONE(PFF GMT): WEST 06 HOURS
STATION TYPE: CENTER CITY - COMMERCIAL            AQCR(007): TENNESSEE RIVER VALLEY-CUMBERLAND MOUNTAINS
AGENCY TYPE: COUNTY                               SMSA(3440): HUNTSVILLE, ALABAMA
SUPP. AGENCY: TRI-COUNTY DISTRICT HEALTH SERVICE
LOCATED ACROSS THE STREET IN FRONT OF LIMESTONE COUNTY HEALTH CNTR

    PARTICULATE                    HI-VOL  GRAVIMETRIC                          24-HOUR   UG/CU METER (25 C)      55 ORS

SITE CODE: 010140001G01                    LATITUDE(D,M,S): 34 48 12 N          EPA REGION: 04          UTM ZONE: 16
SITE ADDRESS: HOBBS STREET                 LONGITUDE(D,M,S): 86 57 54 W      ELEV ABOVE GROUND: 0009   UTM NORTHING: 3851031
CITY OR AREA: ATHENS                         CITY POPULATION:     14,360        ELEV ABOVE MSL: 0678    UTM EASTING: 403201
COUNTY(FIPS): LIMESTONE CO                   AQCR POPULATION:    971,431     TIME ZONE(PFF GMT): WEST 06 HOURS
STATION TYPE: CENTER CITY - COMMERCIAL            AQCR(007): TENNESSEE RIVER VALLEY-CUMBERLAND MOUNTAINS
AGENCY TYPE: COUNTY                               SMSA(3440): HUNTSVILLE, ALABAMA
SUPP. AGENCY: TRI-COUNTY DISTRICT HEALTH SERVICE
LOCATED ON HOBBS STREET AT ATHENS COLLEGE

    PARTICULATE                    HI-VOL  GRAVIMETRIC                          24-HOUR   UG/CU METER (25 C)      53 ORS
    SULFUR DIOXIDE                 GAS BUBBLER  PARAROSANILINE-SULFAMIC ACID   24-HOUR   PARTS PER MILLION       40 ORS
    NITROGEN DIOXIDE               GAS BUBBLER  NASH SODIUM ARSENITE-ARIFICE   24-HOUR   PARTS PER MILLION       45 ORS

SITE CODE: 010360002F03                    LATITUDE(D,M,S): 30 33 7 N           EPA REGION: 04          UTM ZONE: 16
SITE ADDRESS: ROBERTSDALE                  LONGITUDE(D,M,S): 87 42 25 W      ELEV ABOVE GROUND: 0      UTM NORTHING: 3380000
CITY OR AREA: BALDWIN CO                     CITY POPULATION:     80,382        ELEV ABOVE MSL:         UTM EASTING: 0043220
COUNTY(FIPS): BALDWIN CO                     AQCR POPULATION:  2,100,876     TIME ZONE(PFF GMT): WEST 06 HOURS
STATION TYPE: RURAL - COMMERCIAL                  AQCR(005): MOBILE-PENSACOLA-PANAMA CITY-SOUTHERN MISSISSIPPI
AGENCY TYPE: STATE                                SMSA(5160): MOBILE, ALABAMA
SUPP. AGENCY: ALABAMA AIR POLLUTION CONTROL COMMISSION
ATOP OLD POLICE STATION

    PARTICULATE                    HI-VOL  GRAVIMETRIC                          24-HOUR   UG/CU METER (25 C)      40 ORS
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Figure 5.2.2.b Directory of Air Quality Sites Active in 1973

This publication contains data for a limited number of non-criteria pollutants that are collected on a high-volume sampler filter as particulate matter and chemically analyzed for the specific elements or ions. Because these data are not a part of the monitoring and reporting requirements, these data are not as extensive as for criteria pollutants. For this reason, this publication is not published on an annual basis. Also, rather than providing extensive statistics, this publication is designed to provide an inventory of the data.

The data items which are included for each site pollutant that has been reported are:

a. State name
b. Site code
c. Site location name
d. Site address
e. Agency Project code
f. Sampling interval
g. Year of the data
h. Number of observations
i. Maximum value
j. Arithmetic mean

The arithmetic mean is printed only for data that meets the summary criteria.

The publication is organized according to the following hierarchy:

a. Pollutant

b. Method of collection and analysis

c. State name

d. Agency/Project code

e. Sampling interval

f. Year of the Data

Sample Report

Figure 5.2.3-a is an example page from this publication.

NON-CRITERIA POLLUTANT REPORT

POLLUTANT: MANGANESE (UNITS: UG/CU METER (25 C))

METHOD: HI-VOL EMISSION SPECTRA (LOW TEMP ASH)

1971 TO 1975

STATE SITE CODE	AREA	SITE ADDRESS	ART/ PROJ	SAMPLING INTERVAL	YR	NO. OF OBS.	MAXIMUM VALUE	ARITHMETIC MEAN
NEBRASKA								
281540007	LINCOLN	COUNTY-CITY BLDG 555 SO 1	A01	COMPOSITE	71	4	0.03	0.02
					72	4	0.01	0.01
					73	4	0.01	0.01
					74	4	0.01	0.01
					75	4	0.03	0.02
281880001	OMAHA	CITY HALL 18TH & FARNAM	A01	COMPOSITE	71	4	0.08	0.05
					72	4	0.04	0.03
					73	4	0.07	0.01
					74	4	0.03	0.02
					75	1	0.02	
281880035	OMAHA	1723 HARNEY	A01	COMPOSITE	74	3	0.06	
282480001	THOMAS CO	NEBSKY NURSERY NEBRASKA N	A03	COMPOSITE	71	2	0.004	
					72	3	0.002	
					73	4	0.005	0.003
					74	2	0.009	
					75	3	0.010	
NEVADA								
290320001	LAS VEGAS	FIRE ALARM BLDG 300 N CAS	A01	COMPOSITE	71	3	0.06	
					72	1	0.01	
					74	2	0.02	
					75	1	0.02	
290480001	RENO	10 KIRMAN ST	A01	COMPOSITE	71	2	0.07	
					72	4	0.03	0.02
					73	4	0.02	0.02
					74	4	0.02	0.01
					75	1	0.04	
290560001	WHITE PINE CO	LEHMAN CAVES NATIONAL MON	A03	COMPOSITE	71	2	0.003	
					72	4	0.002	0.002
					73	4	0.002	0.002
					74	4	0.010	0.004
					75	1	0.009	
NEW HAMPSHIRE								
300020001	BELKNAP CO	BELKNAP COLLEGE (CENTER H	A03	COMPOSITE	72	1	0.010	
					73	2	0.013	
300130001	CONCORD	STATE HLT BLDG 61 S SPRING	A01	COMPOSITE	71	4	0.02	0.01
					72	4	0.01	0.01
					73	2	0.00	
					74	3	0.01	
300130002	CONCORD	61 S SPRING ST	A01	COMPOSITE	74	2	0.01	
300190001	COOS CO	U S FISH CUL STA WHITE MT	A03	COMPOSITE	71	3	0.011	
					72	2	0.003	
					73	3	0.006	
					74	3	0.002	
					75	4	0.006	0.003
NEW JERSEY								
310180001	BAYONNE	BAYONNE HOSPITAL E 29TH S	A01	COMPOSITE	72	3	0.02	
					74	3	0.02	
					75	3	0.02	
310770001	CAMDEN	FIRE STA HDQ BLDG 3RD & A	A01	COMPOSITE	71	2	0.28	
					72	2	0.10	
					73	2	0.11	
					74	2	0.10	
					75	4	0.17	0.08
310740002	CAMDEN CO	J RANE HUPRY 2102 HARLTON	A01	COMPOSITE	73	2	0.01	
310740003	CAMDEN CO	MUNICIPAL BUILDING 830 MF	A01	COMPOSITE	74	3	0.02	
311300002	ELIZABETH	ELIZ POL HEADQUARTERS BLD	A01	COMPOSITE	71	4	0.06	0.04
					72	3	0.02	
					73	2	0.02	
					74	4	0.04	0.02
					75	4	0.02	0.01
311700001	GLASSBORO	HOSS HART HALL GLASSBORO	A01	COMPOSITE	71	3	0.06	
					72	4	0.01	0.01
					73	1	0.01	
					74	4	0.01	0.01
					75	4	0.01	0.01
311940001	HAMILTON	MUNICIPAL BUILDING 2500 B	A01	COMPOSITE	71	2	0.07	
312320001	JERSEY CITY	MEDICAL CENTER GARAGE BLD	A01	COMPOSITE	71	4	0.06	0.04
					72	4	0.02	0.01
					73	2	0.02	
					74	2	0.03	
					75	3	0.02	
312480001	NEWARK	CITY HALL 920 BROAD STREET	A01	COMPOSITE	71	3	0.06	
					72	4	0.03	0.01
					73	2	0.02	
					74	4	0.02	0.01
					75	3	0.02	
312590001	PATERSON	PATERSON BOARD OF HEALTH	A01	COMPOSITE	71	2	0.04	
					72	1	0.01	
					73	2	0.00	
					74	3	0.01	
					75	2	0.02	
312720001	PERTH AMBOY	HEALTH DEPT 260 HIGH STRE	A01	COMPOSITE	71	4	0.07	0.04
					72	4	0.03	0.02
					74	2	0.03	
					75	3	0.02	
312800001	TRENTON	STATE HOUSE ANNEX STATE S	A01	COMPOSITE	71	2	0.08	
					72	4	0.03	0.02

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Figure 5.2.3.a

Any user who has established valid account codes and user identification codes at NCC has access to the AEROS data files. He may develop his own custom programs to access these files and output the data in the format(s) he desires. Any such custom programming that is done is requested to be brought to the attention of the Reports and Information Section for NADB's analysis of potential application for other users.

The following section contains AEROS file descriptions and record layouts of the more significant NADB files. These descriptions will be updated and expanded as needed. These file descriptions are given for the use of those experienced programmers who wish to do their own programming against the NADB files. Users are warned never to exclusively assign a NADB file. These file descriptions will also be in the NADB-DESC library and it is recommended that programmers use the COBOL Copy or the FORTRAN Include to insert these definitions into their programs. By doing this, program modifications necessitated by changes to the NADB file defiritions will be minimized. NADB is providing these definitions as a convenience only. Programming UNIVAC system questions should be directed to the National Computer Center, User Services Section. Potential users should also read Volume IV, Section 4.3.7 (Non-NADB Development).

7.2.1.1 CITY-COUNTY

AEROS FILE DESCRIPTION

QUALIFIER	FILE NAME	DATE
NADB	AERO-CTYCNTY	June 5, 1975

FILE DESCRIPTION AND USE

Contains the names, populations, and state/area keys for every county (and/or analogous area) in the U. S. and each city with a population equal to or greater than 2500 (in Vermont this includes every village). Flags are entered to distinguish counties from cities. If a flag is equal to a blank, a city or state is indicated. If a flag is equal to a '*' a county is indicated.

USES:

Cross-reference; ID file for most reports. Also used by some NEDS report programs.

FILE TYPE

- [ ] SDF
  - [ ] PRINT FILE
  - [ ] PUNCH FILE
  - [ ] _____
- [x] ASCII COBOL
  - [ ] SEQUENTIAL
  - [ ] DIRECT
  - [x] INDEXED-SEQUENTIAL
- [ ] FORTRAN
  - [ ] FORMATTED
  - [ ] UNFORMATTED
  - [ ] _____
- [ ] OTHER _____

STORAGE MEDIUM

- [x] DISK
- [ ] TAPE { [x] LABELED [ ] UNLABELED
- [ ] CARDS
- [ ] Standard

FILE AVAILABILITY

- [ ] RESTRICTED
- [x] PERMANENT
- [ ] TEMPORARY
- [ ] _____

CATALOGED FILE DESCRIPTION

- [ ] NO
- [x] YES: FILE NAME NADB-DESC
  PROC NAME NADBCITYISAM

RECORDING MODE

- [x] INTERNAL
- [ ] COMPACT
- [ ] CFH
- [ ] F [ ] AN
- [ ] U [ ] AN
- [ ] V [ ] AN

RECORD SIZE

- [x] FIXED LENGTH: 39 CHARACTERS
- [ ] VARIABLE LENGTH: _____ THRU _____ CHARACTERS

BLOCKING

- [ ] UNBLOCKED
- [x] BLOCKED: 88 { [ ] CHARACTERS [x] RECORDS } PER BLOCK

KEY (IF APPLICABLE)

6 CHARACTERS LONG

CONTENT: STATE, CITY OR COUNTY OR 4 BLANKS

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: AE026 (PROGRAM NAME)

FILE SIZE: 127 tracks AS OF 09/4/75

UPDATE FREQUENCY: Every ten years (TIME INTERVAL)

ANTICIPATED GROWTH: 25 to 50 [x] RECORD [ ] TRACKS PER _____

FILE BACKUP

TYPE: [ ] NONE [x] SYSTEM [x] SPECIAL

MEDIUM: [ ] CARDS [x] TAPE [ ] DISK

LOCATED AT: _____

FILE NAME: AERO-CTYCNTY-T

FREQUENCY: Every Ten years

NUMBER OF GENERATIONS KEPT: 2

FILE NAME/DESCRIPTION: AERO-CTYCNTY

RECORD NAME/DESCRIPTION: CITY-REC-IS

APPLICATION: SAROAD

DATE: June 5, 1975

PAGE 1 OF 1

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	39	39	X(39)	CITY-REC-IS	
1	6	6	X(6)	C-IS-KEY	Six Digit Key
1	2	2	X(2)	C-IS-STATE	State Code
3	6	4	X(4)	C-IS-CITY-COUNTY	City/County Code
7	7	1	X	C-IS-CNTY-FLG	One Digit Flag
8	35	28	X(28)	C-IS-NAME	Name of City
36	39	4	9(8) Comp	C-IS-POPL	Area Population

IF C-IS-CNTY-FLAG EQ	THEN C-IS-CTY-COUNTY CONTAINS AND	C-IS-NAME CONTAINS
ß	ßßßß	STATE NAME
ß	AREA CODE	CITY NAME
*	AREA CODE	COUNTY NAME

7.2.1.2 AERO-AQCR

AEROS FILE DESCRIPTION

QUALIFIER	FILE NAME	DATE
NADB	AERO-AQCR	

FILE DESCRIPTION AND USE

File consists of one record for each of 247 Air Quality Control Regions (AQCR), containing AQCR code, name, area in square miles, population, pollutant classification codes, number of counties making up the AQCR, and a six-digit identifier for each state (county within the AQCR, up to 100 counties).

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☐ DIRECT
  - ☒ INDEXED-SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

STORAGE MEDIUM

- ☒ DISK
- ☐ TAPE { ☒ LABELED / ☐ UNLABELED }
- ☐ CARDS
- ☐ _____

FILE AVAILABILITY

- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ _____

CATALOGED FILE DESCRIPTION

- ☐ NO
- ☒ YES: FILE NAME NADB-DESC
  PROC NAME AERO-AQCR

RECORDING MODE

- ☒ INTERNAL ☐ F ☐ AN
- ☐ COMPACT ☐ U ☐ AN
- ☐ CFH ☐ V ☐ AN

RECORD SIZE

- ☐ FIXED LENGTH: _____ CHARACTERS
- ☒ VARIABLE LENGTH: 95 THRU 689 CHARACTERS

BLOCKING

- ☐ UNBLOCKED
- ☒ BLOCKED: 2083 { ☒ CHARACTERS / ☐ RECORDS } PER BLOCK

KEY (IF APPLICABLE)

3 CHARACTERS LONG

CONTENT: AQCR

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: AE029 (PROGRAM NAME)

FILE SIZE: 25 tracks AS OF 09/4/75

UPDATE FREQUENCY: N/A (TIME INTERVAL)

ANTICIPATED GROWTH: ~~N/A~~ ☐ RECORD ☐ TRACKS PER _____

FILE BACKUP

TYPE: ☐ NONE ☒ SYSTEM ☐ OPERATOR

MEDIUM: ☐ CARDS ☐ TAPE

LOCATED AT: _____

FILE NAME: _____

NUMBER OF GENERATIONS KEPT: _____

FILE NAME/DESCRIPTION: AERO-AQCR

RECORD NAME/DESCRIPTION: AQCR-REC

APPLICATION: AEROS

DATE:

PAGE 1 OF 2

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	95	95		AQCR-REC	Air quality control region record
1	3	3	X(3)	IS-AQCR-NBR	Control region number
4	58	55	X(55)	IS-AQCR-NME	Control region name
59	65	7	ZZZ,ZZZ	IS-AQCR-AREA	Control region area
66	75	10	ZZ,ZZZ,ZZZ	IS-AQCR-POP	Population of area
76	87	12	X(12)	FILLER	Unused (See Note 1)
88	89	2	S9(5)COMP	ST-CO-CNT	State county count
90	95	6	X(6)	SFCO-COD	County identifier (occurs 1 to 100 times depending on ST-CO-CNT)

(Note 1) This field contains Priority and Classification Codes. The priorities are based on an observed air quality levels or estimates. A level '1' area has poor air quality and a level '3' area has clean air. If AQCR is level '1' primarily due to one source it is qualified as a level '1A' AQCR.

Particulates and SULFUR-DIOXIDE, can have levels of '1','2', and '3'. NITROGEN DIOXIDE, HYDROCARBONS, CARBON-MONOXIDE AND PHOTOCHEMICAL = OXIDANTS can only have values '1' and '3'.

SUGGESTED REDEFINITION OF FILLER:

76	77	2		PARTICULATE	
76	76	1	X	PART-CLASS	Classification
77	77	1	X	PART-PRIO	Single Point Emission Significance
78	79	2		SULFUR-DIOXIDE	
78	78	1	X	SOL-CLASS	Classification
79	79	1	X	SOL-PRIO	Single Point Emission Significance
80	81	2		NITROGEN-DIOXIDE	
80	80	1	X	NOX-CLASS	Classification
81	81	1	X	NOX-PRIO	Single Point Emission Significance
82	83	2		HYDROCARBONS	
82	82	1	X	HC-CLASS	Classification

FILE NAME/DESCRIPTION: AERO-AQCR

RECORD NAME/DESCRIPTION: AQCR-REC

APPLICATION: AEROS

DATE:

PAGE 2 OF 2

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
83	83	1	X	HC-PRIO	Single Point Emission Significance
84	85	2		CARBON-MONOXIDE	
84	84	1	X	CO-CLASS	Classification
85	85	1	X	CO-PRIO	Single Point Emission Significance
86	87	2		PHOTOCHEMICAL-OXIDANTS	
86	86	1	X	PC-CLASS	Classification
87	87	1	X	PC-PRIO	Single Point Emission Significance

7.2.1.3 AERO-SMSA

AEROS FILE DESCRIPTION

QUALIFIER	FILE NAME	DATE
NADB	AERO-SMSA	Ø5-19-75

FILE DESCRIPTION AND USE

This is an indexed-sequential mass-storage file of numbers and corresponding names of Standard Metropolitan Statistical Areas (SMSA). It contains one SMSA number and name per record, and the index key for each record is the 4-digit SMSA number.

USE: To be used by report programs to retrieve an SMSA name when the SMSA number is known.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☐ DIRECT
  - ☒ INDEXED-SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

STORAGE MEDIUM

- ☒ DISK
- ☐ TAPE { ☒ LABELED ☐ UNLABELED }
- ☐ CARDS
- ☐ Standard

FILE AVAILABILITY

- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ _____

CATALOGED FILE DESCRIPTION

- ☒ NO
- ☐ YES: FILE NAME _____
  PROC NAME _____

RECORDING MODE

- ☐ INTERNAL
- ☐ COMPACT
- ☐ CFH
- ☐ _____

☒ F ☒ AN
☐ U ☐ AN
☐ V ☐ AN

RECORD SIZE

- ☒ FIXED LENGTH: 45 CHARACTERS
- ☐ VARIABLE LENGTH: _____ THRU _____ CHARACTERS

BLOCKING

- ☒ UNBLOCKED
- ☐ BLOCKED: _____ { ☐ CHARACTERS ☐ RECORDS } PER BLOCK

KEY (IF APPLICABLE)

4 CHARACTERS LONG

CONTENT: SMSA Number

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: AEØ33 (PROGRAM NAME)

FILE SIZE: 243 records AS OF Ø5-19-75

UPDATE FREQUENCY: only when lost (TIME INTERVAL)

ANTICIPATED GROWTH: none ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☐ NONE ☒ SYSTEM ☐ SPECIAL

MEDIUM: ☒ CARDS ☐ TAPE ☐ DISK

LOCATED AT: NADB

FILE NAME: SMSA CARDFILE

FREQUENCY: Permanent

NUMBER OF GENERATIONS KEPT: 1

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*AERO-SMSA	SMSA-REC (Output record)

APPLICATION	DATE	PAGE 1 OF 1
AEØ33	22 November 1974	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	4	4	X(4)	SMSA-NBR	SMSA Number
5	45	41	X(41)	SMSA-NME	SMSA Name

Read key for indexed-sequential access = SMSA Number (4 digits)

7.2.1.4 AERO-STEAQCR

FILE DESCRIPTION AND USE

NADB*AERO-STEAQCR is an indexed sequential file containing an AQCR number, a twelve character site identifier, and a single blank. The key is the AQCR-site identifier.

