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Compliance Data System Users Guide

UPDATES AND REVISIONS TO THIS MANUAL

The Compliance Data System (CDS) User's Guide is updated periodically to document changes to the system. These changes occur whenever reporting requirements are altered or expanded; changes also occur whenever programming enhancements are made to the system.

If you would like to receive all updates and revisions to this manual, please make a copy of this page and mail it to:

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1.0 INTRODUCTION

This Compliance Data System (CDS) User's Manual is designed to be the primary source of user documentation regarding CDS. It replaces previous documentation, which should be discarded.

The Manual is organized to be used effectively by several groups of potential readers:

Managers and others wishing a basic description of CDS should read Sections 2, 3, and 4, Management Overview and System Applications.

Current Users who generally understand CDS will wish to skip to specific sections of interest, particularly Sections 7, 9, 10, and 11, Edit Processing and Retrieval Processing, which reflect recent changes due to changes at the Washington Computer Center.

New Users may wish to read the text in its entirety to obtain a working knowledge of CDS.

Those preparing Input Data should read Section 6, Data Input Preparation.

From time to time, revisions to the User's Manual will be issued, e.g. an addendum for headquarter guidance revisions, new SIGNON articles, etc. It is important that these revisions be entered and the old material discarded, as the new sections will reflect major changes.

The Authors of the Manual wish to thank the National Data Bank Coordinator (Franklin Smith) and other members of the DSSE and EPA region Offices who provided valuable assistance. Comments and suggestions should be directed to Franklin C. Smith at 202-755-0103.

2.0 MANAGEMENT OVERVIEW

The Compliance Data System (CDS) was developed for the Division of Stationary Source Enforcement (DSSE) by The Research Corporation of New England (TRC). The primary purpose of CDS is to assist the Environmental Protection Agency in carrying out its enforcement and surveillance programs.

CDS provides users with an effective tool for managing large quantities of non-parametric stationary source information in an efficient and expeditious manner. The system can store, update, and retrieve large quantities of data describing the compliance status and the enforcement activities of all major and many minor sources of stationary air pollution. Output reports from the system enable management to: (1) Maintain a complete inventory of facilities emitting regulated pollutants, (2) Assess enforcement strategies, (3) Monitor state and regional enforcement activities, and (4) measure compliance and enforcement progress.

2.1 Background History

CDS was developed by TRC for the Division of Stationary Source Enforcement in 1972 to assist EPA's Regional Offices in implementing their enforcement programs. The primary objective of EPA's stationary enforcement program is to bring about compliance with Federal and State emission requirements as stated by the State Implementation Plans (SIP), the New Source Performance Standards (NSPS), and the National Emissions Standards for Hazardous Air Pollutants (NESHAPS). State Agencies and EPA's Regional

Offices have coordinated their efforts to develop an enforcement management system which will ensure compliance with the emission limitations for all regulated pollutants.

CDS has been in operation for nearly seven years. Experience with the system has led to modifications and refinements of CDS which are described in detail in this documentation. During the six years of regular production runs, CDS has grown into a system widely used by all ten regions and numerous states.

2.2 System Purposes

Regional offices are using CDS in a number of ways in their enforcement programs. CDS is used primarily for the following reasons:

1. Provide an accurate and easily-accessible inventory of facilities subject to federal and state emission regulations and their compliance status with respect to these regulations.

2. Develop enforcement strategies by providing summaries of the compliance status of facilities tracked by CDS.

3. Provide a means for tracking numerous federal, state, and local enforcement actions both for historical purposes and for future scheduling purposes.

4. Assist the region in the preparation of various national reporting requirements.

5. Provide various turnaround reports to be used by states in fulfilling their reporting requirements to the region.

CDS is not designed to store large quantities of parametric emission data; instead, it is a management information system for tracking compliance and enforcement information in an easily-accessible manner. In effect, CDS is an automated tickler file which provides both historical and current record keeping capabilities.

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2.3 System Capabilities

CDS provides users with the capability to store, update, and retrieve information about all of the facilities placed on the CDS Masterfile. CDS is used to record information on identified major polluters; it provides information about the compliance status of these facilities; and it helps to track the enforcement actions taken by regulatory agencies against these facilities.