USE: This file is used primarly in AQCR-oriented site retrievals such as the Emissions/Air Quality Report.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☐ DIRECT
  - ☒ INDEXED - SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION

- ☐ YES: FILE NAME _____
- ☒ NO PROC NAME _____

BLOCKING

- ☒ BLOCKED: 66 ☐ CHARACTERS ☒ RECORDS PER BLOCK
- ☐ UNBLOCKED

RECORD SIZE

- ☒ FIXED LENGTH: 16 CHARACTERS
- ☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

15 CHARACTERS LONG

CONTENT: AQCR-state-area-site-agency-project

RECORDING MODE

- ☒ INTERNAL ☐ F ☐ AN
- ☐ COMPACT ☐ U ☐ AN
- ☐ CFH ☐ V ☐ AN
- ☐ _____

FILE AVAILABILITY

- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ _____

STORAGE MEDIUM

- ☒ DISK
- ☐ TAPE ☒ LABELED ☐ UNLABELED
- ☐ CARDS
- ☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NA041B (PROGRAM NAME)

FILE SIZE: _____ AS OF _____

UPDATE FREQUENCY: Monthly (TIME INTERVAL)

ANTICIPATED GROWTH: Small ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☐ NONE ☒ SYSTEM ☐ SPECIAL

MEDIUM: ☐ CARDS ☐ TAPE ☐ DISK

LOCATED AT: _____

FILE NAME: _____

FREQUENCY: _____

NUMBER OF GENERATIONS KEPT:

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
AERO-STEAQCR	AQCRFILE-RECORD

APPLICATION	DATE	PAGE 2 OF 2
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	16	16		AQCRFILE-RECORD	Record
1	16	16	X(16)	FILLER	AQCR + SITE IDENTIFICATION and 1 blank AQCR (3) STATE (2) AREA (4) SITE (3) AGENCY (1) PROJECT (2) 1 BLANK

ENVIRONMENTAL PROTECTION AGENCY	SECTION User Generated Retrievals	SECTION 7	CHAPTER 2	SUBJECT 2
NATIONAL AIR DATA BRANCH	CHAPTER File Description	DATE 3/28/80	PAGE 1	
VOLUME III. AEROS SUMMARY AND RETRIEVAL MANUAL	SUBJECT NEDS	Update III-3		

QUALIFIER NADB

FILE NAME NEDS-USER

FILE DESCRIPTION AND USE

This is the NEDS-USER file. It is the master file of the NEDS Point Source system. It is the input master file to be updated by NEØ75A.

The first record for each state is a dummy state record that contains zeroes in all fields except the NUP-STATE field which contains the two digit state code and the NUP-PLANT-NAME-ADDR field which contains the date the file was last updated. All other records are valid point records.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☐ DIRECT
  - ☒ INDEXED-SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION

☒ YES: FILE NAME NADB*NADB-DESC

☐ NO PROC NAME NEDS-USER

BLOCKING

☒ BLOCKED: 6 ☐ CHARACTERS ☒ RECORDS PER BLOCK

☐ UNBLOCKED

RECORD SIZE

☒ FIXED LENGTH: 552 CHARACTERS

☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

23 CHARACTERS LONG

CONTENT: STATE/COUNTY/AQCR(9's)/PLANT/POINT/SCC

RECORDING MODE

☒ INTERNAL ☐ F ☐ AN

☐ COMPACT ☐ U ☐ AN

☐ CFH ☐ V ☐ AN

☐ _____

FILE AVAILABILITY

☐ RESTRICTED

☒ PERMANENT

☐ TEMPORARY

☐ _____

STORAGE MEDIUM

☒ DISK

☐ TAPE ☒ LABELED ☐ UNLABELED

☐ CARDS

☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NEØ75B (PROGRAM NAME)

FILE SIZE: _____ AS OF _____

UPDATE FREQUENCY: Monthly (TIME INTERVAL)

ANTICIPATED GROWTH: _____ ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☐ NONE ☐ SYSTEM ☒ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: NCC

FILE NAME: NEDS-USER-T

FREQUENCY: Monthly

NUMBER OF GENERATIONS KEPT: 5

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER	POINT-REC

APPLICATION	DATE	PAGE 1 OF 9
NEDS	01/17/77	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	552	552		POINT-REC	
1	9	9	X(9)	NUP-FILLER	Unused
*10	11	2	X(2)	NUP-STATE	2-digit state code
12	15	4	X(4)	NUP-COUNTY	4-digit county code
16	18	3	X(3)	NUP-FILLER-AQCR	
19	22	4	X(4)	NUP-PLANT	4-digit plant code
23	24	2	X(2)	NUP-POINT	2-digit point code
25	32	8		NUP-SCC	8-digit SCC code
25	25	1	X(1)	NUP-SCC1	
26	27	2	X(2)	NUP-SCC2	
28	30	3	X(3)	NUP-SCC3	Four Subfields
31	32	2	X(2)	NUP-SCC4	
33	33	1	X(1)	FILLER	Unused
34	36	3	X(3)	NUP-AQCR	3-digit AQCR number
37	38	2	X(2)	NUP-YEAR-OF-RECORD-PLANT	2-digit year-date Plant info last updated
39	42	4	X(4)	NUP-CITY	4-digit city code
43	44	2	X(2)	NUP-UTM-ZONE	2-digit UTM zone

FILE NAME/DESCRIPTION: NEDS-USER

RECORD NAME/DESCRIPTION: POINT-REC

APPLICATION: NEDS

DATE: 01/17/77

PAGE 2 OF 9

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
45	84	40	X(40)	NUP-PLANT-NAME-ADDR	Plant Name and address
85	96	12	X(12)	NUP-PLANT-CONTACT	Personal contact
97	97	1	X(1)	NUP-OWNERSHIP	Code designating type of ownership of plant
98	99	2	X(2)	NUP-YEAR-OF-RECORD-POINT	2-digit year-date info last updated
100	103	4	X(4)	NUP-SIC	4-digit SIC code
104	105	2	X(2)	NUP-IPP	2-digit IPP code
106	109	4	9(3)V9	NUP-UTM-EASTING	UTM X-coord (Km)
110	114	5	9(4)V9	NUP-UTM-NORTHING	UTM-Y-COORD (Km)
115	118	4	9(4)	NUP-STACK-HEIGHT	In feet
119	121	3	9(2)V9	NUP-STACK-DIAMETER	In feet
122	125	4	9(4)	NUP-STACK-TEMPERATURE	Stack Temperature in degrees F
126	132	7	9(7)	NUP-FLOW-RATE	In cubit feet per m
133	136	4	9(4)	NUP-PLUME-HEIGHT	In feet
137	138	2	X(2)	NUP-MULT-BOILER-FIRST	First and last code which feed
139	140	2	X(2)	NUP-MULT-BOILER-LAST	Common Stack

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER	POINT-REC

APPLICATION	DATE	PAGE 3 OF 9
NEDS	01/17/77	

RECORD POSITION FIRST	LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
141	142	2	X(2)	NUP-YEAR-OF-RECORD-CONTROL	Year control info last updated
143	147	5	9(5)	NUP-BOILER-DESIGN-CAPACITY	Mega - BTU per hour
143	147	5	X(5)	NUP-B-D-C	REDEFINES NUP-BOILER-DESIGN CAPACITY
148	177	30		NUP-CONTROL-EQUIPMENT	3-digit codes for primary and secondary control equipment for particulate SO_2, NO_x, VOC and CO
148	150	3	9(3)	NUP-PRIMARY-PART	
151	153	3	9(3)	NUP-SECONDARY-PART	
154	156	3	9(3)	NUP-PRIMARY-SOX	
157	159	3	9(3)	NUP-SECONDARY-SOX	
160	162	3	9(3)	NUP-PRIMARY NOX	
163	165	3	9(3)	NUP-SECONDARY NOX	
166	168	3	9(3)	NUP-PRIMARY-VOC	
169	171	3	9(3)	NUP-SECONDARY-VOC	
172	174	3	9(3)	NUP-PRIMARY-CO	
175	177	3	9(3)	NUP-SECONDARY-CO	
		30		NUP-CONTROL-EQUIP-RDEF	Redefines NUP-CONTROL-EQUIP-MENT
		30		NUP-CONTROL-EQUIP	Occurs 5 times.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER	POINT-REC

APPLICATION	DATE	PAGE 4 OF 9
NEDS	01/17/77	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
		3	9(3)	NUP-PRI-CONTROL-EQUIP	
		3	9(3)	NUP-SEC-CONTROL-EQUIP	
178	192	15		NUP-CONTROL-EFFICIENCY	Estimated efficiency of control equipment (percent)
178	180	3	9(2)V9	NUP-PART	
181	183	3	9(2)V9	NUP-SOX	
184	186	3	9(2)V9	NUP-NOX	
187	189	3	9(2)V9	NUP-VOC	
190	192	3	9(2)V9	NUP-CO	
178	192	15		NUP-CONTROL-EFFIC-RDEF	Redefines NUP-CONTROL-EFFICIENCY
178	192	3	9(2)V9	NUP-CONTROL-EFFIC	Occurs 5 times.
193	194	2	X(2)	NUP-YEAR-OF-RECORD-PRODUCTION	Year production info last updated
195	202	8		NUP-PERCENT-ANNUAL-THRUPUT	Percent of Annual production which occurs in each of four "quarters"
195	196	2	9(2)	NUP-WINTER	
197	198	2	9(2)	NUP-SPRING	
199	200	2	9(2)	NUP-SUMMER	

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER	POINT-REC

APPLICATION	DATE	PAGE 5 OF 9
NEDS	01/17/77	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
201	202	2	9(2)	NUP-FALL	
195	202	8		NUP-PERC-ANNUAL-THRU	Redefines NUP-PERCENT-ANNUAL THRUPUT
195	202	2	9(2)	NUP-PERCENT-THRUPUT	Occurs 4
203	207	5		NUP-OPERATING-SCHEDULE	Operating rate for the plant/point
203	204	2	9(2)	NUP-HOURS-PER-DAY	99 for missing value
205	205	1	9(1)	NUP-DAYS-PER WEEK	9 for missing value
206	207	2	9(2)	NUP-WEEKS-PER-YEAR	99 for missing value
208	242	35		NUP-ESTIMATED-POINT-EMISSIONS	Estimated emissions for each pollutant in tons per year
208	214	7	9(7)	NUP-PART	
215	221	7	9(7)	NUP-SOX	
222	228	7	9(7)	NUP-NOX	
229	235	7	9(7)	NUP-VOC	
236	242	7	9(7)	NUP-CO	
208	242	35		NUP-EST-POINT-EMISSIONS	Redefines NUP-ESTIMATED-POINT-EMISSIONS

* NOTE: These are hand calculated emissions provided by the Agency that submitted the data.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER	POINT-REC

APPLICATION	DATE	PAGE 6 OF 9
NEDS	01/17/77	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
208	242	7	9(7)	NUP-EST-POINT-EMIS	Occurs 5
243	247	5		NUP-ESTIMATION-METHOD	Method of estimation codes 0 thru 7 currently assigned
243	243	1	X(1)	NUP-PART	
244	244	1	X(1)	NUP-SOX	
245	245	1	X(1)	NUP-NOX	
246	246	1	X(1)	NUP-VOC	
247	247	1	X(1)	NUP-CO	
243	247	5		NUP-ESTIMATION-METH	Redefines NUP-ESTIMATION-METHOD
243	247	5	X(1)	NUP-ESTIM-METHOD	Occurs 5
248	250	3	9(2)V9	NUP-PERCENT-SPACE-HEAT	
251	252	2	X(2)	NUP-YEAR-OF-RECORD-REGULATORY	Year regulatory info last updated
253	257	35		NUP-ALLOWABLE-EMISSIONS	Maximum allowable emissions
253	259	7	9(7)	NUP-PART	
260	266	7	9(7)	NUP-SOX	
267	273	7	9(7)	NUP-NOX	

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER	POINT-REC

APPLICATION	DATE	PAGE 7 OF 9
NEDS	01/17/77	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
274	280	7	9(7)	NUP-VOC	
281	287	7	9(7)	NUP-CO	
253	287	35		NUP-ALLOWABLE-EMISSIONS-RDEF	Redefines NUP-ALLOWABLE-EMISSIONS
253	287	7	9(7)	NUP-ALLOWABLE-EMIS	Occurs 5
288	288	1	X(1)	NUP-COMPLIANCE-STATUS	Code for compliance status
289	292	4		NUP-COMPLIANCE-DATE	Date for plant to be in compliance
289	290	2	X(2)	NUP-COMPLIANCE-YEAR	
291	292	2	X(2)	NUP-COMPLIANCE-MONTH	
293	298	6		NUP-DATE-OF-RECORD-COMPLIANCE	Date compliance info updated
293	294	2	X(2)	NUP-COMPLIANCE-UPDATE-YEAR	
295	296	2	X(2)	NUP-COMPLIANCE-UPDATE-MONTH	
297	298	2	X(2)	NUP-COMPLIANCE-UPDATE-DAY	
299	299	1	X(1)	NUP-EMERGENCY-CONTROL-STATUS	Code for status of emergency control
300	311	12		NUP-CONTROL-REGULATIONS	Anything can be entered
300	303	4	X(4)	NUP-REG1	

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER	POINT-REC

APPLICATION	DATE	PAGE 8 OF 9
NEDS	01/17/77	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
304	307	4	X(4)	NUP-REG2	
308	311	4	X(4)	NUP-REG3	
312	313	2	X(2)	NUP-YEAR-OF-RECORD-EMISSIONS	Year emissions info last updated
314	320	7	9(7)	NUP-OPERATING-RATE	In SCC units per year
314	320	7	X(7)	NUP-Q-R	Redefines NUP-OPERATING-RATE
321	327	7	9(4)V9(3)	NUP-MAXIMUM-DESIGN-RATE	In SCC-units per hr.
321	327	7	X(7)	NUP-M-D-R	Redefines NUP-MAXIMUM-DESIGN RATE
328	330	3	9V9(2)	NUP-SULFUR-CONTENT	In percent
331	333	3	9(2)V9	NUP-ASH-CONTENT	In percent
334	338	5	9(5)	NUP-HEAT-CONTENT	In mega-BTU PER SCC unit
339	358	20	X(20)	NUP-CARD6-COMMENT	
359	359	1	X(1)	NUP-SOURCE-CODE	B=boiler, P=process O=other, S=solid waste
360	360	1	X(1)	NUP-CONFIDENTIALITY-CODE	Code for confidentiality of data in this record

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER	POINT-REC

APPLICATION	DATE	PAGE 9 OF 9
NEDS	01/17/77	

RECORD POSITION FIRST	LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
361	396	36	X(54)	NUP-PLANT-COMMENT	Display-1 Plant and Point Comment from Card7
397	432	36	X(54)	NUP-POINT-COMMENT	Display-1
433	442	10	9(7)V9(3)	NUP-PART	
443	452	10	9(7)V9(3)	NUP-SOX	
453	462	10	9(7)V9(3)	NUP-NOX	
463	472	10	9(7)V9(3)	NUP-VOC	
473	482	10	9(7)V9(3)	NUP-CO	
433	482	50		NUP-COMPUTED-EMIS-RDEF	Redefines NUP-COMPUTED-POINT EMISSIONS
433	482	10	9(7)V9(3)	NUP-COMPUTED-EMIS-IONS	Occurs 5

* NOTE: These are computer calculated emissions for each pollutant. See AEROS Volume III, Section 2.1Ø for a description of calculation procedures.

483	518	36	X(54)	NUP-SCC-COMMENT	Display-1
519	552	34	X(51)	FILLER	Display-1 Not used

* NOTE: The first record for each state is a dummy state record that contains zeroes in all fields except the NUP-STATE field which contains the two digit state code and the NUP-PLANT-NAME-ADDR field which contains the date the file was last updated. The date is of the format Day spelled (9 char), 1 blank, Month spelled (9 char), day, year for a total of 28 characters, i.e., WEDNESDAY SEPTEMBER 30, 1978.

QUALIFIER

FILE NAME NEDS-SUBFILE

FILE DESCRIPTION AND USE

This is a temporary tape subfile containing point source records selected from the NEDS-USER file by program NE001A and sorted by NE001B. Preceding the data records are two header records and one or more select records which describe the selection/sort parameters.

This file is for use by NEDS report programs.

FILE TYPE
- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ ____
- ☒ ASCII COBOL
  - ☒ SEQUENTIAL
  - ☐ DIRECT
  - ☐ INDEXED-SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ ____
- ☐ OTHER ____

CATALOGUED FILE DESCRIPTION
- ☐ YES: FILE NAME NADB*NADB-DESC
- ☐ NO PROC NAME NEDS-SUBFILE

BLOCKING
- ☒ BLOCKED: 6 ☐ CHARACTERS ☒ RECORDS PER BLOCK
- ☐ UNBLOCKED

RECORD SIZE
- ☒ FIXED LENGTH: 552 CHARACTERS
- ☐ VARIABLE LENGTH: ____ THROUGH ____ CHARACTERS

KEY (IF APPLICABLE)

____ CHARACTERS LONG

CONTENT: ____

RECORDING MODE
- ☒ INTERNAL ☐ F ☐ AN
- ☐ COMPACT ☐ U ☐ AN
- ☐ CFH ☐ V ☐ AN
- ☐ ____

FILE AVAILABILITY
- ☐ RESTRICTED
- ☐ PERMANENT
- ☒ TEMPORARY
- ☐ ____

STORAGE MEDIUM
- ☐ DISK
- ☒ TAPE ☒ LABELED ☐ UNLABELED
- ☐ CARDS
- ☐ ____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NE001A & NE001B (PROGRAM NAME)

FILE SIZE: Depends on selection AS OF ____

UPDATE FREQUENCY: Re-created each time NE001A is run (TIME INTERVAL)

ANTICIPATED GROWTH: ____ ☐ RECORD ☐ TRACKS ☐ ____ PER ____

FILE BACKUP

TYPE: ☒ NONE ☐ SYSTEM ☐ SPECIAL

MEDIUM: ☐ CARDS ☐ TAPE ☐ DISK

LOCATED AT: ____

FILE NAME: ____

FREQUENCY: ____

NUMBER OF GENERATIONS KEPT: ____

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	HEADER-REC1

APPLICATION	DATE	PAGE 1 OF 2
NEDS	June, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	1	1	9(1)	REC-CODE	Code = 1 for header records.
2	8	7	9(7)	REC-NUMBER	Contains 1 for this record (used in sorting the file)
9	9	1	X(1)	FILL-H	Contains "H" for header records
10	10	1	9(1)	POLLUTANT-CODE	Identifies pollutant selected: Ø = all, 1 = Part., 2 = SO_x, 3 = NO_x, 4 = VOC, 5=CO
11	11	1	S9(1)	MIN-VAL-SWITCH	Emission level selection code: -1 = missing values, Ø = all values, +1 = values ≥ MINIMUM-VALUE
12	17	6	9(6)	MINIMUM-VALUE	Minimum annual emissions selected (if MIN-VAL-SWITCH = 1
18	18	1	9(1)	UNIT-SYSTEM	Unit system selected; 1 = Metric, 2 = English
19	19	1	9(1)	SIGNIFICANT-DIGITS	Number of significant digits specified
20	20	1	9(1)	CONFIDENTIALITY	Confidentiality of selected data:
				sum of these for combinations	1 = State Conf. 2 = Non Conf. 4 = EPA Conf.
21	21	1	X(1)	SOURCE-TYPE	Contains "P"

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	HEADER-REC1

APPLICATION	DATE	
NEDS	June, 1978	PAGE 2 OF 2

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
22	49	28	X(28)	NEDS-USER-DATE	Contains file creation date of NEDS-USER (Day of Week, Month, Day, Year.)
50	77	28	X(28)	NEDS-SUBFILE-DATE	Contains file creation date of NEDS-SUBFILE (Day of Week, Month, Day, Year.)
78	209	132	X(132)	REPORT-HEADER-LINE	Line of test for page header
210	341	132	X(132)	REPORT-HEADER-DATE	Line of text to show file creation dates
342	552	214	X(211)	FILLER	Not used.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	HEADER-REC2

APPLICATION	DATE	PAGE 1 OF 1
NEDS	June, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	1	1	9(1)	REC-CODE	Code = 1 header records
2	8	7	9(7)	REC-NUMBER	Contains 2 for this record (used in sorting the file)
9	9	1	X(1)	FILL-H	Contains "H" for header records
1Ø	141	132	X(132)	CONTROL-PARM-LINE1	Two lines of text suitable for use by reporting programs which describe the control card parameters used in selection of data.
142	273	132	X(132)	CONTROL-PARM-LINE2	
274	4Ø5	132	X(132)	SORT-LIST-LINE1	Two lines of text suitable for use by reporting programs which describe the sort sequence of the subfile
4Ø6	537	132	X(132)	SORT-LIST-LINE2	
538	552	15	X(15)	FILLER	Not used

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	SELECT-REC

APPLICATION	DATE	PAGE 1 OF 2
NEDS	June, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	1	1	9(1)	REC-CODE	Code = 2 for select record
2	8	7	9(7)	REC-NUMBER	Contains select card number
9	9	1	X(1)	FILL-S	Contains "S"
10	11	2	X(2)	STATE-CODE	2-digit state code; spaces = all states, 'NA' = nationwide
12	15	4	X(4)	COUNTY-CODE	4-digit county-code; spaces = all counties
16	18	3	X(3)	AQCR-CODE	3-digit AQCR number; spaces = all AQCRs
19	22	4	X(4	PLANT-CODE	4-digit plant code; spaces = all plants
23	24	8	X(8)	POINT-CODE	2-digit point code; spaces = all points
25	32	8	X(8)	SCC-CODE	8-digit SCC code, four subfields; for any subfield spaces= all values selected.
25	25	1	X(1)	SCC1-CODE	
26	27	2	X(2)	SCC2-CODE	
28	3Ø	3	X(3)	SCC3-CODE	
31	32	2	X(2)	SCC4-CODE	
33	33	1	X(1)	OWNERSHIP-CODE	1-character ownership code; spaces = all codes selects
34	37	4	X(4)	SIC-CODE	4-digit SIC code; spaces = all SICs selected
38	38	1	X(1)	ESTIMATION-CODE	1-digit estimation method code; space = all codes selected
39	66	28	X(28)	STATE-NAME	Name of state selected or "ALL STATES" or "NATIONWIDE SELECTION"

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	SELECT-REC

APPLICATION	DATE	PAGE 2 OF 2
NEDS	June, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
67	94	28	X(28)	COUNTY-NAME	Name of county selected or "ALL COUNTIES"
95	149	55	X(55)	AQCR-NAME	Name of AQCR selected or "ALL AQCRS"
150	281	132	X(132)	SELECT-PARM-LINE1	Three lines of text which describe the parameters specified on the select card.
282	413	132	X(132)	SELECT-PARM-LINE2	
414	545	132	X(132)	SELECT-PARM-LINE3	
546	552	7	9(7)	REC-COUNT	Number of records selected by the select card described by this record.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	POINT-REC

APPLICATION	DATE	
NEDS	June, 1978	PAGE 1 OF 7

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	552	552		POINT-REC	
1	1	1	9(1)	REC-CODE	Code=3 for data records
2	8	7	X(7)	FILL-P	Not used
9	9	1	X(1)	RECORD-TYPE	Contains 'P'
1Ø	11	2	X(2)	STATE	2-digit state code
12	15	4	X(4)	COUNTY	4-digit county code
16	18	3	X(3)	FILLER	Contains '999'
19	22	4	X(4)	PLANT	4-digit plant code
23	24	2	X(2)	POINT	2-digit point code
25	32	8		SCC.	8-digit SCC code
25	25	1	X(1)	SCC1	
26	27	2	X(2)	SCC2	Four subfields
28	3Ø	3	X(3)	SCC3	
31	32	2	X(2)	SCC4	
33	33	1	X(1)	FILLER	Not used
34	36	3	X(3)	AQCR	3-digit AQCR number
37	38	2	X(2)	YEAR-OF-RECORD-PLANT	2-digit year-date plant info last updated
39	42	4	X(4)	CITY	4-digit city code
43	44	2	X(2)	UTM-ZONE	2-digit UTM zone
45	84	4Ø	X(4Ø)	PLANT-NAME-ADDR	Plant name and address
85	96	12	X(12)	PLANT-CONTACT	Person responsible for filling out NEDS forms
97	97	1	X(1)	OWNERSHIP	Code designating type of ownership of plant
98	99	2	X(2)	YEAR-OF-RECORD-POINT	2-digit year-date point info last updated
1ØØ	1Ø3	4	X(4)	SIC	4-digit SIC code
1Ø4	1Ø5	2	X(2)	IPP	2-digit IPP code
1Ø6	1Ø9	4	9(3)V9	UTM-EASTING	UTM x-coord (kilometers)

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	POINT-REC (continued)

APPLICATION	DATE	PAGE 2 OF 7
NEDS	June, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
110	114	5	9(4)V9	UTM-NORTHING	UTM y-coord (kilometers)
115	118	5	9(4)	STACK-HEIGHT	In feet
119	121	3	9(2)V9	STACK-DIAMETER	In feet
122	125	4	9(4)	STACK-TEMPERATURE	Stack temperature in degrees F.
126	132	7	9(7)	FLOW-RATE	In cubic feet per minute
133	136	4	9(4)	PLUME-HEIGHT	In feet
137	138	2	X(2)	MULT-BOILER-FIRST	First and last point codes which feed common stack
139	14Ø	2	X(2)	MULT-BOILER-LAST	
141	142	2	X(2)	YEAR-OF-RECORD-CONTROL	Year control info last updated
143	147	5	9(5)	BOILER-DESIGN-CAPACITY	Mega-BTU per hour
143	147	5	X(5)	B-D-C	Redefines BOILER-design-CAPACITY
148	177	3Ø		CONTROL-EQUIPMENT	3-digit codes for primary and secondary control equipment for particulate, SO_2, NO_x, HC and CO.
148	15Ø	3	9(3)	PRIMARY-PART	
151	153	3	9(3)	SECONDARY-PART	
154	156	3	9(3)	PRIMARY-SOX	
157	159	3	9(3)	SECONDARY-SOX	
16Ø	162	3	9(3)	PRIMARY-NOX	
163	165	3	9(3)	SECONDARY-NOX	

FILE NAME/DESCRIPTION: NEDS-SUBFILE

RECORD NAME/DESCRIPTION: POINT-REC (continued)

APPLICATION: NEDS

DATE: June, 1978

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RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
166	168	3	9(3)	PRIMARY-VOC	
169	171	3	9(3)	SECONDARY-VOC	
172	174	3	9(3)	PRIMARY-CO	
175	177	3	9(3)	SECONDARY-CO	
148	177	30		CONTROL-EQUIP-RDEF	Redefines CONTROL-EQUIPMENT
		6	occurs 5	CONTROL-EQUIP	
		3	9(3)	PRI-CONTROL-EQUIP	
		3	9(3)	SEC-CONTROL-EQUIP	
178	192	15		CONTROL-EFFICIENCY	Estimated efficiency of control equipment (percent)
178	180	3	99V9	PART	
181	183	3	99V9	SOX	
184	186	3	99V9	NOX	
187	189	3	99V9	VOC	
190	192	3	99V9	CO	
178	192	15		CONTROL-EFFIC-RDEF	Redefines CONTROL-Efficiency
			99V9 occurs 5	CONTROL-EFFIC	
193	194	2	X(2)	YEAR-OF-RECORD-PRODUCTION	Year production info was last updated
195	202	8		PERCENT-ANNUAL-THRUPUT	Percent of annual production which occurs in each of four "quarters"

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	POINT-REC (continued)

APPLICATION	DATE	PAGE 4 OF 7
NEDS	June, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
195	196	2	9(2)	WINTER	
197	198	2	9(2)	SPRING	
199	200	2	9(2)	SUMMER	
201	202	2	9(2)	FALL	
195	202	8		PERC-ANNUAL-THRU	Redefines Percent-Annual-Thruput
			9(2) occurs 4	PERCENT-THRUPUT	
203	207	5	9(5)	OPERATING-SCHEDULE	Operating rate for this plant/point
203	204	2	9(2)	HOURS-PER-DAY	99 for missing value
205	205	1	9(1)	DAYS-PER-WEEK	9 for missing value
206	207	2	9(2)	WEEKS-PER-YEAR	99 for missing value
208	242	35	9(7)	ESTIMATED-POINT-EMISSIONS	Estimated emissions of each pollutant in tons/year
208	214	7	9(7)	PART	
215	221	7	9(7)	SOX	
222	228	7	9(7)	NOX	
229	235	7	9(7)	VOC	
236	242	7	9(7)	CO	
208	242	35		EST-POINT-EMISSIONS	Redefines Estimated-Point-Emissions
			9(7) occurs 5	EST-POINT-EMIS	
243	247	5		ESTIMATION-METHOD	Method for obtaining estimated point emissions codes 0 thru 7 currently assigned

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	POINT-REC (continued)

APPLICATION	DATE	PAGE 5 OF 7
NEDS	June, 1978	

RECORD POSITION FIRST	LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
243	243	1	X(1)	PART	
244	244	1	X(1)	SOX	
245	245	1	X(1)	NOX	
246	246	1	X(1)	VOC	
247	247	1	X(1)	CO	
243	247	5	X(1) occurs 5	ESTIMATION-METH ESTIM-METHOD	Redefines ESTIMATION-METHOD
248	250	3	99V9	PERCENT-SPACE-HEAT	
251	252	2	X(2)	YEAR-OF-RECORD-REGULATORY	Year regulatory info was last updated
253	287	35	9(7)	ALLOWABLE-EMISSIONS	Maximum allowable emission of each pollutant
253	259	7	9(7)	PART	
260	266	7	9(7)	SOX	
267	273	7	9(7)	NOX	
274	280	7	9(7)	VOC	
281	287	7	9(7)	CO	
253	287	35		ALLOWABLE-EMISSION-RDEF	Redefines ALLOWABLE EMISSIONS
			9(7) occurs 5	ALLOWABLE-EMIS	
288	288	1	X(1)	COMPLIANCE-STATUS	Code for compliance status
289	292	4	X(4)	COMPLIANCE-DATE	Date for plant to be in compliance
289	290	2	X(2)	COMPLIANCE-YEAR	
291	292	2	X(2)	COMPLIANCE-MONTH	
293	298	6	X(6)	DATE-OF-RECORD-COMPLIANCE	Date compliance info last updated
293	294	2	X(2)	COMPLIANCE-UPDATE-YEAR	

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	POINT-REC (continued)

APPLICATION	DATE	PAGE 6 OF 7
NEDS	June, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
295	296	2	X(2)	COMPLIANCE-UPDATE-MONTH	
297	298	2	X(2)	COMPLIANCE-UPDATE-DAY	
299	299	1	X(1)	EMERGENCY- CONTROL-STATUS	Code for status of emergency control program
300	311	12	X(12)	CONTROL-REGULATIONS	Anything can be entered
300	303	4	X(4)	REG1	
304	307	4	X(4)	REG2	
308	311	4	X(4)	REG3	
312	313	2	X(2)	YEAR-OF-RECORD-EMISSIONS	Year emissions info last updated
314	320	7	9(7)	OPERATING-RATE	In SCC-units per year
314	320	7	X(7)	O-R	Redefines OPERATING-RATE
321	327	7	9999V999	MAXIMUM-DESIGN-RATE	In SCC-Units per hours
321	327	7	X(7)	M-D-R	Redefines MAXIMUM-DESIGN-RATE
328	330	3	9V99	SULFUR-CONTENT	In percent
331	333	3	99V9	ASH-CONTENT	In percent
334	338	5	9(5)	HEAT-CONTENT	In mega-BTU per SCC-unit
339	358	20	X(20)	CARD6-COMMENT	
359	359	1	X(1)	SOURCE-CODE	B= boiler,P = process O = other, S = solid waste
360	360	1	X(1)	CONFIDENTIALITY CODE	1 = state confidential 2 = non-confidential 3 = EPA confidential

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-SUBFILE	POINT-REC (continued)

APPLICATION	DATE	PAGE 7 OF 7
NEDS	June, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
361	396	36	X(54) Display-1	PLANT-COMMENT	Plant and Point comments from card 7.
397	433	36	X(54) Display-1	POINT-COMMENT	
433	482	50		COMPUTED-POINT-EMISSIONS	Computed emissions in tons/year of five criteria pollutants
433	442	10	9(7)V9(3)	PART	
443	452	10	9(7)V9(3)	SOX	
453	462	10	9(7)V9(3)	NOX	
463	472	10	9(7)V9(3)	VOC	
473	482	10	9(7)V9(3)	CO	
433	482	50		COMPUTED-EMIS-RDEF	Redefines COMPUTED-POINT-EMISSIONS
			9(7)V9(3) occurs 5	COMPUTED-EMISSIONS	
483	518	36	X(54) Display-1	SCC-COMMENT	SCC coments from card 7
519	552	34	X(51) Display-1	FILLER	Not used

QUALIFIER NADB

FILE NAME NEDS-USER-AR

FILE DESCRIPTION AND USE

This file contains the NEDS Area Source data. It consists of one record for each State-County-AQCR plus 1 header record. Each record contains:

1. Activity Levels from the Area Source input form.
2. Emissions for each source category, plus the total emissions for the county for the 5 criteria pollutants.
3. Flags for each emission to denote whether it is computer or hand calculated.

A dummy state record precedes all records for that state for positioning.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ ____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☐ DIRECT
  - ☒ INDEXED-SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ ____
- ☐ OTHER ____

CATALOGUED FILE DESCRIPTION

- ☒ YES: FILE NAME NADB-DESC
- ☐ NO PROC NAME NEDS-USER-AR

BLOCKING

- ☐ BLOCKED: ____ ☐ CHARACTERS ☐ RECORDS PER BLOCK
- ☒ UNBLOCKED

RECORD SIZE

- ☒ FIXED LENGTH: 5852 CHARACTERS
- ☐ VARIABLE LENGTH: ____ THROUGH ____ CHARACTERS

KEY (IF APPLICABLE)

9 CHARACTERS LONG

CONTENT: State/County/AQCR

RECORDING MODE

- ☒ INTERNAL ☐ F ☐ AN
- ☐ COMPACT ☐ U ☐ AN
- ☐ CFH ☐ V ☐ AN
- ☐ ____

FILE AVAILABILITY

- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ ____

STORAGE MEDIUM

- ☒ DISK
- ☐ TAPE ☒ LABELED ☐ UNLABELED
- ☐ CARDS
- ☐ ____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NE077B (PROGRAM NAME)

FILE SIZE: 3250 Records or 42 Positions AS OF 6/76

UPDATE FREQUENCY: Annually or as needed (TIME INTERVAL)

ANTICIPATED GROWTH: 0 ☐ RECORD ☐ TRACKS ☐ ____ PER ____

FILE BACKUP

TYPE: ☐ NONE ☐ SYSTEM ☐ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: NCC

FILE NAME: NEDS-US-AR-T

FREQUENCY: Each time NEDS-USER-AR is updated.

NUMBER OF GENERATIONS KEPT: 4

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR/NEDS AREA SOURCE USERS FILE	NUA-HEADER-RECORD

APPLICATION	DATE	PAGE 1 OF 1
	4/5/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	9	9	9(9)	NUA-HEADER-KEY	Record Key (Contains all zeroes)
10	69	60	X(60)	NUA-HEADER-LITERAL	NADB Literal
70	97	28	X(28)	NUA-HEADER-DATE	File create date
98	5852	5755	X(5755)	FILLER	Not used

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 1 OF 10
NEDS AREA	4/5/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	9	9		NUA-KEY	Record Key (see Note 1
1	2	2	9(2)	NUA-STATE	State Code
3	6	4	9(4)	NUA-COUNTY	County Code
7	9	3	9(3)	NUA-AQCR	AQCR Number
10	11	2	9(2)	NUA-YEAR	Year of Record
12	12	1	X(1)	FILLER	Space Not Used
13	388	376		NUA-ACT-LEVEL	Group Name
13	16	4	COMP-1	NUA01-TSP-EST	Emission Est. Particulate Tons-Yr.
17	20	4	COMP-1	NUA02-SO2-EST	Emission Est. SO_2 Tons/Yr.
21	24	4	COMP-1	NUA03-NOX-EST	Emission Est. NO_X Tons/Yr.
25	28	4	COMP-1	NUA04-HCS-EST	Emission Est. HC Tons/Yr.
29	32	4	COMP-1	NUA05-COX-EST	Emission Est. CO Tons/Yr.
33	36	4	COMP-1	NUA06-SC-ANT-COAL	Sulfur % Anthracite
37	40	4	COMP-1	NUA07-SC-BIT-COAL	Sulfur % Bitumns.
41	44	4	COMP-1	NUA08-SC-DIS-OIL	Sulfur % Dis. Oil
45	48	4	COMP-1	NUA09-SC-RESD-OIL	Sulfur % Res. Oil
49	52	4	COMP-1	NUA10-AC-ANT-COAL	Ash % Anthracite
53	56	4	COMP-1	NUA11-AC-BIT-COAL	Ash % Bituminous
57	60	4	COMP-1	NUA12-RES-ANT-COAL	Res. Coal Anthracite
61	64	4	COMP-1	NUA13-RES-BIT-COAL	Res. Coal Bituminous
65	68	4	COMP-1	NUA14-RES-DIS-OIL	Res. Oil Distillate 10^3 Gal.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 2 OF 10
NEDS AREA	4/5/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
69	72	4	COMP-1	NUA15-RES-RESD-OIL	Res. Oil Residual 10^3 Gal.
73	76	4	COMP-1	NUA16-RES-NAT-GAS	Res. Gas Natural 10^6 Ft^3
77	80	4	COMP-1	NUA17-RES-WOOD	Res. Fuel Wood Tons
81	84	4	COMP-1	NUA18-C-I-ANT-COAL	Commercial Coal Anthracite Tons
85	88	4	COMP-1	NUA19-C-I-BIT-COAL	Commercial Coal Bituminous Tons
89	92	4	COMP-1	NUA20-C-I-DIS-OIL	Commercial Oil Distillate 10^3 Gal.
93	96	4	COMP-1	NUA21-C-I-RESD-OIL	Commercial Oil Residual 10^3 Gal.
97	100	4	COMP-1	NUA22-C-I-NAT-GAS	Commercial Gas Natural 10^6 - Ft^3
101	104	4	COMP-1	NUA23-C-I-WOOD	Commercial Fuel Wood Tons
105	108	4	COMP-1	NUA24-IND-ANT-COAL	Industril. Coal Anthracite Tons
109	112	4	COMP-1	NUA25-IND-BIT-COAL	Industril. Coal Bituminous Tons
113	116	4	COMP-1	NUA26-IND-COKE	Industrial Coke Tons
117	120	4	COMP-1	NUA27-IND-DIS-OIL	Industrial Oil Distillt 10^3 Gal.
121	124	4	COMP-1	NUA28-IND-RESD-OIL	Industrial Oil Residual 10^3 Gal.
125	128	4	COMP-1	NUA29-IND-NAT-GAS	Industrial Gas Natural 10^6 - Ft^3