Eight different punched card formats are used to enter data into CDS via the Edit Program. On each of these card formats there are a number of data elements nationally defined and controlled; there are also a number of data elements which can be defined according to each regional user's needs. Since CDS can accommodate both types of data, it is a highly flexible system able to meet both national and regional needs.

The Update Program uses each of the different input card formats to add, change, or delete information on the CDS Masterfile. Once data is placed on the CDS Masterfile, the Retrieval Program can be used to create a wide variety of management reports based on the data on the Masterfile.

CDS's retrieval capabilities are highly flexible. Users can obtain reports based on all data on the CDS Masterfile or on only that portion of the data which meets user selection criteria. There are four fixed-format reports as well as two flexible format reports which can be designed to fit any particular user requirements. Once a user has determined which report format will fit his needs and has determined what portion of the Masterfile he wishes to include on the report, he can specify the sorting criteria for his report. Thus, the data can

appear in any desired sequence. Because of this flexibility, CDS has been able to adapt easily to changing reporting requirements.

2.4 System Functions

A number of computer programs have been developed to input, update, and retrieve CDS data. These computer programs as well as all associated data files are available at the EPA central computer facility. Currently, this facility is operated by Computer Network Corporation (COMNET). All regional users have computer terminals connected via telephone lines to COMNET's computers.

Input transactions prepared by regional users can be transmitted at any time to the central computer facility. Once there, transactions are validated by the Edit program. Valid transactions are stored for further use in the Update Cycle, and an Edit Report showing the Edit's action on each input transaction is returned to the user's terminal once the computer has executed the Edit program. Under normal operating conditions, one hour turnaround is available for the data submission procedure utilizing the CDS Edit.

Users may submit CDS input data via the Edit any number of times in between runs of the Update Cycle. At the central computer site edited data is stored for use by the Update. Under normal operating conditions, the Update Cycle is scheduled by the national Data Bank Coordinator (DBC) to run once a week on Wednesday nights. During periods of very high data entry activity,especially at the end of each quarter, more frequent updates may be scheduled at the discretion of the DBC.

All valid transactions saved since the last Update are applied to the CDS Masterfile.

The Update adds, changes, or deletes data on the Masterfile based on each transactions's Update Code. The Update produces an Update Report to show what action it took on each transaction. After each update cycle for which the user had input data, the DBC will run each region's Update Report, as described in Section 8.

Once data has been applied to the CDS Masterfile by the Update, users may request management reports via the Retrieval. The Retrieval extracts, sorts, and prints data from the most current version of the CDS Masterfile. Requests for retrievals may be made as often as necessary. Under normal operating conditions, quick turnaround is available for short retrievals.

Regional users are responsible for data submission and retrieval requests. The national DBC is responsible for scheduling update cycles and for maintaining adequate backup and security for computer programs and files stored at the central computer facility.

2.5 System Relationship to Other EPA Systems

Although CDS has a coding structure compatible with a number of EPA systems and can accept input data prepared by related systems, it is basically an independent management information system.

The inventory of facilities in CDS should correspond to the facilities registered in the National Emission Data System (NEDS). NEDS contains parametric emission data for sources of air pollution; CDS contains compliance and enforcement data for facilities. CDS uses the NEDS facility numbering

for a majority of its facilities and the SAROAD geographic codes for all of its facilities. In addition, the NEDS source number is carried as a retrievable data element on all CDS facilities.

A number of state systems are compatible with CDS. Some of the states using the Enforcement Management System (EMS) or a state version of CDS have a converter program which reformats EMS data to meet CDS input specifications. With the EMS-to-CDS Converter, compliance and enforcement information from a state is placed directly into CDS with little data input preparation needed on the part of the region. However, the region is still required to perform the review functions necessary to verify the accuracy of the reported data.

3.0 SYSTEM APPLICATIONS - What can CDS do for you?

CDS is a management information system designed to track large quantities of compliance and enforcement information for stationary sources of air pollution. With the flexible retrieval capability, CDS can produce reports for a wide variety of users.

3.1 General Applications

A great deal of information must be readily available to those responsible for conducting a successful enforcement program for stationary sources of air pollution. Management must be able to:

1. Identify those sources of pollution which are affected by federal, state or local emission regulations. CDS provides an inventory of these facilities and a fast retrieval capability for details about them.