FILE NAME/DESCRIPTION: NEDS-USER-AR

RECORD NAME/DESCRIPTION: NUA-AREA-RECORD

APPLICATION: NEDS AREA

DATE: 4/5/79

PAGE 3 OF 10

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
129	132	4	COMP-1	NUA30-IND-WOOD	Industrial Fuel Wood Ton
133	136	4	COMP-1	NUA31-IND-PCS-GAS	Industrial Process Gas 10^6 - Ft^3
137	140	4	COMP-1	NUA32-RES-ON-ST-INC	Residentl Incineration On Site Tons Incineration
141	144	4	COMP-1	NUA33-IND-ON-ST-INC	Industrial Incineration On Site Tons
145	148	4	COMP-1	NUA34-C-I-ON-ST-INC	Commercial Incineration On Site Tons
149	152	4	COMP-1	NUA35-RES-OPEN-BURN	Resdnt Open Burning Tons
153	156	4	COMP-1	NUA36-IND-OPEN-BURN	Industrial Open Burning Tons
157	160	4	COMP-1	NUA37-C-I-OPEN-BURN	Commercl Open Burning Tons
161	164	4	COMP-1	NUA38-LDV-GAS	Gas, Light Vehicle 10^3 Gal.
165	168	4	COMP-1	NUA39-HDV-GAS	Gas, Heavy Vehicle 10^3 Gal.
169	172	4	COMP-1	NUA40-OHV-GAS	Gas Fuel Off Hiway 10^3 Gal.
173	176	4	COMP-1	NUA41-HDV-DES	Diesel Fuel Heavy Vehicl. 10^3 Gal.
177	180	4	COMP-1	NUA42-OHV-DES	Diesel Fuel Off Hiway 10^3 Gal.
181	184	4	COMP-1	NUA43-RAIL-LOC-DES	Diesel Fuel Railroad 10^3 Gal.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 4 OF 10
NEDS AREA	4/5/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
185	188	4	COMP-1	NUA44-POP-CODE	Density Code Pop.
189	192	4	COMP-1	NUA45-LTO-MIL	LTO Military Academy
193	196	4	COMP-1	NUA46-LTO-CIVL	LTO Civil Aircraft
197	200	4	COMP-1	NUA47-LTO-COM	LTO Commercial Aircraf
201	204	4	COMP-1	NUA48-VSL-COAL	Vessels Coal Tons
205	208	4	COMP-1	NUA49-VSL-DES	Vessels Diesel Oil 10^3 Gal.
209	212	4	COMP-1	NUA50-VSL-RESD-OIL	Vessels Residual Oil 10^3 Gal.
213	216	4	COMP-1	NUA51-VSL-GAS	Vessels Gasoline 10^3 Gal.
217	220	4	COMP-1	NUA52-EVP-SOLVT-PUR	Evaporation Solvent Purchased Tons-Yr.
221	224	4	COMP-1	NUA53-EVP-GAS-MAR	Evaporation Gasoline Marketed 10^3 Gal.
225	228	4	COMP-1	NUA54-MVM-LAR	Vehicle Mile Limited Access 10^3 Mi.
229	232	4	COMP-1	NUA55-MVM-RR	Vehicle Miles Rural Rds. 10^3
233	236	4	COMP-1	NUA56-MVM-SR	Vehicle Miles Surburban Rds. 10^3 Mi.
237	240	4	COMP-1	NUA57-MVM-UR	Vehicles Miles Urban Rds. 10^3 Mi.
241	244	4	COMP-1	NUA58-MVM-DR	Dirt Rds. Vehicle Miles Traveled
245	248	4	COMP-1	NUA59-LTO-DIRT	Dirt Air Strips LTO
249	252	4	COMP-1	NUA60-CONSTRUCT-ACRES	Constructions Acres

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 5 OF 10
NEDS AREA	4/5/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
253	256	4	COMP-1	NUA61-WIND-EROS-ACRES	Miscel. Wind Erosion Acres
257	260	4	COMP-1	NUA62-LAND-TILL-ACRES	Landtilling Acres
261	264	4	COMP-1	NUA63-FOR-FILES-ACRES	Forest Fires Acres Burned
265	268	4	COMP-1	NUA64-FOR-FIRE-TON	Forest Fires Quant Tons/Acre
269	272	4	COMP-1	NUA65-MAN-BURN-ACRES	Managed Burning Acres
273	276	4	COMP-1	NUA66-MAN-BURN-TON	Managed Burning Tons/ Acres
277	280	4	COMP-1	NUA67-AGRI-BURN-ACRES	Agricultr. Acres Burned
281	284	4	COMP-1	NUA68-AGRI-BURN-TON	Agricultr Tons/Acre Burned
285	288	4	COMP-1	NUA69-FROST-CNTRL-HTRS	Orchard Heaters
289	292	4	COMP-1	NUA70-FROST-CNTRL-DAYS	Frost Control Days Fired/Yr.
293	296	4	COMP-1	NUA71-STRUCT-FIRES	Structure Fires #/Yr.
297	300	4	COMP-1	NUA72-NUM-AUTOS	# of Autos
301	304	4	COMP-1	NUA73-TRK-LT6	# of Trucks Lt 6000 lbs.
305	308	4	COMP-1	NUA74-TRK-6-10	# of Trucks 6000 to 10,000 lbs.
309	312	4	COMP-1	NUA75-SPARE	Spare
313	316	4	COMP-1	NUA76-SPARE	Spare
317	320	4	COMP-1	NUA77-SPARE	Spare
321	324	4	COMP-1	NUA78-SPARE	Spare
325	328	4	COMP-1	NUA79-SPARE	Spare

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 6 OF 10
NEDS AREA	4/5/79	

RECORD POSITION FIRST	LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
329	332	4	COMP-1	NUA80-SPARE	Spare
333	336	4	COMP-1	NUA81-SPARE	Spare
337	340	4	COMP-1	NUA82-SPARE	Spare
341	344	4	COMP-1	NUA83-SPARE	Spare
345	348	4	COMP-1	NUA84-SPARE	Spare
349	352	4	COMP-1	NUA85-SPARE	Spare
353	356	4	COMP-1	NUA86-SPARE	Spare
357	360	4	COMP-1	NUA87-SPARE	Spare
361	364	4	COMP-1	NUA88-SPARE	Spare
365	368	4	COMP-1	NUA89-SPARE	Spare
369	372	4	COMP-1	NUA90-SPARE	Spare
373	376	4	COMP-1	NUA91-SPARE	Spare
377	380	4	COMP-1	NUA92-SPARE	Spare
381	384	4	COMP-1	NUA93-SPARE	Spare
385	388	4	COMP-1	NUA94-SPARE	Spare
13	388	4 ea.	COMP-1	NUA-ACTIVITY-LEVEL	Redefines NUA-ACT-LEVEL
				NUA-AL	Occurs 94 times
389	456	68	X(68)	NUA-CRD6-COMMENT	Card 6 Comments
457	5852	5396		NUA-SC-EMISS	Group Header for Source Cat. Calculated Emissions
457	520	64		NUA-SC01-RES-ANT-COAL	Residential Anthracite Coal
457	460	4	COMP-1	NUA-SC01-TSP-TON-YR	S. Cat. 01 Total TSP
461	464	4	COMP-1	NUA-SC01-SO2-TON-YR	S. Cat. 01 Total SO2

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 7 OF 10
NEDS AREA	4/5/79	

RECORD POSITION FIRST	LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
465	468	4	COMP-1	NUA-SC01-NOX-TON-YR	S. Cat. 01 Total NOX
469	472	4	COMP-1	NUA-SC01-VOC-TON-YR	S. Cat. 01 Total VOC
473	476	4	COMP-1	NUA-SC01-COX-TON-YR	S. Cat. 01 Total CO
477	477	1	9(1)	NUA-SC01-TSP-FLAG	S. Cat. 01 TSP Flag
478	478	1	9(1)	NUA-SC01-SO2-FLAG	S. Cat. 01 SO2 Flag
479	479	1	9(1)	NUA-SC01-NOX-FLAG	S. Cat. 01 NOX Flag
480	480	1	9(1)	NUA-SC01-VOC-FLAG	S. Cat. 01 VOC Flag
481	481	1	9(1)	NUA-SC01-COX-FLAG	S. Cat. 01 COX Flag
482	483	2	9(2)	NUA-SC01-YR-REC	Year of Record
484	517	34	X(34)	NUA-SC01-CRD7-COM	Comments
518	520	3	X(3)	FILLER	Not Used = Blank
521	584	64		NUA-SC02-RES-BIT-COAL	Residential Bituminous Coal
521	524	4	COMP-1	NUA-SC02-TSP-TON-YR	S. Cat. 02 Total TSP
525	528	4	COMP-1	NUA-SC02-SO2-TON-YR	S. Cat. 02 Total SO2
529	532	4	COMP-1	NUA-SC02-NOX-TON-YR	S. Cat. 02 Total NOX
533	536	4	COMP-1	NUA-SC02-VOC-TON-YR	S. Cat. 02 Total VOC
537	540	4	COMP-1	NUA-SC02-COX-TON-YR	S. Cat. 02 Total COX
541	541	1	9(1)	NUA-SC02-TSP-FLAG	S. Cat. 02 TSP Flag
542	542	1	9(1)	NUA-SC02-SO2-FLAG	S. Cat. 02 SO2 Flag
543	543	1	9(1)	NUA-SC02-NOX-FLAG	S. Cat. 02 NOX Flag
544	544	1	9(1)	NUA-SC02-VOC-FLAG	S. Cat. 02 VOC Flag
545	545	1	9(1)	NUA-SC02-COX-FLAG	S. Cat. 02 COX Flag
546	547	2	9(2)	NUA-SC02-YR-REC	Year of Record
548	581	34	X(34)	NUA-SC02-CRD7-COM	Comments

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 8 OF 10
NEDS AREA	4/5/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
582	584	3	X(3)	FILLER	Not Used = Blank
585	5768	5184		NUA-SC03 through NUA-SC83	Same sequence as above for source categories 03-83. Source category ID numbers are given in AEROS Vol. V, Sec. 3.11.
5769	5832	64		NUA-SC84-SPARE	Spare
5769	5772	4	COMP-1	NUA-SC84-TSP-TON-YR	S. Cat. 84 Total TSP
5773	5776	4	COMP-1	NUA-SC84-SO2-TON-YR	S. Cat. 84 Total SO2
5777	5780	4	COMP-1	NUA-SC84-NOX-TON-YR	S. Cat. 84 Total NOX
5781	5784	4	COMP-1	NUA-SC84-VOC-TON-YR	S. Cat. 84 Total VOC
5785	5788	4	COMP-1	NUA-SC84-COX-TON-YR	S. Cat. 84 Total COX
5789	5789	1	9(1)	NUA-SC84-TSP-FLAG	S. Cat. 84 TSP Flag
5790	5790	1	9(1)	NUA-SC84-SO2-FLAG	S. Cat. 84 SO2 Flag
5791	5791	1	9(1)	NUA-SC84-NOX-FLAG	S. Cat. 84 NOX Flag
5792	5792	1	9(1)	NUA-SC84-VOC-FLAG	S. Cat. 84 VOC Flag
5793	5793	1	9(1)	NUA-SC84-COX-FLAG	S. Cat. 84 COX Flag
5794	5795	2	9(2)	NUA-SC84-YR-REC	Year of Record
5796	5829	34	X(34)	NUA-SC84-CRD7-COM	Comments
5830	5832	3	X(3)	FILLER	Not used = Blank

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 9 OF 10
NEDS AREA	4/5/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
457	5832	5376		NUA-SCX	Redefines SC-EMISS
457	5832	64		NUA-SC	Occurs 84 Times
		4	COMP-1	NUA-POLL	Occurs 5 Times
		1	9(1)	NUA-FLAG	Occurs 5 Times
		2	9(2)	NUA-YEAR-7	Year of Record
		34	X(34)	NUA-COMMENTS-7	Comments Card 7
		3	X(3)	FILLER	Not Used
5833	5852	20		NUA-POLL-SUM	Group Header for County Sums
5833	5836	4	COMP-1	NUA-TSP-TOT	TSP Tons/Yr.
5837	5840	4	COMP-1	NUA-SO2-TOT	SO2 Tons/Yr.
5841	5844	4	COMP-1	NUA-NOX-TOT	NOX Tons/Yr.
5845	5848	4	COMP-1	NUA-VOC-TOT	VOC Tons/Yr.
5849	5852	4	COMP-1	NUA-COX-TOT	COX Tons/Yr.
5833	5852	20		NUA-SUMX	Redefines NUA-POLL-SUM
		4	COMP-1	NUA-SUM-POLL	Occurs 5 Times

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NEDS-USER-AR	NUA-AREA-RECORD

APPLICATION	DATE	PAGE 10 OF 10
NEDS	4/11/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION

NOTE 1: Records having special keys are:
1. Header Record KEY = 000000000 1st record on file
2. Dummy State Record KEY = NN0000000, where NN is the state code. This record precedes all records for state NN.
   There is one dummy state record for each state on the file

NOTE 2: The flag field for each pollutant and source category indicates whether the emission for that pollutant/source category is computer calculated or hand calculated.
   2 indicates computer calculated
   1 indicates hand calculated

NOTE 3: For the COMP-1 fields a blank field is represented as negative number, because storing blanks in COMP-1 representation is invalid and it is important to know if a field is actually blank.

QUALIFIER NADB

FILE NAME EBCDIC-SUB

FILE DESCRIPTION AND USE

EBCDIC-SUB is a tape subfile containing area source records selected from the NEDS-USER-AR file. This file may be sorted by State/County/AQCR or AQCR, depending upon user specifications. Preceding the data records are one header record and one or more select records which describe the selection/sort parameters.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☐ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☐ DIRECT
  - ☐ INDEXED-SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☒ OTHER EBCDIC

CATALOGUED FILE DESCRIPTION

- ☒ YES: FILE NAME NADB*NADB-DESC
- ☐ NO PROC NAME EBCDIC-SUB

BLOCKING

- ☐ BLOCKED: _____ ☐ CHARACTERS ☐ RECORDS PER BLOCK
- ☒ UNBLOCKED

RECORD SIZE

- ☒ FIXED LENGTH 9435 CHARACTERS
- ☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

N/A CHARACTERS LONG

CONTENT: _____

RECORDING MODE

- ☐ INTERNAL ☐ F ☐ AN
- ☐ COMPACT ☐ U ☐ AN
- ☐ CFH ☐ V ☐ AN
- ☐ _____

FILE AVAILABILITY

- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ _____

STORAGE MEDIUM

- ☐ DISK
- ☒ TAPE ☐ LABELED ☒ UNLABELED
- ☐ CARDS
- ☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: _____ (PROGRAM NAME)

FILE SIZE: Depends on selection AS OF _____

UPDATE FREQUENCY: _____ (TIME INTERVAL)

ANTICIPATED GROWTH: _____ ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☒ NONE ☐ SYSTEM ☐ SPECIAL

MEDIUM: ☐ CARDS ☐ TAPE ☐ DISK

LOCATED AT: _____

FILE NAME: _____

FREQUENCY: _____

NUMBER OF GENERATIONS KEPT:

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-HEADER-REC

APPLICATION	DATE	PAGE 1 OF 1
NEDS	11/26/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	1	1	9(1)	EB-REC-CODE	Code = 1 for header record
2	2	1	X(1)	EB-FILL-H	Contains 'H' for header record
3	3	1	X(1)	EB-SOURCE-TYPE	Contains 'A'
4	31	28	X(28)	EB-USER-AR-DATE	Contains file creation date of NEDS-USER-AR (day of week, month, day, year)
32	59	28	X(28)	EBCDIC-SUB-DATE	Contains file creation date of EBCDIC-SUB (day of week, month, day, year)
60	191	132	X(132)	EB-REPORT-HEADER	Line of text for page header
192	323	132	X(132)	EB-REPORT-HEADER-DATE	Line of text to show file creation dates
324	455	132	X(132)	EB-SORT-LINE	Line of text describing sort sequence of EBCDIC-SUB
456	9485	9030	X(9030)	FILLER	Not used

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-AREA-RECORD

APPLICATION	DATE	PAGE 1 OF 9
NEDS	11/26/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	9	9		EB-KEY	Record key (see NOTE)
1	2	2	9(2)	EB-STATE	State Code
3	6	4	9(4)	EB-COUNTY	County Code
7	9	3	9(3)	EB-AQCR	AQCR Number
10	11	2	9(2)	EB-YEAR	Year of record
12	12	1	X(1)	FILLER	Space not used
13	1046	1034		EB-ACT-LEVEL	Group name
13	23	11	9(8)V9(3)	EB01-TSP-EST	Emission est. particulate tons/year
24	34	11	9(8)V9(3)	EB02-SO2-EST	Emission est. SO_2 tons/year
35	45	11	9(8)V9(3)	EB03-NOX-EST	Emission est. NO_X tons/year
46	56	11	9(8)V9(3)	EB04-HCS-EST	Emission est. HC tons/year
57	67	11	9(8)V9(3)	EB05-COX-EST	Emission est. CO tons/year
68	78	11	9(8)V9(3)	EB06-SC-ANT-COAL	Sulfur % Anthracite
79	89	11	9(8)V9(3)	EB07-SC-BIT-COAL	Sulfur % Bituminous
90	100	11	9(8)V9(3)	EB08-SC-DIS-OIL	Sulfur % Dis. Oil
101	111	11	9(8)V9(3)	EB09-SC-RESD-OIL	Sulfur % Res. Oil
112	122	11	9(8)V9(3)	EB10-AC-ANT-COAL	Ash % Anthracite
123	133	11	9(8)V9(3)	EB11-AC-BIT-COAL	Ash % Bituminous
134	144	11	9(8)V9(3)	EB12-RES-ANT-COAL	Res. Coal Anthra. Ton
145	155	11	9(8)V9(3)	EB13-RES-BIT-COAL	Res. Coal Bitumi. Ton
156	166	11	9(8)V9(3)	EB14-RES-DIS-OIL	Res. Oil Distillate 10^3 Gal

FILE NAME/DESCRIPTION: EBCDIC-SUB

RECORD NAME/DESCRIPTION: EB-AREA-RECORD

APPLICATION: NEDS

DATE: 11/26/79

PAGE 2 OF 9

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
167	177	11	9(8)V9(3)	EB15-RES-RESD-OIL	Res. Oil Residual 10^3 Gal.
178	188	11	9(8)V9(3)	EB16-RES-NAT-GAS	Res. Gas Natural 10^6 Ft^3
189	199	11	9(8)V9(3)	EB17-RES-WOOD	Res. Fuel Wood Tons
200	210	11	9(8)V9(3)	EB18-C-I-ANT-COAL	Commercial Coal Anthracite Tons
211	221	11	9(8)V9(3)	EB19-C-I-BIT-COAL	Commercial Coal Bituminous Tons
222	232	11	9(8)V9(3)	EB20-C-I-DIS-OIL	Commercial Oil Distillate 10^3 Gal.
233	243	11	9(8)V9(3)	EB21-C-I-RESD-OIL	Commercial Oil Residual 10^3 Gal.
244	254	11	9(8)V9(3)	EB22-C-I-NAT-GAS	Commercial Gas Natural 10^6 - Ft^3
255	265	11	9(8)V9(3)	EB23-C-I-WOOD	Commercial Fuel Wood Tons
266	276	11	9(8)V9(3)	EB24-IND-ANT-COAL	Industrial Coal Anthracite Tons
277	287	11	9(8)V9(3)	EB25-IND-BIT-COAL	Industrial Coal Bituminous Tons
288	298	11	9(8)V9(3)	EB26-IND-COKE	Industrial Coke Tons
299	309	11	9(8)V9(3)	EB27-IND-DIS-OIL	Industrial Oil Distillate 10^3 Gal.
310	320	11	9(8)V9(3)	EB28-IND-RESD-OIL	Industrial Oil Residual 10^3 Gal.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-AREA-RECORD

APPLICATION	DATE	PAGE 3 OF 9
NEDS	11/26/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
321	331	11	9(8)V9(3)	EB29-IND-NAT-GAS	Industrial Gas Natural 10^6 - Ft^3
332	342	11	9(8)V9(3)	EB30-IND-WOOD	Industrial Fuel Wood Ton
343	353	11	9(8)V9(3)	EB31-IND-PCS-GAS	Industrial Process Gas 10^6 - Ft^3
354	364	11	9(8)V9(3)	EB32-RES-ON-ST-INC	Residential Incineration On-Site Tons Incineration
365	375	11	9(8)V9(3)	EB33-IND-ON-ST-INC	Industrial Incineration On-Site Tons
376	386	11	9(8)V9(3)	EB34-C-I-ON-ST-INC	Commercial Incineration On-Site Tons
387	397	11	9(8)V9(3)	EB35-RES-OPEN-BURN	Resident Open Burning Tons
398	408	11	9(8)V9(3)	EB36-IND-OPEN-BURN	Industrial Open Burning Tons
409	419	11	9(8)V9(3)	EB37-C-I-OPEN-BURN	Commercial Open Burning Tons
420	430	11	9(8)V9(3)	EB38-LDV-GAS	Gas, Light Vehicle 10^3 Gal.
431	441	11	9(8)V9(3)	EB39-HDV-GAS	Gas, Heavy Vehicle 10^3 Gal.
442	452	11	9(8)V9(3)	EB40-OHV-GAS	Gas Fuel Off Highway 10^3 Gal.
453	463	11	9(8)V9(3)	EB41-HDV-DES	Diesel Fuel Heavy Vehicle 10^3 Gal.
464	474	11	9(8)V9(3)	EB42-OHV-DES	Diesel Fuel Off Highway 10^3 Gal.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-AREA-RECORD

APPLICATION	DATE	PAGE 4 OF 9
NEDS	11/26/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
475	485	11	9(8)V9(3)	EB43-RAIL-LOC-DES	Diesel Fuel Railroad 10^3 Gal.
486	496	11	9(8)V9(3)	EB44-POP-CODE	Density Code Pop.
497	507	11	9(8)V9(3)	EB45-LTO-MIL	LTO Military Academy
508	518	11	9(8)V9(3)	EB46-LTO-CIVL	LTO Civil Aircraft
519	529	11	9(8)V9(3)	EB47-LTO-COM	LTO Commercial Aircraft
530	540	11	9(8)V9(3)	EB48-VSL-COAL	Vessels Coal Tons
541	551	11	9(8)V9(3)	EB49-VSL-DES	Vessels Diesel Oil 10^3 Gal.
552	562	11	9(8)V9(3)	EB50-VSL-RESD-OIL	Vessels Residual Oil 10^3 Gal.
563	573	11	9(8)V9(3)	EB51-VSL-GAS	Vessels Gasoline 10^3 Gal.
574	584	11	9(8)V9(3)	EB52-EVP-SOLVT-PUR	Evaporation Solvent Purchased Tons/Year
585	595	11	9(8)V9(3)	EB53-EVP-GAS-MAR	Evaporation Gasoline Marketed 10^3 Gal.
596	606	11	9(8)V9(3)	EB54-MVM-LAR	Vehicle Mile Limited Access 10^3 mi.
607	617	11	9(8)V9(3)	EB55-MVM-RR	Vehicle Miles Rural Roads 10^3
618	628	11	9(8)V9(3)	EB56-MVM-SR	Vehicle Miles Suburban roads 10^3 mi.
629	639	11	9(8)V9(3)	EB57-MVM-UR	Vehicles Miles Urban roads 10^3 mi.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-AREA-RECORD

APPLICATION	DATE	PAGE 5 OF 9
NEDS	11/26/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
640	650	11	9(8)V9(3)	EB58-MVM-DR	Dirt Roads Vehicle Miles Traveled
651	661	11	9(8)V9(3)	EB59-LTO-DIRT	Dirt Air Strips LTO
662	672	11	9(8)V9(3)	EB60-CONSTRUCT-ACRES	Construction Acres
673	683	11	9(8)V9(3)	EB61-WIND-EROS-ACRES	Miscel. Wind Erosion Acres
684	694	11	9(8)V9(3)	EB62-LAND-TILL-ACRES	Landtilling Acres
695	705	11	9(8)V9(3)	EB63-FOR-FIRES-ACRES	Forest Fires Acres Burned
706	716	11	9(8)V9(3)	EB64-FOR-FIRE-TON	Forest Fires Quant. Tons/Acre
717	727	11	9(8)V9(3)	EB65-MAN-BURN-ACRES	Managed Burning Acres
728	738	11	9(8)V9(3)	EB66-MAN-BURN-TON	Managed Burning Tons/ Acres
739	749	11	9(8)V9(3)	EB67-AGRI-BURN-ACRES	Agricultr. Acres Burned
750	760	11	9(8)V9(3)	EB68-AGRI-BURN-TON	Agri. Tons/Acre Burned
761	771	11	9(8)V9(3)	EB69-FROST-CNTRL-HTRS	Orchard Heaters
772	782	11	9(8)V9(3)	EB70-FROST-CNTRL-DAYS	Frost Control Days Fires/Year
783	793	11	9(8)V9(3)	EB71-STRUCT-FIRES	Structure Fires #/Year
794	804	11	9(8)V9(3)	EB72-NUM-AUTOS	# of Autos
805	815	11	9(8)V9(3)	EB73-TRK-LT6	# of Trucks Lt 6000 lbs
816	826	11	9(8)V9(3)	EB74-TRK-6-10	# of Trucks 6000 to 10,000 lbs
827	837	11	9(8)V9(3)	EB75-SPARE	Spare
838	848	11	9(8)V9(3)	EB76-SPARE	Spare
849	859	11	9(8)V9(3)	EB77-SPARE	Spare

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-AREA-RECORD

APPLICATION	DATE	PAGE 6 OF 9
NEDS	11/26/79	

RECORD POSITION FIRST	LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
860	870	11	9(8)V9(3)	EB78-SPARE	Spare
871	881	11	9(8)V9(3)	EB79-SPARE	Spare
882	892	11	9(8)V9(3)	EB80-SPARE	Spare
893	903	11	9(8)V9(3)	EB81-SPARE	Spare
904	914	11	9(8)V9(3)	EB82-SPARE	Spare
915	925	11	9(8)V9(3)	EB83-SPARE	Spare
926	936	11	9(8)V9(3)	EB84-SPARE	Spare
937	947	11	9(8)V9(3)	EB85-SPARE	Spare
948	958	11	9(8)V9(3)	EB86-SPARE	Spare
959	969	11	9(8)V9(3)	EB87-SPARE	Spare
970	980	11	9(8)V9(3)	EB88-SPARE	Spare
981	991	11	9(8)V9(3)	EB89-SPARE	Spare
992	1002	11	9(8)V9(3)	EB90-SPARE	Spare
1003	1013	11	9(8)V9(3)	EB91-SPARE	Spare
1014	1024	11	9(8)V9(3)	EB92-SPARE	Spare
1025	1035	11	9(8)V9(3)	EB93-SPARE	Spare
1036	1046	11	9(8)V9(3)	EB94-SPARE	Spare
13	1046	11 ea.	9(8)V9(3)	EB-ACTIVITY-LEVEL	Redefines EB-ACT-LEVEL
				EB-AL	Occurs 94 times
1047	1114	68	X(68)	EB-CRD6-COMMENT	Card 6 comments
1115	9485	8371		EB-SC-EMISS	Group Header for Source Cat. Calculated Emissions
1115	1213	99		EB-SC01-RES-ANT-COAL	Residential Anthracite Coal

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-AREA-RECORD

APPLICATION	DATE	PAGE 7 OF 9
NEDS	11/26/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1115	1125	11	9(8)V9(3)	EB-SC01-TSP-TON-YR	S. Cat. 01 Total TSP
1126	1136	11	9(8)V9(3)	EB-SC01-SO2-TON-YR	S. Cat. 01 Total SO2
1137	1147	11	9(8)V9(3)	EB-SC01-NOX-TON-YR	S. Cat. 01 Total NOX
1148	1158	11	9(8)V9(3)	EB-SC01-VOC-TON-YR	S. Cat. 01 Total VOC
1159	1169	11	9(8)V9(3)	EB-SC01-COX-TON-YR	S. Cat. 01 Total CO
1170	1170	1	9(1)	EB-SC01-TSP-FLAG	S. Cat. 01 TSP Flag
1171	1171	1	9(1)	EB-SC01-SO2-FLAG	S. Cat. 01 SO2 Flag
1172	1172	1	9(1)	EB-SC01-NOX-FLAG	S. Cat. 01 NOX Flag
1173	1173	1	9(1)	EB-SC01-VOC-FLAG	S. Cat. 01 VOC Flag
1174	1174	1	9(1)	EB-SC01-COX-FLAG	S. Cat. 01 COX Flag
1175	1176	2	9(2)	EB-SC01-YR-REC	Year of Record
1177	1210	34	X(34)	EB-SC01-CRD7-COM	Comments
1211	1213	3	X(3)	FILLER	Not Used = Blank
1214	1312	99		EB-SC02-RES-BIT-COAL	Residential Bituminous Coal
1214	1224	11	9(8)V9(3)	EB-SC02-TSP-TON-YR	S. Cat. 02 Total TSP
1225	1235	11	9(8)V9(3)	EB-SC02-SO2-TON-YR	S. Cat. 02 Total SO2
1236	1246	11	9(8)V9(3)	EB-SC02-NOX-TON-YR	S. Cat. 02 Total NOX
1247	1257	11	9(8)V9(3)	EB-SC02-VOC-TON-YR	S. Cat. 02 Total VOC
1258	1268	11	9(8)V9(3)	EB-SC02-COX-TON-YR	S. Cat. 02 Total COX
1269	1269	1	9(1)	EB-SC02-TSP-FLAG	S. Cat. 02 TSP Flag
1270	1270	1	9(1)	EB-SC02-SO2-FLAG	S. Cat. 02 SO2 Flag
1271	1271	1	9(1)	EB-SC02-NOX-FLAG	S. Cat. 02 NOX Flag
1272	1272	1	9(1)	EB-SC02-VOC-FLAG	S. Cat. 02 VOC Flag
1273	1273	1	9(1)	EB-SC02-COX-FLAG	S. Cat. 02 COX Flag

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-AREA-RECORD

APPLICATION	DATE	PAGE 8 OF 9
NEDS	11/26/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1274	1275	2	9(2)	EB-SC02-YR-REC	Year of Record
1276	1309	34	X(34)	EB-SC02-CRD7-COM	Comments
1310	1312	3	X(3)	FILLER	Not Used = Blank
1313	9331	8019		EB-SC03 through EB-SC83	Same sequence as above for source categories 03-83. Source category ID numbers are given in AEROS Vol. V, Sec. 3.11.
9332	9430	99		EB-SC84-SPARE	Spare
9332	9342	11	9(8)V9(3)	EB-SC84-TSP-TON-YR	S. Cat. 84 Total TSP
9343	9353	11	9(8)V9(3)	EB-SC84-SO2-TON-YR	S. Cat. 84 Total SO2
9354	9364	11	9(8)V9(3)	EB-SC84-NOX-TON-YR	S. Cat. 84 Total NOX
9365	9375	11	9(8)V9(3)	EB-SC84-VOC-TON-YR	S. Cat. 84 Total VOC
9376	9386	11	9(8)V9(3)	EB-SC84-COX-FLAG	S. Cat. 84 Total COX
9387	9387	1	9(1)	EB-SC84-TSP-FLAG	S. Cat. 84 TSP Flag
9388	9388	1	9(1)	EB-SC84-SO2-FLAG	S. Cat. 84 SO2 Flag
9389	9389	1	9(1)	EB-SC84-NOX-FLAG	S. Cat. 84 NOX Flag
9390	9390	1	9(1)	EB-SC84-VOC-FLAG	S. Cat. 84 VOC Flag
9391	9391	1	9(1)	EB-SC84-COX-FLAG	S. Cat. 84 COX Flag
9392	9393	2	9(2)	EB-SC84-YR-REC	Year of Record
9394	9427	34	X(34)	EB-SC84-CRD7-COM	Comments
9428	9430	3	X(3)	Filler	Not Used = Blank

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
EBCDIC-SUB	EB-AREA-RECORD

APPLICATION	DATE	PAGE 9 OF 9
NEDS	11/26/79	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1115	9430	8316		EB-SCX	Redefines SC-EMISS
1115	9430	99		EB-SC	Occurs 84 Times
		11	9(8)V9(3)	EB-POLL	Occurs 5 Times
		1	9(1)	EB-FLAG	Occurs 5 Times
		2	9(2)	EB-YEAR-7	Year of Record
		34	X(34)	EB-COMMENTS-7	Comments Card 7
		3	X(3)	FILLER	Not Used
9431	9485	55		EB-POLL-SUM	Group Header for County Sums
9431	9441	11	9(8)V9(3)	EB-TSP-TOT	TSP Tons/Year
9442	9452	11	9(8)V9(3)	EB-SO2-TOT	SO2 Tons/Year
9453	9463	11	9(8)V9(3)	EB-NOX-TOT	NOX Tons/Year
9464	9474	11	9(8)V9(3)	EB-VOC-TOT	VOC Tons/Year
9475	9485	11	9(8)V9(3)	EB-COX-TOT	COX Tons/Year
9431	9485	55		EB-SUMX	Redefines EB-POLL-SUM
		11	9(8)V9(3)	EB-SUM-POLL	Occurs 5 Times

Note 1: The flag field for each pollutant and source category indicates whether the emission for that pollutant/source category is computer calculated or hand calculated.

2 indicates computer calculated
1 indicates hand calculated

Note 2: An ASCII tape file (ASCII-SUB) with record description identical to EBCDIC-SUB, but in ASCII format is also available.

ENVIRONMENTAL PROTECTION AGENCY	SECTION User Generated Retrievals	SECTION 7	CHAPTER 2	SUBJECT 3
NATIONAL AIR DATA BRANCH	CHAPTER File Description SUBJECT SAROAD	DATE 3/1/79	PAGE 1	
VOLUME III. AEROS SUMMARY AND RETRIEVAL MANUAL	QUALIFIER NADB FILE NAME NADB-AL-SFPI	Update III-2		

FILE DESCRIPTION AND USE

NADB-AL-SFPI a primary index, contains summary-frequency keys and block pointers to NADB-AL-SFBK. The file is used to locate SAROADS Summary-Frequency bulk data. It can be used as a stand-alone index or it can be used in conjunction with NADB-AL-SFSI, a secondary index. These files are used by access and report programs to retrieve data for summary-frequency reports.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☒ DIRECT
  - ☐ INDEXED - SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION

☒ YES: FILE NAME NADB*NADB-DESC

☐ NO PROC NAME NADB-AL-SFPI

BLOCKING

☐ BLOCKED: 4960 ☒ CHARACTERS ☐ RECORDS PER BLOCK

☒ UNBLOCKED

RECORD SIZE

☒ FIXED LENGTH: 4960 CHARACTERS

☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

16 CHARACTERS LONG

CONTENT: STATE,AREA,SITE,AGENCY,PROJECT, POLLUTANT,METHOD,INTERVAL,YEAR,UNITS (=High values) SFBK PTR.

RECORDING MODE

☒ INTERNAL ☐ F ☐ AN

☐ COMPACT ☐ U ☐ AN

☐ CFH ☐ V ☐ AN

☐ _____

FILE AVAILABILITY

☐ RESTRICTED

☒ PERMANENT

☐ TEMPORARY

☐ _____

STORAGE MEDIUM

☒ DISK

☐ TAPE ☒ LABELED ☐ UNLABELED

☐ CARDS

☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NAØ34 (PROGRAM NAME)

FILE SIZE: _____ AS OF _____

UPDATE FREQUENCY: 2 weeks (TIME INTERVAL)

ANTICIPATED GROWTH: _____ ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☐ NONE ☐ SYSTEM ☒ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: NCC

FILE NAME: NADB-AL-SFPI

FREQUENCY: At each update

NUMBER OF GENERATIONS KEPT:

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFPI	SFPI-HEADER

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	June 04, 1976	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	16	16		SFPI-HEADER	SFPI 1st Entry = Header
01	04	4	9(8) COMP	SGPI-LST-IXRC	Last SFPI Index Record#
05	08	4	9(8) COMP	SFPI-LST-IXKY	Last SFPI Index Key # in last SFPI Record.
09	12	4	9(8) COMP	SFPI-LST-BULK	Last SFPI BULK (NADB-AL-SFBK) Record #
13	16	4		SFPI-DATE	Create/Update Date
			99 DISP-1	SFPI-MON	Month
			99 DISP-1	SFPI-DAY	Day
			99 DISP-1	SFPI-YR	Year

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFPI	SFPI-RECORD

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	June 04, 1976	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	4960	4960		SFPI-RECORD	Summary-Frequency Primary Index
01	16	16	occurs 310	SFPI-KEYREC	
01	14	14		SFPI-KEY	Site/Pollutant/Date Key
01	13	13		SFPI-KEY-TO-YEAR	Site/Pollutant/Year Key
01	08	8		SFPI-SITE-DESC	Site Description
01	06	6		SFPI-SITE-KEY	Site-Key
01	02	2	X(2)	SFPI-STATE	State
03	04	2	9999 COMP	SFPI-AREA	Area
05	06	2	999 COMP	SFPI-SITE	Site
07	07	1	X	SFPI-AGY	Agency
08	08	1	99 COMP	SFPI-PRJ	Project
09	12	4		SFPI-POLL-KEY	Pollutant Key
09	11	3		SFPI-POLL-ME	Pollutant-Method
09	10	2	99999 COMP	SFPI-POLL	Pollutant
11	11	1	99 COMP	SFPI-METH	Method
12	12	1	X	SFPI-INT	Interval
13	13	1	99 COMP	SFPI-YEAR	Year
14	14	1	99 COMP	SFPI-UNITS	Units (High-Values)
15	16	2	99999 COMP	SFPI-BLK-PTR	Bulk-Pointer

FILE DESCRIPTION AND USE

NADB-AL-SFSI, a secondary index, contains an index to NADB-AL-SFPI, the primary index of the SAROADS Summary-Frequency bulk data. Each entry of NADB-AL-SFSI represents the last entry of each block (310 indexes) of NADB-AL-SFPI. The file is used to locate proper primary index blocks which in turn are used to locate Summary-Frequency data blocks. These indices are used by access and report programs to retrieve data for summary-frequency reports.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☒ DIRECT
  - ☐ INDEXED - SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION

☒ YES: FILE NAME NADB*NADB-DESC

☐ NO PROC NAME NADB-AL-SFSI

BLOCKING

☐ BLOCKED: 4960 ☒ CHARACTERS ☐ RECORDS PER BLOCK

☒ UNBLOCKED

RECORD SIZE

☒ FIXED LENGTH: 4960 CHARACTERS

☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

16 CHARACTERS LONG

CONTENT: STATE,AREA,SITE,AGENCY,PROJECT POLLUTANT,METHOD,INTERVAL,YEAR,UNITS (=H-V), SFPI-PTR

RECORDING MODE

☒ INTERNAL ☐ F ☐ AN

☐ COMPACT ☐ U ☐ AN

☐ CFH ☐ V ☐ AN

☐ _____

FILE AVAILABILITY

☐ RESTRICTED

☒ PERMANENT

☐ TEMPORARY

☐ _____

STORAGE MEDIUM

☒ DISK

☐ TAPE ☒ LABELED ☐ UNLABELED

☐ CARDS

☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NAØ34 (PROGRAM NAME)

FILE SIZE: _____ AS OF _____

UPDATE FREQUENCY: 2 weeks (TIME INTERVAL)

ANTICIPATED GROWTH: _____ ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☐ NONE ☐ SYSTEM ☒ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: NCC

FILE NAME: NADB-AL-SFSI

FREQUENCY: At each update

NUMBER OF GENERATIONS KEPT:

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFSI	SFSI-RECORD

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	June 04, 1976	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	4960	4960		SFSI-RECORD	Summary-Frequency Secondary-INDX
01	16	16	Occurs 310	SFSI-KEYREC	
01	14	14		SFSI-KEY	Site/Pollutant/Date Key
01	13	13		SFSI-KEY-TO-YEAR	Site/Pollutant/Year key
01	08	8		SFSI-SITE-DESC	Site Description
01	06	6		SFSI-SITE-KEY	Site Key
01	02	2	X(2)	SFSI-STATE	State
03	04	2	9999 COMP	SFSI-AREA	Area
05	06	2	999 COMP	SFSI-SITE	Site
07	07	1	X	SFSI-AGENCY	Agency
08	08	1	99 COMP	SFSI-PROJECT	Project
09	12	4		SFSI-POLL-KEY	Pollutant Key
09	11	3		SFSI-POLL-ME	Pollutant-Method
09	10	2	99999 COMP	SFSI-POLL	Pollutant
11	11	1	99 COMP	SFSI-METH	Method
12	12	1	X	SFSI-INT	Interval
13	13	1	99 COMP	SFSI-YEAR	Year
14	14	1	99 COMP	SFSI-UNITS	Units (High-Value)
15	16	2	99999 COMP	SFSI-SFPI-PTR	SFPI Pointer

FILE DESCRIPTION AND USE

NADB-AL-SFBK contains all the summary and frequency information for all SAROADS data (current and historic less than 24-hour and all greater than 24-hour). The bulk data is organized by unique site key (state, area, site, agency, project, pollutant, method, interval, and year). Data exists for the interval codes 1-7 B, X, Y, and Z. This file, along with NADB-AL-SFPI and NADB-AL-SFSI, are used by various SAROADS report and access programs to produce summary and frequency report listings. The data record contains quarterly and yearly integrated summary and frequency data items pertaining to one key and each has a checksum and a data key.