2. Develop counts of various types of facilities which are in compliance, out of compliance, and of unknown compliance status with state, local and federal regulations. CDS provides both milestone (summary) reports and listings of facilities falling into the various compliance categories.

3. Monitor a wide variety of enforcement actions. CDS can track enforcement actions scheduled into the future and also it can provide an historical record of actions scheduled or achieved in the past.

4. Prepare special reports. With the retrieval capability, CDS can be used to prepare special reports based on standard industrial class (SIC) codes, on New Source Performance Standards, or on any other criteria based on user needs.

5. Coordinate with state and local enforcement programs. In some states, enforcement and compliance information can be fed directly from the state into CDS. In all states, CDS can provide highly effective turnaround documents used by states for providing the region with new or additional enforcement information.

6. Anticipate future enforcement requirements. CDS has a great deal of built-in flexibility, and also is being constantly upgraded to meet current and anticipated user requirements.

3.2 Examples of Specific Applications

Once a regional user has an accurate inventory of his region's facilities registered on the CDS Masterfile, he can obtain a wide variety of management reports. The following is a partial list of some specific user needs met by CDS:

- CDS can produce a milestone report showing the number of major facilities determined to be in compliance with SIP standards or scheduled increments of progress by state, or other geographic breakdown.

- CDS can produce lists of all major sources of air pollution. Listings can be broken down by a wide variety of criteria, such as major/minor, compliance status code, attainment/non-attainment, federal/non-federal, etc. Sub-totals and totals can be developed on any user-selected criteria.

- CDS can identify sources inspected by regional and/or state personnel in both attainment and non-attainment AQCR's.

- CDS can list the enforcement actions taken, or about to be taken, by the EPA to ensure compliance in both attainment and non-attainment AQCR's.

- CDS can be used to track a large number of actions, such as formal inquiries (114 Letters), field surveillances, notices of violation, abatement orders, etc. Once a region has determined what actions it wishes to track in CDS, CDS can provide users with a history of past actions and also a schedule of actions to be performed.

- CDS can be used to prepare milestone reports and lists of facilities subject to SIP regulations, NSPS regulations, NESHAPS regulations and PSD regulations.

- CDS can be used to prepare industry studies or summaries based on the Standard Industrial Class Code (SIC) or on the Standard Classification Code (SCC) for certain processes.

The types of reports that CDS can generate in aiding management in its enforcement activities are virtually limitless. Once a user has determined what his information needs are, he can use a large number of both fixed format and user-defined data elements as input to the system. After the data has been placed on the CDS Masterfile, the user can select, sort, and format the data on the Masterfile according to his needs.

In one retrieval, sources can be selected by State, AQCR, City, and/or County, industrial category, emission size, pollutant, SIP regulation number, federal or non-federal facility, compliance status or any combination of retrievable data elements. The user, by matching the selection criteria which he has chosen, could get a Source Data Report which provides all data stored in the system. This might include compliance information with respect to all applicable SIP regulations for all emission points within the facility. Or, since such an extensive report is seldom needed by program managers except perhaps for special studies, he could request a Quick Look Report to obtain a concise listing of sources displaying only a few pieces of needed information. For example, if he needs to have a list of major sources of air pollution within a particular State or AQCR, he could get a Quick Look Report which displays each of these facilities and information he wants to know such as name, location, or compliance status, on a single line. The program manager can quickly scan the list to obtain his desired information.

The process of obtaining compliance information is long and tedious. The number of point source facilities in a State may range from as few as 10 to over 1,000. Data is subject to constant change. With the help of CDS, the initial data base can be established and future processing will be simplified since needed reports can be generated quickly, and since only new or changed information need be entered or updated.

Inspections, legal actions, monitoring of compliance schedule progress, and other agency actions are reported to Region Offices by the State. These actions are entered into the CDS data base and may be summarized by State, AQCR or any other basis for review by Regional management. In addition, Compliance Schedules may be entered into the data base in their entirety, including events which are scheduled for the future. CDS can print out a Quick Look Report for the State giving the current status of Compliance and listing actions scheduled to occur during a reporting period. The report can be formatted as a means for State reporting on the schedule status or as a means of monitoring of State scheduled enforcement.