FILE TYPE

- [ ] SDF
  - [ ] PRINT FILE
  - [ ] PUNCH FILE
  - [ ] ____
- [x] ASCII COBOL
  - [ ] SEQUENTIAL
  - [x] DIRECT
  - [ ] INDEXED-SEQUENTIAL
- [ ] FORTRAN
  - [ ] FORMATTED
  - [ ] UNFORMATTED
  - [ ] ____
- [ ] OTHER ____

CATALOGUED FILE DESCRIPTION

- [x] YES: FILE NAME NADB*NADB-DESC
- [ ] NO PROC NAME NADB-AL-SFBK

BLOCKING

- [ ] BLOCKED 560 [x] CHARACTERS [ ] RECORDS PER BLOCK
- [x] UNBLOCKED

RECORD SIZE

- [x] FIXED LENGTH: 560 CHARACTERS
- [ ] VARIABLE LENGTH: ____ THROUGH ____ CHARACTERS

KEY (IF APPLICABLE)

____ CHARACTERS LONG

CONTENT: SFBK relative block pointed to by NADB-AL-SFPI (SFPI-BLK-PTR)

RECORDING MODE

- [x] INTERNAL [ ] F [ ] AN
- [ ] COMPACT [ ] U [ ] AN
- [ ] CFH [ ] V [ ] AN
- [ ] ____

FILE AVAILABILITY

- [ ] RESTRICTED
- [x] PERMANENT
- [ ] TEMPORARY
- [ ] ____

STORAGE MEDIUM

- [x] DISK
- [ ] TAPE [x] LABELED [ ] UNLABELED
- [ ] CARDS
- [ ] ____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NAØ34 (PROGRAM NAME)

FILE SIZE: ____ AS OF ____

UPDATE FREQUENCY: 2 weeks (TIME INTERVAL)

ANTICIPATED GROWTH: ____ [ ] RECORD [ ] TRACKS [ ] ____ PER ____

FILE BACKUP

TYPE: [ ] NONE [ ] SYSTEM [x] SPECIAL

MEDIUM: [ ] CARDS [x] TAPE [ ] DISK

LOCATED AT: NCC

FILE NAME: NADB-AL-SFBK

FREQUENCY: AT EACH UPDATE

NUMBER OF GENERATIONS KEPT:

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFBK	SFBK-RECORD-01

APPLICATION	DATE	PAGE 1 OF 3
SAROAD	Dec. 1, 1976	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	560	560		SFBK-RECORD-01	Summary-frequency data - non-X, Y, Z.
01	108	108	occurs 5	SFBK-SUMFRQ-DATA INDEXED BY Q	4 quarterly and 1 yearly summary and frequency entries (See note 1).
01	02	2	SH9(5)	SFBK-OBSERVATIONS	#OBS.
03	04	2	X(2)	SFBK-UNITS	Last reported units per key excluding units.
05	08	4	COMP-1	SFBK-10-PCT	10th Percentile.
09	12	4	COMP-1	SFBK-30-PCT	30th Percentile.
13	16	4	COMP-1	SFBK-50-PCT	50th Percentile
17	20	4	COMP-1	SFBK-70-PCT	70th Percentile
21	24	4	COMP-1	SFBK-90-PCT	90th Percentile
25	28	4	COMP-1	SFBK-95-PCT	95th Percentile
29	32	4	COMP-1	SFBK-99-PCT	99th Percentile
33	36	4	COMP-1	SFBK-1st-HVAL	Highest data value
37	40	4	COMP-1	SFBK-2nd-HVAL	2nd Highest
41	44	4	COMP-1	SFBK-3rd-HVAL	3rd Highest
45	46	2	SH9(5)	SFBK-1st-HVALCNT	# occurrences 1st
47	48	2	SH9(5)	SFBK-2nd-HVALCNT	# occurrences 2nd
49	50	2	SH9(5)	SFBK-3rd-HVALCNT	# occurrences 3rd
51	52	2	SH9(5)	SFBK-PRVLCNT	# Primary violations
53	54	2	SH9(5)	SFBK-SCVLCNT	# Secondary violations
55	55	1	COMP	SFBK-VALID-QTRS-OR-QTR	1st 4 = non-zero if data available and thus sum-frq present per each quarter; 5th = # valid quarter. (See note 1).
56	56	1	X	FILLER	
57	60	4	COMP-1	SFBK-MIN	Minimum data value
61	64	4	X(6) DISP-1	SFBK-TIME-MAX	Time of occurrence of maximum value

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFBK	SFBK-RECORD-01

APPLICATION	DATE	PAGE 2 OF 3
SAROAD	Dec. 1, 1976	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
65	68	4	X(6) DISP-1	SFBK-TIME-SCMAX	Time of occurrence of 2nd maximum
69	72	4	COMP-1	SFBK-AR-MEAN	Arithmetic Mean
73	76	4	COMP-1	SFBK-GE-MEAN	Geometric Mean
77	80	4	COMP-1	SFBK-AR-STDEV	Arith. Stnd. Deviation
81	84	4	COMP-1	SFBK-GE-STDEV	Geom. Stnd. Deviation
85	88	4	COMP-1	SFBK-MEDIAN	Median
89	92	4	COMP-1	SFBK-SUM-VAL	Sum of values
93	96	4	COMP-1	SFBK-SUM-LNVAL	Sum of Nat. Log of Val.
97	100	4	COMP-1	SFBK-PCT-OBS	Percentage of observation
101	104	4	COMP-1	SFBK-SUB-VAL	Substitution value
105	106	2	SH9(5)	SFBK-SUBCNT	# Occurrences of Sub.
107	107	1	X	SFBK-CRT-FLAG	Criteria Flag
108	108	1	X	FILLER	
541	544	4	9(10) COMP	SFBK-CHKSUM	Checksum of data (See note 2)
545	560	16	X(16)	SFBK-KEY	SFPI-Key echoed (See note 3)

Note 1. The 1st 108 positions of SFBK-RECORD-01 (SFBK-OBSERVATIONS thru SFBK-CRT-FLAG & SUBSEQUENT FILLER) occurrence for quarter (1, 2, 3, 4 respectively) followed by one occurrence for the year. If raw data from NADB-ND-BULK or NADB-GT-DISK) is available for the respective quarter/year then SFBK-VALID-QTRS-OR-QTR will be set non-zero representing that summary-frequency quarter data is present for the quarter/year.

Note 2. The checksum is the arithmetic summation of all data in the record excluding the checksum itself and the key, SFBK-KEY.

Note 3. This item represents the key for the summary-frequency data and is coded as follows:

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFBK	SFBK-RECORD-01

APPLICATION	DATE	PAGE 3 OF 3
SAROAD	Dec. 1, 1976	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
545	546	2	X(2)		STATE
547	548	2	9999 COMP		AREA
549	550	2	999 COMP		SITE
551	551	1	X		AGENCY
552	552	1	99 COMP		PROJECT
553	554	2	99999COMP		POLLUTANT
555	555	1	99 COMP		METHOD
556	556	1	X		INTERVAL
557	557	1	99 COMP		YEAR
558	558	1	99 COMP		UNITS: (=HIGH VALUES)
559	560	2	99999COMP		BULK POINTER

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFBK	SFBK-RECORD-02

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	Dec. 1, 1976	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	560	560		SFBK-RECORD-02	Summary & Frequency Date - X, Y, Z
01	108	108	occurs 5	SFBK-RUNAVG-DATA INDEXED BY Q1	4 Quarterly & 1 Yearly summary-frequency entries
01	68	68	X(68)	FILLER	Defined same as per SFBK-RECORD-01
69	72	4	COMP-1	SFBK-SCMAX	Maximized 2nd maximum data value
73	74	2	SH9(5)	SFBK-NOVL-PRVLCNT	# Nonoverlapping Primary violations
75	76	2	SH9(5)	SFBK-NOVL-SCVLCNT	# Nonoverlapping Secondary violations
77	108	32	X(32)	FILLER	Defined same as per SFBK-RECORD-01
541	560	20	X(20)	FILLER	Defined same as per SFBK-RECORD-01

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFBK	SFBK-RECORD-03

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	Dec. 1, 1976	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	560	560		SFBK-RECORD-03	Summary & Frequency checksum data
01	04	4	occurs 135 9(10) COMP	SFBK-CHKSUM-DATA	Data treated as 36 bit computational
541	560	20	X(20)	FILLER	Defined as per SFBK-RECORD-01 Positions 541-560

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-AL-SFBK	SFBK-RECORD-04

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	October 1979	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	560	560		SFBK-RECORD-04	Ozone and Oxidant data
01	108	108	OCCURS 5	SFBK-OZONE-DATA	Quarterly/Yearly data
01	04	4	X(4)	FILLER	Defined same as SFBK-RECORD-01
05	44	40	COMP-1 OCCURS 10	SFBK-O-PCT	Defined same as SFBK-RECORD-01
45	46	2	SH9(5)	SFBK-N-VAL	No. Valid Daily Maxima
47	48	2	SH9(5)	SFBK-Z-VAL	No. Days Assumed < Standard
49	50	2	SH9(5)	SFBK-E-VAL	Estimated No. Days > Standard
51	52	2	SH9(5)	SFBK-V-VAL1	Measured No. Days > Standard
53	54	2	SH9(5)	SFBK-V-VAL2	Same as SFBK-V-VAL1
55	108	54	X(54)	FILLER	Defined same as SFBK-RECORD-01
541	560	20	X(20)	FILLER	Defined same as SFBK-RECORD-01

FILE DESCRIPTION AND USE

NADB-ND-INDX contains the unique keys and pointers for the current SAROAD continuous data values stored in the NADB-ND-BULK file. The key is state-area-site-agency-project-pollutant-method-interval-year-units. With each key is a pointer which is the relative block address for the associated value record in NADB-ND-BULK. There are 310 four word keys in each physical record in NADB-ND-INDX. NADB-ND-INDX is used by SAROAD report program to access current continuous raw data.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☒ DIRECT
  - ☐ INDEXED - SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION

- ☒ YES: FILE NAME NADB-DESC
- ☐ NO PROC NAME NADB-ND-INDX

BLOCKING

- ☐ BLOCKED 4960 ☒ CHARACTERS ☐ RECORDS PER BLOCK
- ☒ UNBLOCKED

RECORD SIZE

- ☒ FIXED LENGTH: 4960 CHARACTERS
- ☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

NONE CHARACTERS LONG*

CONTENT: File is accessed VIA a pointer which is a record number (relative number within the file).

RECORDING MODE

- ☐ INTERNAL ☐ F ☐ AN
- ☒ COMPACT ☐ U ☐ AN
- ☐ CFH ☐ V ☐ AN
- ☐ _____

FILE AVAILABILITY

- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ _____

STORAGE MEDIUM

- ☒ DISK
- ☐ TAPE ☒ LABELED ☐ UNLABELED
- ☐ CARDS
- ☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NA029/D (PROGRAM NAME)

FILE SIZE: _____ AS OF _____

UPDATE FREQUENCY: 2 weeks (TIME INTERVAL)

ANTICIPATED GROWTH: _____ ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☐ NONE ☐ SYSTEM ☒ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: NCC (2 copies)

FILE NAME: NADB-ND-CBXP

FREQUENCY: 2 weeks

NUMBER OF GENERATIONS KEPT: 4

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-ND-INDX	NDIX-RECORD

APPLICATION	DATE	PAGE 1 OF 2
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	4960	4960		NDIX-RECORD	Index data record containing 310 four word keys.
1	16	16		NDIX-KEYREC	Four word key which occurs 310 times
1	14	14		NDIX-KEY	Key for data not including bulk pointer
1	13	13		NDIX-KEY-TO-YEAR	Site-pollutant-year key
1	8	8		NDIX-SITE-DESC	SITE KEY THROUGH PROJECT
1	6	6		NDIX-SITE-KEY	STATE KEY THROUGH SITE
1	2	2	X(2)	NDIX-STATE	STATE
3	4	2	9(4) COMP	NDIX-AREA	AREA
5	6	2	9(3) COMP	NDIX-SITE	SITE
7	7	1	X	NDIX-AGY	AGENCY
8	8	1	9(2) COMP	NDIX-PRJ	PROJECT
9	12	4		NDIX-POLL-KEY	PARAMETER KEY THROUGH INTERVAL
9	11	3		NDIX-POLL-ME	POLLUTANT-METHOD
9	10	2	9(5) COMP	NDIX-POLL	POLLUTANT
11	11	1	9(2) COMP	NDIX-METH	METHOD
12	12	1	X	NDIX-INT	INTERVAL
13	13	1	9(2) COMP	NDIX-YEAR	YEAR
14	14	1	9(2) COMP	NDIX-UNITS	REPORTING UNITS
15	16	2	9(5) COMP	NDIX-BLK-PTR	Pointer to NADB-ND-BULK file (data values file)

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-ND-INDX	NDIX-HEADER

APPLICATION	DATE	PAGE 2 OF 2
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	16	16		NDIX-HEADER	Header Record for index file which redefines first four words of NDIX-RECORD
1	4	4	9(8) COMP	NDIX-LST-IXRC	Pointer for last record of NADB-ND-INDX file
5	8	4	9(8) COMP	NDIX-LST-IXKY	Number of actual keys in last record of index file (≤310)
9	12	4	9(8) COMP	NDIX-LST-BULK	Pointer for last record of NADB-ND-BULK file
12	16	4		NDIX-DATE	Date of file CREATION
			9(2) DISP-1	NDIX-MON	Month file created
			9(2) DISP-1	NDIX-DAY	Day file created
			9(2) DISP-1	NDIX-DYR	Year file created

FILE DESCRIPTION AND USE

NADB-ND-BULK contains the current data values for the SAROAD continuous data. The records are fixed length records containing 8928 values (24 hourly values/day, 31 days/month, 12 months/year). Each data value and its corresponding decimal point indicator is stored in a half word. Missing or non-existent data values are stored as all 1 bits. The checksum is computed by summing the 4464 words allocated to values.

NADB-ND-BULK is directly accessed via NADB-ND-INDX keys and pointers. These two files are used by SAROAD reporting programs requiring access to the raw data.

FILE TYPE

- [ ] SDF
  - [ ] PRINT FILE
  - [ ] PUNCH FILE
  - [ ] _____
- [x] ASCII COBOL
  - [ ] SEQUENTIAL
  - [x] DIRECT
  - [ ] INDEXED - SEQUENTIAL
- [ ] FORTRAN
  - [ ] FORMATTED
  - [ ] UNFORMATTED
  - [ ] _____
- [ ] OTHER _____

CATALOGUED FILE DESCRIPTION

- [x] YES: FILE NAME NADB-DESC
- [ ] NO PROC NAME NADB-ND-BULK

BLOCKING

- [ ] BLOCKED: 17876 [x] CHARACTERS [ ] RECORDS PER BLOCK
- [x] UNBLOCKED

RECORD SIZE

- [x] FIXED LENGTH: 17876 CHARACTERS
- [ ] VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

NONE CHARACTERS LONG

CONTENT: File is accessed via pointers in NADB-ND-INDX which have a key = state-area-site-agency-project-pollutant-method-interval-year-units.

RECORDING MODE

- [ ] INTERNAL [ ] F [ ] AN
- [x] COMPACT [ ] U [ ] AN
- [ ] CFH [ ] V [ ] AN
- [ ] _____

FILE AVAILABILITY

- [ ] RESTRICTED
- [x] PERMANENT
- [ ] TEMPORARY
- [ ] _____

STORAGE MEDIUM

- [x] DISK
- [ ] TAPE [x] LABELED [ ] UNLABELED
- [ ] CARDS
- [ ] _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NA029/D (PROGRAM NAME)

FILE SIZE: 3 disks AS OF 7/76

UPDATE FREQUENCY: 2 weeks (TIME INTERVAL)

ANTICIPATED GROWTH: _____ [ ] RECORD [ ] TRACKS [ ] _____ PER _____

FILE BACKUP

TYPE: [ ] NONE [ ] SYSTEM [x] SPECIAL

MEDIUM: [ ] CARDS [x] TAPE [ ] DISK

LOCATED AT: NCC (2 copies)

FILE NAME: NADB-ND-CBXP

FREQUENCY: 2 weeks

NUMBER OF GENERATIONS KEPT: 4

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-ND-BULK	NDBK-RECORD

APPLICATION	DATE	PAGE 1 OF 1
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	17876	17876		NDBK-RECORD	Bulk record containing 1 year's data (8928 values)
1	1488	1488		NDBK-MONTH	Month's worth of data values occurs 12 times.
1	48	48		NDBK-DAY	Day's worth of data values occurs 31 times.
1	2	2		NDBK-HOUR*	Hour's worth of data occurs 24 times.
			1 (3)	NDBK-DP	Decimal point indicator
			S1 (15)	NDBK-VAL	Data value
17857	17860	4	9(8) COMP	NDBK-CHKSUM	Checksum
17861	17876	16	X(16)	NDBK-KEY	Copy of INDX key and pointer

Each half word contains the decimal point indicator, and the data value. The first three (3) bits are the indicator, and the last 15 bits are the data value.

To move:

1 year	NDBK-RECORD
1 month	NDBK-MONTH(month#)
1 day	NDBK-DAY (month #, day#)
1 value	NDBK-VAL (month #, day #, hour#)

To get floating point representation of the number, move NDBK-VAL to a COMP-1 field, and then multiply rounded the field times 10 to the -(NDBK-DP) power

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-ND-BULK	NDBK-REDEF1

APPLICATION	DATE	PAGE 1 OF 1
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	17876	17876		NDBK-REDEF1	Re-define the bulk record for the purpose of computing the checksum value.
1	4	4	9(10) COMP	NDBK-FW (1)	OCCURS 4464 TIMES. Full word overlay for computing the checksum value.
5	8	4	9(10) COMP	NDBK-FW (2)	
.	.	.	.	.	
.	.	.	.	.	
.	.	.	.	.	
17853	17856	4	9(10) COMP	NDBK-FW (4464)	
17857	17876	20	X (20)	FILLER	Not used for checksumming process.

FILE DESCRIPTION AND USE

NADB-HD-INDX contains the unique keys and pointers for the historical SAROAD continuous data values stored in the NADB-HD-BULK file. The key is state-area-site-agency-project-pollutant-method-interval-year-units. With each key is a pointer which is the relative block address for the associated value record in NADB-HD-BULK. There are 310 four word keys in each physical record in NADB-HD-INDX. NADB-HD-INDX is used by SAROAD report program to access historical continuous raw data.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☒ DIRECT
  - ☐ INDEXED - SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION

- ☒ YES: FILE NAME ~~NADB-DESC~~
- ☐ NO PROC NAME NADB-HD-INDX

BLOCKING

- ☐ BLOCKED: 4960 ☒ CHARACTERS ☐ RECORDS PER BLOCK
- ☒ UNBLOCKED

RECORD SIZE

- ☒ FIXED LENGTH: 4960 CHARACTERS
- ☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

NONE CHARACTERS LONG *

CONTENT: File is accessed VIA a pointer which is a record number (relative number within the file).

RECORDING MODE

- ☐ INTERNAL ☐ F ☐ AN
- ☒ COMPACT ☐ U ☐ AN
- ☐ CFH ☐ V ☐ AN
- ☐ _____

FILE AVAILABILITY

- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ _____

STORAGE MEDIUM

- ☒ DISK
- ☐ TAPE ☒ LABELED ☐ UNLABELED
- ☐ CARDS
- ☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NA029/D (PROGRAM NAME)

FILE SIZE: _____ AS OF _____

UPDATE FREQUENCY: 2 weeks (TIME INTERVAL)

ANTICIPATED GROWTH: _____ ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☐ NONE ☐ SYSTEM ☒ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: NCC (2 copies)

FILE NAME: NADB-HD-CBXP

FREQUENCY: 2 weeks

NUMBER OF GENERATIONS KEPT: 4

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-HD-INDX	HDIX-RECORD

APPLICATION	DATE	PAGE 1 OF 2
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	4960	4960		HDIX-RECORD	Index data record containing 310 four word keys.
1	16	16		HDIX-KEYREC	Four word key which occurs 310 times.
1	14	14		HDIX-KEY	Key for data not including bulk pointer
1	13	13		HDIX-KEY-TO-YEAR	Site-pollutant-year key
1	8	8		HDIX-SITE-DESC	SITE KEY THROUGH PROJECT
1	6	6		HDIX-SITE-KEY	STATE KEY THROUGH SITE
1	2	2	X(2)	HDIX-STATE	STATE
3	4	2	9(4)COMP	HDIX-AREA	AREA
5	6	2	9(3)COMP	HDIX-SITE	SITE
7	7	1	X	HDIX-AGY	AGENCY
8	8	1	9(2)COMP	HDIX-PRJ	PROJECT
9	12	4		HDIX-POLL-KEY	PARAMETER KEY THROUGH INTERVAL
9	11	3		HDIX-POLL-ME	POLLUTANT-METHOD
9	10	2	9(5)COMP	HDIX-POLL	POLLUTANT
11	11	1	9(2)COMP	HDIX-METH	METHOD
12	12	1	X	HDIX-INT	INTERVAL
13	13	1	9(2)COMP	HDIX-YEAR	YEAR
14	14	1	9(2)COMP	HDIX-UNITS	REPORTING UNITS
15	16	2	9(5)COMP	HDIX-BLK-PTR	Pointer to NADB-HD-BULK file (data values file)

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-HD-INDX	HDIX-HEADER

APPLICATION	DATE	PAGE 2 OF 2
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	16	16		HDIX-HEADER	Header Record for index file which redefines first four words of NDIX-RECORD
1	4	4	9(8) COMP	HDIX-LST-IXRC	Pointer for last record of NADB-HD-INDX file
5	8	4	9(8) COMP	HDIX-LST-IXKY	Number of actual keys in last record of index file (≤310)
9	12	4	9(8) COMP	HDIX-LST-BULK	Pointer for last record of NADB-HD-BULK file
12	16	4		HDIX-DATE	Date of file CREATION
			9(2) DISP-1	HDIX-MON	Month file created
			9(2) DISP-1	HDIX-DAY	Day file created
			9(2) DISP-1	HDIX-DYR	Year file created

FILE DESCRIPTION AND USE

NADB-HD-BULK contains the historical data values for the SAROAD continuous data. The records are fixed length records containing 8928 values (24 hourly values/day, 31 days/month, 12 months/year). Each data value and its corresponding decimal point indicator is stored in a half word. Missing or non-existent data values are stored as all 1 bits. The checksum is computed by summing the 4464 words allocated to values.

NADB-HD-BULK is directly accessed via NADB-HD-INDX keys and pointers. These two files are used by SAROAD reporting programs requiring access to the raw data.

FILE TYPE

- [ ] SDF
  - [ ] PRINT FILE
  - [ ] PUNCH FILE
  - [ ] ____
- [x] ASCII COBOL
  - [ ] SEQUENTIAL
  - [x] DIRECT
  - [ ] INDEXED - SEQUENTIAL
- [ ] FORTRAN
  - [ ] FORMATTED
  - [ ] UNFORMATTED
  - [ ] ____
- [ ] OTHER ____

CATALOGUED FILE DESCRIPTION

- [x] YES: FILE NAME NADB-DESC
- [ ] NO PROC NAME NADB-HD-BULK

BLOCKING

- [ ] BLOCKED: 17876 [x] CHARACTERS [ ] RECORDS PER BLOCK
- [x] UNBLOCKED

RECORD SIZE

- [x] FIXED LENGTH: 17876 CHARACTERS
- [ ] VARIABLE LENGTH: ____ THROUGH ____ CHARACTERS

KEY (IF APPLICABLE)

NONE CHARACTERS LONG *

CONTENT: File is accessed via pointers in NADB-HD-INDX which have a key = state-area-site-agency-project-pollutant-method-interval-year-units.

RECORDING MODE

- [ ] INTERNAL [ ] F [ ] AN
- [x] COMPACT [ ] U [ ] AN
- [ ] CFH [ ] V [ ] AN
- [ ] ____

FILE AVAILABILITY

- [ ] RESTRICTED
- [x] PERMANENT
- [ ] TEMPORARY
- [ ] ____

STORAGE MEDIUM

- [x] DISK
- [ ] TAPE [x] LABELED [ ] UNLABELED
- [ ] CARDS
- [ ] ____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NA029/D (PROGRAM NAME)

FILE SIZE: ____ AS OF ____

UPDATE FREQUENCY: 2 weeks (TIME INTERVAL)

ANTICIPATED GROWTH: ____ [ ] RECORD [ ] TRACKS [ ] ____ PER ____

FILE BACKUP

TYPE: [ ] NONE [ ] SYSTEM [x] SPECIAL

MEDIUM: [ ] CARDS [ ] TAPE [ ] DISK

LOCATED AT: NCC (2 copies)

FILE NAME: NADB-HD-CBXP

FREQUENCY: 2 weeks

NUMBER OF GENERATIONS KEPT: 4

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-HD-BULK	HDBK-RECORD

APPLICATION	DATE	PAGE 1 OF 1
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	17876	17876		HDBK-RECORD	Bulk record containing 1 year's data (8928 values)
1	1488	1488		HDBK-MONTH	Month's worth of data values occurs 12 times.
1	48	48		HDBK-DAY	Day's worth of data values occurs 31 times.
1	2	2		HDBK-HOUR*	Hour's worth of data occurs 24 times
			1 (3)	HDBK-DP	Decimal point indicator
			S1 (15)	HDBK-VAL	Data value
17857	17860	4	9(8) COMP	HDBK-CHKSUM	Checksum
17861	17876	16	X(16)	HDBK-KEY	Copy of INDX key and pointer

Each half word contains the decimal point indicator, and the data value. The first three (3) bits are the indicator, and the last 15 bits are the data value.

To move:

1 year	HDBK-RECORD
1 month	HDBK-MONTH(month#)
1 day	HDBK-DAY (month #, day #)
1 value	HDBK-VAL (month #, day #, hour #)

To get floating point representation of the number, move HDBK-VAL to a COMP-1 field, and then multiply rounded the field times 10 to the -(HDBK-DP) power

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-HD-BULK	HDBK-REDEF1

APPLICATION	DATE	PAGE 1 OF 1
SAROAD		

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	17876	17876		HDBK-REDEF1	Re-define the bulk record for the purpose of computing the checksum value.
1	4	4	9(10) COMP	HDBK-FW (1)	OCCURS 4464 TIMES. Full word overlay for computing the checksum value.
5	8	4	9(10) COMP	HDBK-FW (2)	
.	.	.	.	.	
.	.	.	.	.	
.	.	.	.	.	
17853	17856	4	9(10) COMP	HDBK-FW (4464)	
17857	17876	20	X (20)	FILLER	Not used for checksumming process.

FILE DESCRIPTION AND USE

NADB-GT-PRIX is a primary index containing the keys and pointers to the ≥ 24-hour rawdata stored in NADB-GT-BULK. Each record comprises a logical block of 348 keys. With each key is a pointer to the associated record on NADB-GT-BULK. In case more than one bulk record is required to store one year's interval-7 data for a given key, the pointer to GT-BULK will point to the first record in the chain. This file is used by SAROAD programs in conjunction with the secondary index NADB-GT-SCIX to access ≥ 24-hour rawdata.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☒ DIRECT
  - ☐ INDEXED · SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION

☐ YES: FILE NAME NADB*NADB-DESC

☐ NO PROC NAME NADB-GT-PRIX

BLOCKING

☐ BLOCKED: _____ ☐ CHARACTERS ☐ RECORDS PER BLOCK

☒ UNBLOCKED

RECORD SIZE

☒ FIXED LENGTH: 6264 CHARACTERS

☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

N/A CHARACTERS LONG

CONTENT: _____

RECORDING MODE

☐ INTERNAL ☐ F ☐ AN

☒ COMPACT ☐ U ☐ AN

☐ CFH ☐ V ☐ AN

☐ _____

FILE AVAILABILITY

☐ RESTRICTED

☒ PERMANENT

☐ TEMPORARY

☐ _____

STORAGE MEDIUM

☒ DISK

☐ TAPE ☒ LABELED ☐ UNLABELED

☐ CARDS

☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NAØ29 (PROGRAM NAME)

FILE SIZE: 6 positions AS OF 6-16-78

UPDATE FREQUENCY: biweekly (TIME INTERVAL)

ANTICIPATED GROWTH: 38 ☐ RECORD ☒ TRACKS ☐ _____ PER YEAR

FILE BACKUP

TYPE: ☐ NONE ☐ SYSTEM ☒ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: NCC-RTP

FILE NAME: _____

FREQUENCY: biweekly

NUMBER OF GENERATIONS KEPT: 4

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*NADB-GT-PRIX	GTPI-HEADER

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	4/24/78	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	18	18		GTPI-HEADER	P.I. header--1st key of 1st record
1	12	12	9(12)	GTPI-DATE-TIME	Date and time of 1st change to GT-BULK file during last update run. Format MMDDYYHHMMSS.
13	14	2	9(5) COMP	GTPI-REC-COUNT	Number of records in GT-PRIX
15	16	2	999 COMP	GTPI-KEY-COUNT	Number of actual keys in last record ($\leq$ 348)
17	18	2	XX	GTPI-FILLER	Not Used

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*NADB-GT-PRIX	GTPI-RECORD

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	4/24/78	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	6264	6264		GTPI-RECORD	Primary index record
1	18	18	OCCURS 348X	GTPI-KEY-PTR	Key with pointer
1	15	15		GTPI-KEY-TO-TYP	State thru comp. type
1	14	14		GTPI-KEY	State thru units
1	13	13		GTPI-KEY-TO-YEAR	State thru year
1	8	8		GTPI-SITE-DESC	Site key thru project
1	6	6		GTPI-SITE-KEY	State thru site
1	2	2	XX	GTPI-STATE	State
3	4	2	9999 COMP	GTPI-AREA	Area
5	6	2	999 COMP	GTPI-SITE	Site
7	7	1	X	GTPI-AGY	Agency
8	8	1	99 COMP	GTPI-PRJ	Project
9	12	4		GTPI-POLL-KEY	Parameter key thru INT
9	11	3		GTPI-POLL-ME	Pollutant-method
9	10	2	9(5) COMP	GTPI-POLL	Pollutant
11	11	1	99 COMP	GTPI-METH	Method
12	12	1	X	GTPI-INT	Interval
13	13	1	99 COMP	GTPI-YEAR	Year
14	14	1	99 COMP	GTPI-UNITS	Units
15	15	1	X	GTPI-COMP-TYPE	Composite type if INT=C, otherwise blank
16	18	3	9(7) COMP	GTPI-BULK-PTR	Pointer to GT-BULK file's RECORD #1 for this key

FILE DESCRIPTION AND USE

NADB-GT-SCIX is a secondary index which indexes NADB-GT-PRIX, the primary index used to access GT rawdata in NADB-GT-BULK. Each consists of a logical block of 348 key/pointers. Each key/pointer represents the last key in a primary index record and the pointer to that record. The file is used to expedite searches for keys on the primary index file.

FILE TYPE

- [ ] SDF
  - [ ] PRINT FILE
  - [ ] PUNCH FILE
  - [ ] _____
- [X] ASCII COBOL
  - [ ] SEQUENTIAL
  - [X] DIRECT
  - [ ] INDEXED · SEQUENTIAL
- [ ] FORTRAN
  - [ ] FORMATTED
  - [ ] UNFORMATTED
  - [ ] _____
- [ ] OTHER _____

CATALOGUED FILE DESCRIPTION

- [ ] YES: FILE NAME NADB*NADB-DESC
- [ ] NO PROC NAME NADB-GT-SCIX

BLOCKING

- [ ] BLOCKED: _____ [ ] CHARACTERS [ ] RECORDS PER BLOCK
- [X] UNBLOCKED

RECORD SIZE

- [X] FIXED LENGTH: 6264 CHARACTERS
- [ ] VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

N/A CHARACTERS LONG

CONTENT: _____

RECORDING MODE

- [ ] INTERNAL [ ] F [ ] AN
- [X] COMPACT [ ] U [ ] AN
- [ ] CFH [ ] V [ ] AN
- [ ] _____

FILE AVAILABILITY

- [ ] RESTRICTED
- [X] PERMANENT
- [ ] TEMPORARY
- [ ] _____

STORAGE MEDIUM

- [X] DISK
- [ ] TAPE [X] LABELED [ ] UNLABELED
- [ ] CARDS
- [ ] _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NAØ29 (PROGRAM NAME)

FILE SIZE: 2 tracks AS OF 6-16-78

UPDATE FREQUENCY: biweekly (TIME INTERVAL)

ANTICIPATED GROWTH: 1 [ ] RECORD [X] TRACKS [ ] _____ PER 5 years

FILE BACKUP

TYPE: [ ] NONE [ ] SYSTEM [X] SPECIAL

MEDIUM: [ ] CARDS [X] TAPE [ ] DISK

LOCATED AT: NCC-RTP

FILE NAME: _____

FREQUENCY: bi-weekly

NUMBER OF GENERATIONS KEPT: 4

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*NADB-GT-SCIX	GTSI-HEADER

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	4/25/78	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	18	18		GTSI-HEADER	S.I. header--1st key of 1st record.
1	12	12	9(12)	GTSI-DATE-TIME*	Date and time of 1st change to GT-BULK file during last update run.
13	14	2	9(5) COMP	GTSI-REC-COUNT	Number of records in GT-SCIX
15	16	2	999 COMP	GTSI-KEY-COUNT	Number of actual keys in last record ($\leq$ 348)
17	18	2	XX	GTSI-FILLER	Not Used

*format MMDDYYHHMMSS matches date-time on GT-PRIX and GT-BULK files.

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*NADB-GT-SCIX	GTSI-RECORD

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	4/25/78	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	6264	6264		GTSI-RECORD	Secondary index record
1	18	18	OCCURS 348X	GTSI-KEY-PTR	Key with pointer
1	15	15		GTSI-KEY-TO-TYP	State thru comp. type
1	14	14		GTSI-KEY	State thru units
1	13	13		GTSI-KEY-TO-YEAR	State thru year
1	8	8		GTSI-SITE-DESC	Site key thru project
1	6	6		GTSI-SITE-KEY	State thru site
1	2	2	XX	GTSI-STATE	State
3	4	2	9999 COMP	GTSI-AREA	Area
5	6	2	999 COMP	GTSI-SITE	Site
7	7	1	X	GTSI-AGY	Agency
8	8	1	99 COMP	GTSI-PRJ	Project
9	12	4		GTSI-POLL-KEY	Parameter key thru INT
9	11	3		GTSI-POLL-ME	Pollutant-method
9	10	2	9(5) COMP	GTSI-POLL	Pollutant
11	11	1	99 COMP	GTSI-METH	Method
12	12	1	X	GTSI-INT	Interval
13	13	1	99 COMP	GTSI-YEAR	Year
14	14	1	99 COMP	GTSI-UNITS	Units
15	15	1	X	GTSI-COMP-TYPE	Composite type if INT=C, otherwise blank
16	18	3	9(7) COMP	GTSI-PRIX-PTR	Pointer to primary index record for this key

FILE DESCRIPTION AND USE

NADB-GT-BULK contains all SAROAD air quality rawdata of sampling intervals ≥ 24-hour. Each record may contain 1-102 values depending on the interval and number of samples submitted. If interval = 7, a chain of 1 - 4 bulk records may be needed to store 1 year's data. The GTPI bulk pointer points only to record #1 of the chain. Each bulk record in a chain echoes the same GTPI key/pointer and has a forward pointer to the next record in the chain. Each value has an associated start-hour for use by intervals 7 and C data. U used matrix slots are justified right. This file is directly accessed via GTPI key/pointers to retrieve 24-hour SAROAD rawdata.

FILE TYPE

- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☒ DIRECT
  - ☐ INDEXED - SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION

- ☒ YES: FILE NAME NADB*NADB-DESC
- ☐ NO PROC NAME NADB-GT-BULK

BLOCKING

- ☐ BLOCKED: _____ ☐ CHARACTERS ☐ RECORDS PER BLOCK
- ☒ UNBLOCKED

RECORD SIZE

- ☒ FIXED LENGTH: 440 CHARACTERS
- ☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

_____ CHARACTERS LONG

CONTENT: _____

RECORDING MODE

- ☐ INTERNAL ☐ F ☐ AN
- ☒ COMPACT ☐ U ☐ AN
- ☐ CFH ☐ V ☐ AN
- ☐ _____

FILE AVAILABILITY

- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ _____

STORAGE MEDIUM

- ☒ DISK
- ☐ TAPE ☒ LABELED ☐ UNLABELED
- ☐ CARDS
- ☐ _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NA029 (PROGRAM NAME)

FILE SIZE: 149 positions AS OF 6-16-78

UPDATE FREQUENCY: biweekly (TIME INTERVAL)

ANTICIPATED GROWTH: 15 ☐ RECORD ☐ TRACKS ☒ Positions PER year

FILE BACKUP

TYPE: ☐ NONE ☐ SYSTEM ☒ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: NCC in RTP

FILE NAME: _____

FREQUENCY: biweekly

NUMBER OF GENERATIONS KEPT: 4

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*NADB-GT-BULK	GTBK-HEADER-REC

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	6/19/78	

RECORD POSITION FIRST	LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	440	440		GTBK-HEADER-REC	Bulk header (1st record on file)
01	12	12		GTBK-DATE-TIME	Date and time of 1st change to GT-BULK during last update (format MMDDYYHHMMSS)
01	02	2	99 DISP	GTBK -UPDT-MONTH	Month
03	04	2	99 DISP	GTBK-UPDT-DAY	Day
05	06	2	99 DISP	GTBK-UPDT-YEAR	Year
07	08	2	99 DISP	GTBK-UPDT-HR	Hour
09	10	2	99 DISP	GTBK-UPDT-MIN	Minute
11	12	2	99 DISP	GTBK-UPDT-SEC	Second
13	17	5	X(5)	GTBK-UPDT-PROG	Program which last updated GT-BULK
18	18	1	X	GTBK-EOJ-CODE	Update program's EOJ code (N=normal, A=abnormal).
19	21	3	9(7) COMP	GTBK-REC-COUNT	No. of physical records on file including header
22	436	415	X(415)	GTBK-FILLER-2	Not in use
437	440	4	9(10) COMP	GTBK-HDR-CHKSUM	Checksum of 1st 109 words

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*NADB-GT-BULK	GTBK-DATA-REC

APPLICATION	DATE	PAGE 1 OF 2
SAROAD	6/19/78	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	440	440		GTBK-DATA-REC	Bulk data record
01	18	18	X(18)	GTBK-KEY-PTR	Echoed GTPI key/pointer
19	19	1	9	GTBK-CHAIN-LENGTH	Number of records in bulk chain (1 if interval ≠7; 1-4 if interval =7)
20	20	1	9	GTBK-CHAIN-POS	Position of this record within the chain (1-4)
21	23	3	9(7) COMP	GTBK-CHAIN-PTR	Pointer to next record in chain (zero if N/A)
24	25	2	999 COMP	GTBK-CHAIN-VALUES	Number of values in chain (1-366)
26	27	2	999 COMP	GTBK-RECORD-VALUES	Number of values in record (1-102)
28	435	408		GTBK-MATRIX	Value matrix
28	31	4		GTBK-MATRIX-ENTRY	Matrix entry (occurs 102 times)
28	28	1	1(9)	GTBK-PERIOD-NO	Depending on the interval, period number has one of the following meanings and value ranges;

int	defn	range
7	day	1-372
8	month	1-12
9	qtr	1-4
A	week	1-53
C	(depends on type)	1-53
D	year	1 only

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*NADB-GT-BULK	GTBK-DATA-REC

APPLICATION	DATE	PAGE 2 OF 2
SAROAD	6/19/78	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
29	30	2	111	GTBK-DEC-POS *	Decimal point position indicator (1-5)
			S1 (15)	GTBK-VALUE	Data value (-999 to 9999)
31	31	1	99 COMP	GTBK-START-HOUR	Hour that sampling began if interval = 7; no. of observations composited if interval = C; otherwise zero
436	436	1	X	FILLER	Not in use
437	440	4	9(10)COMP	GTBK-DATA-CHKSUM	Checksum of first 109 words in the record

* GTBK-DEC-POS is the number of decimal places to the right of the implied decimal point. (For example, a value of 0001 with a DEC-POS of 3 is .001)

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB*NADB-GT-BULK	GTBK-CHKSUM-REC

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	6/19/78	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
01	440	440		GTBK-CHKSUM-REC	Redefinition of the bulk record to compute the checksum
01	04	4	9(10) COMP	GTBK-FW	Fullword overlay (occurs 109 times)
437	440	4	XXXX	FILLER	Not used for checksum

ENVIRONMENTAL PROTECTION AGENCY	SECTION User Generated Retrievals	SECTION 7	CHAPTER 2	SUBJECT 3
NATIONAL AIR DATA BRANCH	CHAPTER File Descriptions	DATE 3/28/80		PAGE 36
VOLUME III. AEROS SUMMARY AND RETRIEVAL MANUAL	SUBJECT SAROAD QUALIFIER NADB FILE NAME NADB-STE-INX	Update III-3		

FILE DESCRIPTION AND USE Sampling Site Description data from SAROAD "Site Identification" forms. Contains codes for state, area, site, agency, project, AQCR, county, EPA-region and SMSA. Contains city population, UTM and grid coordinates, latitude and longitude, supporting agency, site address, station type, AQCR population, elevation above ground and mean sea level time zone and comments.

USES: Used in the interactive system.

FILE TYPE
- ☐ SDF
  - ☐ PRINT FILE
  - ☐ PUNCH FILE
  - ☐ _____
- ☒ ASCII COBOL
  - ☐ SEQUENTIAL
  - ☐ DIRECT
  - ☒ INDEXED-SEQUENTIAL
- ☐ FORTRAN
  - ☐ FORMATTED
  - ☐ UNFORMATTED
  - ☐ _____
- ☐ OTHER _____

CATALOGUED FILE DESCRIPTION
- ☒ YES: FILE NAME NADB-DESC
- ☐ NO PROC NAME NADBSITEISAM

BLOCKING
- ☒ BLOCKED: 9 ☐ CHARACTERS ☒ RECORDS PER BLOCK
- ☐ UNBLOCKED

RECORD SIZE
- ☒ FIXED LENGTH: 421 CHARACTERS
- ☐ VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)
12 CHARACTERS LONG
CONTENT: STATE,AREA,SITE,AGENCY PROJECT

RECORDING MODE
- ☒ INTERNAL ☐ F ☐ [illegible]
- ☐ COMPACT ☐ U ☐ [illegible]
- ☐ CSH ☐ V ☐
- ☐ _____

FILE AVAILABILITY
- ☐ RESTRICTED
- ☒ PERMANENT
- ☐ TEMPORARY
- ☐ _____

STORAGE MEDIUM
- ☒ DISK
- ☐ TAPE ☒ LABELED ☐ UNLABELED
- ☐ CARDS
- ☐ Standard

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NA061 (PROGRAM NAME)

FILE SIZE: _____ AS OF _____

UPDATE FREQUENCY: Two weeks (TIME INTERVAL)

ANTICIPATED GROWTH: _____ ☐ RECORD ☐ TRACKS ☐ _____ PER _____

FILE BACKUP

TYPE: ☐ NONE ☒ SYSTEM ☐ SPECIAL

MEDIUM: ☐ CARDS ☒ TAPE ☐ DISK

LOCATED AT: _____

FILE NAME: NADB-STE-T

FREQUENCY: _____

NUMBER OF GENERATIONS KEPT:

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-STE-INX	SITE-REC

APPLICATION	DATE	PAGE 1 OF 3
SAROAD	January 19, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	421	421		SITE-REC	Site Record *
1	1	1	x	FILLER	Unused
2	13	12		SR-KEY	Identification Key
2	1Ø	9		SR-CODE	Code
2	3	2	x(2)	SR-STATE	State Code
4	7	4	X(4)	SR-AREA	Area Code
8	1Ø	3	x(3)	SR-SITE	Site Code
11	13	3		SA-AP	Agency/Project
11	11	1	x	SR-AGENCY	Agency Code
12	13	2	x(2)	SR-PROJECT	Project Code
14	18	5		PARTICULATE	Pollutant Type
14	14	1	x	P-SITE-TYPE	Site Type Code
15	15	1	x	FILLER	Blank
16	18	3	x(3)	P-EQUIP-CODE	Equipment Code
19	23	5		SO_2	Pollutant Type
19	19	1	x	SO_2-SITE-TYPE	Site Type Code
2Ø	2Ø	1	x	FILLER	Blank
21	23	3	x(3)	SO_2-EQUIP-CODE	Equipment Code
24	28	5		CO	Pollutant Type
24	24	1	x	CO-SITE-TYPE	Site Type
25	25	1	x	FILLER	Blank
26	28	3	x(3)	CO-EQUIP-CODE	Equipment Code
29	33	5		OX	Pollutant Type
29	29	1	x	OX-SITE-TYPE	Site Type
30	30	1	x	FILLER	Blank
31	33	3	x(3)	OX-EQUIP-CODE	Equipment Code
34	38	5		NO_2	Pollutant Type
34	34	1	x	NO_2-SITE-TYPE	Site Type
35	35	1	x	FILLER	Blank
36	38	3	x(3)	NO_2-EQUIP-CODE	Equipment Code
39	43	5		HC	Pollutant Type
39	39	1	x	HC-SITE-TYPE	Site Type
40	40	1	x	FILLER	Blank
41	43	3	x(3)	HC-EQUIP-CODE	Equipment Code
44	48	5		Pb	Pollutant Type

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-STE-INX	SITE-REC

APPLICATION	DATE	PAGE 2 OF 3
SAROAD	January 19, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
44	44	1	x	PB-SITE-TYPE	Site Type
45	45	1	x	FILLER	Blank
46	48	3	x(3)	PB-EQUIP-CODE	Equipment Code
49	51	3	x(3)	FILLER	Blank
52	59	8	9(8)	SR-CITY-POPL	City Population
60	61	2	x(2)	SR-UTM-ZONE	UTM Zone
62	69	8	x(8)	SR-UTM-EAST	UTM Easting
70	76	7	x(7)	SR-UTM-NORTH	UTM Northing
77	84	8		SR-LONGITUDE	Longitude
77	77	1	x	SR-LON-DIR	Longitude Direction
78	80	3	x(3)	SR-LON-DEG	Longitude Degrees
81	82	2	x(2)	SR-LON-MIN	Longitude Minutes
83	84	2	x(2)	SR-LON-SEC	Longitude Seconds
85	91	7		SR-LATITUDE	Latitude
85	85	1	x	SR-LAT-DIR	Latitude Direction
86	87	2	x(2)	SR-LAT-DEG	Latitude Degrees
88	89	2	x(2)	SR-LAT-MIN	Latitude Minutes
90	91	2	x(2)	SR-LAT-SEC	Latitude Seconds
92	92	1	x	SR-REGION	Region
93	96	4	x(4)	SR-SMSA-NBR	SMSA Number
97	157	61	x(61)	SR-SUPP-AGCY	Supporting Agency
158	223	66	x(66)	SR-COMMENT-1	Comment
224	289	66	x(66)	SR-COMMENT-2	Comment
290	314	25	x(25)	SR-ABV-ADDR	Site Abbreviation
315	355	41	x(41)	SR-ADDR	Site Address
356	357	2	x(2)	SR-STA-TYP	Station Type
358	361	4	x(4)	SR-CNTY-NBR	County Number
362	364	3	x(3)	SR-AQCR-NBR	AQCR Number
365	372	8	9(8)	SR-AQCR-POPL	AQCR Population
373	375	3	x(3)	SR-ELEV-ABOVE-G	Elevation Above Ground
376	379	4	x(4)	SR-ELEV-ABOVE-MSL	Elev Above Sea Level
380	381	2	x(2)	SR-TIME-ZONE	Time Zone of Sampling
382	415	34	x(34)	FILLER	Unused
416	421	6	x(6)	DATE-UPDATED	Date Record was Updated

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-STE-INX	STE-REC

APPLICATION	DATE	PAGE 3 OF 3
SAROAD	January 19, 1978	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
416	417	2	x(2)	MONTH	
418	419	2	x(2)	DAY	
420	421	2	x(2)	YEAR	

* Dummy records for each state are stored to allow positioning of the file at the beginning of a state. The key is the state code followed by 10 blanks.

FILE DESCRIPTION AND USE

Contains the monitored air pollutant and meteorlogical parameters their methods of collection and analysis and associated codes: name of parameter, name of collection method, name of analysis method, time-interval code, approximation to the minimum detectable value, reporting decimal point, standard units code, conversion factor for units.

USE: Input to all SAROAD reporting programs other than publication programs NA25Ø, NA217, and NA218.

Is used for Summary and Frequency File Creation.

FILE TYPE

- [ ] SDF
  - [ ] PRINT FILE
  - [ ] PUNCH FILE
  - [ ] ____
- [x] ASCII COBOL
  - [ ] SEQUENTIAL
  - [ ] DIRECT
  - [x] INDEXED - SEQUENTIAL
- [ ] FORTRAN
  - [ ] FORMATTED
  - [ ] UNFORMATTED
  - [ ] ____
- [ ] OTHER ____

CATALOGUED FILE DESCRIPTION

- [x] YES: FILE NAME NADB-DESC
- [ ] NO PROC NAME NADBPARAISM

BLOCKING

- [x] BLOCKED: 30 [ ] CHARACTERS [x] RECORDS PER BLOCK
- [ ] UNBLOCKED

RECORD SIZE

- [x] FIXED LENGTH: 94 CHARACTERS
- [ ] VARIABLE LENGTH: ____ THROUGH ____ CHARACTERS

KEY (IF APPLICABLE)

10 CHARACTERS LONG

CONTENT: POLLUTANT, METHOD, UNITS AND INTERVAL

RECORDING MODE

- [x] INTERNAL [ ] F [ ] AN
- [ ] COMPACT [ ] U [ ] AN
- [ ] CFH [ ] V [ ] AN
- [ ] ____

FILE AVAILABILITY

- [ ] RESTRICTED
- [x] PERMANENT
- [ ] TEMPORARY
- [ ] ____

STORAGE MEDIUM

- [x] DISK
- [ ] TAPE [x] LABELED [ ] UNLABELED
- [ ] CARDS
- [ ] Standard

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NAØ31B (PROGRAM NAME)

FILE SIZE: 1 POS AS OF 5/22/75

UPDATE FREQUENCY: As needed (TIME INTERVAL)

ANTICIPATED GROWTH: Minimum [ ] RECORD [ ] TRACKS [ ] ____ PER ____

FILE BACKUP

TYPE: [ ] NONE [ ] SYSTEM [x] SPECIAL

MEDIUM: [ ] CARDS [x] TAPE [ ] DISK

LOCATED AT: ____

FILE NAME: NADB-PARM-T

FREQUENCY: As needed

NUMBER OF GENERATIONS KEPT: 2

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-PARMFL	PARAMETER REC

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	June 5, 1975	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	94	94		PARAMETER-REC	Record
1	10	10		IR-KEY	Identification Key
1	5	5	X(5)	IR-POLT-COD	Pollutant Code
6	7	2	X(2)	IR-METH	Method
8	9	2	X(2)	IR-UNITS	Units
10	10	1	X	IR-INTVL	Interval
11	14	4	Comp-1	IR-CONV-FAC	Conversion Factor
15	18	4	Comp-1	IR-UR-MIN-DETC	Urban Minimum Detectable
19	22	4	Comp-1	IR-NU-MIN-DETC	Non-Urban Minimum Detectable
23	23	1	9	IR-UR-DP	Urban Decimal Point
24	24	1	9	IR-NU-DP	Non-Urban Decimal Point
25	26	2	X(2)	IR-STD-UTS	Standard Units
27	36	10	X(10)	IR-POL-NME-1	Pollutant Name Part-1
37	46	10	X(10)	IR-POL-NME-2	Pollutant Name Part-2
47	60	14	X(14)	IR-MET-COL	Method of Collection
61	94	34	X(34)	IR-MET-ANAL	Method Analysis

FILE DESCRIPTION AND USE

File contains pollutant code and the name of the associated pollutant.

USES: Accessed by five-digit pollutant code. Is used by standard retrieval programs and in editing routines also by programs producing a listing.

FILE TYPE

- [ ] SDF
  - [ ] PRINT FILE
  - [ ] PUNCH FILE
  - [ ] _____
- [x] ASCII COBOL
  - [ ] SEQUENTIAL
  - [ ] DIRECT
  - [x] INDEXED - SEQUENTIAL
- [ ] FORTRAN
  - [ ] FORMATTED
  - [ ] UNFORMATTED
  - [ ] _____
- [ ] OTHER _____

CATALOGUED FILE DESCRIPTION

- [x] YES: FILE NAME NADB-DESC
- [ ] NO PROC NAME NADBPOLTISAM

BLOCKING

- [x] BLOCKED: 10 [ ] CHARACTERS [x] RECORDS PER BLOCK
- [ ] UNBLOCKED

RECORD SIZE

- [x] FIXED LENGTH: 50 CHARACTERS
- [ ] VARIABLE LENGTH: _____ THROUGH _____ CHARACTERS

KEY (IF APPLICABLE)

5 CHARACTERS LONG

CONTENT: POLLUTANT CODE

RECORDING MODE

- [x] INTERNAL [ ] F [ ] AN
- [ ] COMPACT [ ] U [ ] AN
- [ ] CFH [ ] V [ ] AN
- [ ] _____

FILE AVAILABILITY

- [ ] RESTRICTED
- [x] PERMANENT
- [ ] TEMPORARY
- [ ] _____

STORAGE MEDIUM

- [x] DISK
- [ ] TAPE [x] LABELED [ ] UNLABELED
- [ ] CARDS
- [ ] _____

FILE CREATION AND MAINTENANCE

FILE CREATED OR UPDATED BY: NA032 (PROGRAM NAME)

FILE SIZE: 1 POS AS OF 09/4/75

UPDATE FREQUENCY: Irregular when new pollutant cataloged (TIME INTERVAL)

ANTICIPATED GROWTH: _____ [ ] RECORD [ ] TRACKS [ ] _____ PER _____

FILE BACKUP

TYPE: [ ] NONE [x] SYSTEM [x] SPECIAL

MEDIUM: [ ] CARDS [x] TAPE [ ] DISK

LOCATED AT: _____

FILE NAME: NADB-POLT-T

FREQUENCY: _____

NUMBER OF GENERATIONS KEPT: 2

FILE NAME/DESCRIPTION	RECORD NAME/DESCRIPTION
NADB-POLTFL	POLT-REC

APPLICATION	DATE	PAGE 1 OF 1
SAROAD	June 5, 1975	

RECORD POSITION FIRST	RECORD POSITION LAST	LENGTH	DATA ITEM PICTURE	DATA ITEM NAME	DESCRIPTION
1	50	50		POLT-REC	Record
1	1	1	x	PF-DELETE	Space
2	6	5		PF-KEY	Pollutant key
2	6	5	x(5)	PF-POLT-COD	Pollutant Code
7	50	44	x(44)	PF-POLT-NME	Pollutant Name

At the request of the EPA Office of General Counsel, procedures for the treatment of NEDS data claimed to be confidential have been restored to the policy in effect prior to January 1979. This policy provides for the following:

1. States may submit point source data with either a code 1 (some data claimed to be confidential) or a code 2 (no data claimed to be confidential) for each NEDS record. If no confidentiality code is specified, or an invalid code is specified the data will be treated as if code 1 were specified.

2. For NEDS report programs that print data for individual point sources with a confidentiality code 1, selected data items will not be printed unless the requestor uses a special control card code. The data items that are suppressed from being printed are boiler design capacity, emission estimation method codes for all five pollutants, percent space heat, annual operating rate, and hourly maximum design rate. This procedure prevents release of these data to non-EPA unauthorized users. Individuals who use the special control card code to print all data items are responsible for insuring that these reports are not released to unauthorized users.

3. Since as of October, 1980 it is impossible to identify which specific point source records have been claimed to be confidential, since the code 1 has not been treated as a valid confidentiality code since January 1979, the Office of General Counsel has requested that all records in the NEDS-USER file be changed to confidentiality code 1.

Thus, all data will be treated as being claimed to be confidential, pending changes to the data by the States as a result of their routine data submittals.

4. These procedures remain in effect pending any changes in rulings issued by the Office of General Counsel.

The most current information on the Comprehensive Data Handling System (CDHS) is contained in the following publications.

EPA-450/4-79-009, The Air Quality Data Handling System User's Guide
EPA-450/4-79-010, Air Quality Data Handling System (AQDHS-II) Test Run Series Documentation
EPA-450/4-80-007, Engineering Reference Manual for Coding NEDS and EIS/P&R Forms
EPA-450/4-80-009, Emissions Inventory System/Area Source User's Guide
EPA-450/4-80-010, Emissions Inventory System/Point Source User's Guide
EPA-450/4-80-018, Emissions Inventory System (EIS/AS) Test Run Series Documentation
EPA-450/4-80-019, Emissions Inventory System (EIS/PS) Test Run Series Documentation
EPA-450/4-81-009, Comprehensive Data Handling System (CDHS) Coding Manual

Any questions or requests for furthur information can be directed to:

CDHS Project Officer (MD-14)
National Air Data Branch
Environmental Protection Agency
Research Triangle Park, NC 27711

FTS: 629-5547
Commercial: (919) 541-5547

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO. EPA-450/2-76-009b	2.	3. RECIPIENT'S ACCESSION NO.
4. TITLE AND SUBTITLE AEROS MANUAL SERIES, VOLUME III: SUMMARY AND RETRIEVAL (Third Edition		5. REPORT DATE August 1981
		6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) National Air Data Branch		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Environmental Protection Agency Office of Air Quality Planning & Standards Monitoring and Data Analysis Division Research Triangle Park, North Carolina 27711		10. PROGRAM ELEMENT NO.
		11. CONTRACT/GRANT NO.
12. SPONSORING AGENCY NAME AND ADDRESS Same as above		13. TYPE OF REPORT AND PERIOD COVERED Final
		14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES

16. ABSTRACT

The AEROS Summary and Retrieval Manual, Volume III of the OAQPS Guidelines Manual Series, describes and illustrates the reporting and analysis capabilities of the various AEROS systems. It also describes the analysis packages available for use in the evaluation of AEROS data and describes the user access procedures for obtaining AEROS reports. It describes the standard publications available from the NADB to provide quarterly or annual information on emissions and air quality. In an applications section, the manual provides specific examples of applications of AEROS data. It also gives an overview of the Comprehensive Data Handling System (CDHS), which is an AEROS related system for storing and reporting air quality and emissions data.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Quality Data Data Base Retrievals Emissions Data Environmental Data System National Emissions Data System (NEDS) SAROAD		

18. DISTRIBUTION STATEMENT Release Unlimited	19. SECURITY CLASS *(This Report)* Unclassified	21. NO. OF PAGES
	20. SECURITY CLASS *(This page)* Unclassified	22. PRICE

EPA Form 2220-1 (9-73)

This Update Notice concerns the enclosed replacement for pages for Volume III of the AEROS Manual Series. Please remove and insert pages as listed below.

	REMOVE	INSERT	COMMENTS
1.	ix to xii	ix to xii	Table of Contents revised to reflect Update
2.		0.2.0-11 to 0.2.0-12	Update Notice III-5*
3.	2.1.0-1 to 2.1.0-2	2.1.0-1 to 2.1.0-2	Revised to reflect HC VOC change
	2.1.0-7 to 2.1.0-8	2.1.0-7 to 2.1.0-8	Revised to document new reports & selection capability
	2.1.0-15 to 2.1.0-17	2.1.0-15 to 2.1.0-17	Revised to reflect HC to VOC change & document addition of a new report
4.	2.1.1-1 to 2.1.1-12 2.1.1-17 to 2.1.1-22 2.1.1-25 to 2.1.1-28	2.1.1-1 to 2.1.1-12 2.1.1-17 to 2.1.1-22 2.1.1-25 to 2.1.1-28	Revised to reflect HC to VOC change & document addition of a new report
5.	2.1.2-1 to 2.1.2-6 2.1.2-11 to 2.1.2-27	2.1.2-1 to 2.1.2-6 2.1.2-11 to 2.1.2-31	Revised to reflect HC to VOC change & document addition of a new report
6.	2.1.3-3 to 2.1.3-4	2.1.3-3 to 2.1.3-4	Revised to reflect HC to VOC change & document addition of a new report
7.	2.3.0-5 to 2.3.0-8	2.3.0-5 to 2.3.0-8	New Report Programs
8.	2.3.1-9 to 2.3.1-10	2.3.1-9 to 2.3.1-10	New Report Programs

	REMOVE	INSERT	COMMENTS
9.	2.3.2-31	2.3.2-31 to 2.3.2-41	New Report Programs
10.	2.5.1-7 to 2.5.1-12	2.5.1-7	Revised to reflect VOC in NEDS
11.	4.1.1-3 to 4.1.1-4	4.1.1-3 to 4.1.1-4	Revised R.O. addresses
12.	4.2.3-1 to 4.2.3-4	4.2.3-1 to 4.2.3-4	Revised to document revised procedure
	4.2.3-11 to 4.2.3-12 4.2.3-35 to 4.2.3-38 4.2.3-49 to 4.2.3-114	4.2.3-11 to 4.2.3-12 4.2.3-35 to 4.2.3-38 4.2.3-49 to 4.2.3-109	Revised to reflect HC to VOC change
13.	5.1.0-1	5.1.0-1	Revised to reflect HC to VOC change
14.	5.1.1-1 to 5.1.1-8	5.1.1-1 to 5.1.1-2	Revised to reflect HC to VOC change
15.	7.2.2-3 to 7.2.2-12 7.2.2-19 to 7.2.2-24 7.2.2-31 to 7.2.2-34 7.2.2-43 to 7.2.2-46	7.2.2-3 to 7.2.2-12 7.2.2-19 to 7.2.2-24 7.2.2-31 to 7.2.2-34 7.2.2-43 to 7.2.2-46	Revised to reflect HC to VOC change

UPDATE SUMMARY

Volume III

Number	Date
III-5	9/23/82

BLT 11.9.82

*When you have made the changes indicated in this Notice, initial it in Chapter 0.2.0 of Volume III as a record of the Updates received and filed.

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