Besides monitoring State progress in assuring that sources meet schedules, CDS can be used to overview State inspection programs for sources already in Compliance. Reporting can be accomplished in the same way as reporting on Compliance schedules. If, for example, a State is committed to inspecting major facilities at least once a year, the Regional Office can periodically send the State a CDS listing of those facilities scheduled for inspection. The State would indicate on the printout whether or not the inspection actually was conducted. Reporting on source tests and other actions can be handled in the same manner.

CDS can also print out a special list of facilities of unknown Compliance status. A State can be sent a printout for further information on the listed sources. If the State does not provide the information in the requested reporting time, EPA can use the same list to initiate a field inspection program to resolve the Compliance status.

CDS can be used to follow-up on sources out of Compliance. CDS can provide a printout of the problem facilities. EPA can then assign a priority ranking to these facilities for future actions.

When an order is issued by EPA or a court, follow-up is essential to ensure that the required steps in the order are achieved. CDS's tracking system can be used for monitoring State Compliance schedules to relieve Program Managers of the burden of increasing numbers of Enforcement actions and increments of progress.

By entering all enforcement actions and scheduled field activities, CDS becomes a tool that can assist personnel at all levels of environmental enforcement. Project managers can determine the workload facing their staff during a coming month by obtaining a CDS report on all EPA actions scheduled during the month. Inspectors can be provided with reports of the date and results of the last inspection of all sources in their assigned area. Another useful report is a complete date sequenced list of scheduled source tests, facility start-ups, control equipment installations, and inspections. Some jurisdictions use CDS printouts as turn-around documents, eliminating the need for special reporting forms.

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4.0 SYSTEM OVERVIEW

The Compliance Data System provides regional users with the ability to store, update, and retrieve large quantities of data necessary for running an enforcement program. To meet these objectives, CDS has been designed to perform three distinct functions: edits, updates, and retrievals.

Regional users are responsible for preparing data for CDS in order to maintain an up-to-date Masterfile. Data preparation involves both coding of information and the preparation of turnaround documents which can be used by state and local enforcement agencies. Once input data has been updated, regional users are responsible for the preparation of all retrieval requests from the system.

National headquarter responsibilities include the following:

- Developing and maintaining all CDS programs, data sets, and table values.
- Scheduling all update cycles.
- Providing definition and usage of all nationally controlled data elements.
- Establishing retrieval guidelines for meeting national reporting requirements.
- Providing user training for any region requesting training.
- Responding to regional requests for system modifications.
- Coordinating state data input procedures, especially with the EMS-to-CDS Converter.

The following paragraphs describe the edit, update, and retrieval functions; subsequent sections of this manual will describe in detail the operational usage of the computer programs which perform these functions.

4.1 Edit Program

Stationary source data is initially processed for the Masterfile by the CDS Edit Program. Regional users gather data concerning stationary sources of air pollution and then prepare this data in a format acceptable to the Edit Program. There are eight fixed card formats available to the user for preparing data as input transactions to the Edit Program. Whenever the user has a sufficient amount of data to be submitted, he initiates the Edit Program by submitting the keypunched input transactions together with the appropriate Job Control Language to his region's computer terminal.

The Edit Program examines every input transaction prepared for the system and produces an Edit Report for each Edit Program that is run. If an input transaction has no edit error messages next to it on the Edit Report, it is a valid transaction. Transactions in error will have one or more edit error messages next to it on the Edit Report. Errors are identified as either "Warning" or "Fatal".

The Edit Program stores all valid transactions on a MOD File until the next scheduled Update Program. One or more fatal errors will prevent a transaction from being saved for the Update Program. A transaction with only warning errors will be saved for the weekly update, but the data elements in error are blanked out.

The Edit Program can be run as often as necessary in between update cycles. Each time that the Edit is run, an Edit Report is immediately produced and sent to regional users for review.

4.1.1 Input Data Processed by CDS

Data is input to the Edit Program on punched cards or 80 character card images on tape or disk. There are eight fixed card formats, described in detail in Section 6, that are validated by the Edit Program. These cards provide the following general information:

- Cards 1 and 2 provide facility (source) level data for this system.
- Card 3 provides pollutant compliance data for the facility.
- Card 4 is a facility comment record which provides additional information about the source.
- Card 5 provides descriptive emission point data for various pollutants.
- Card 6 is a point comment record which provides additional information for a given emission point.
- Card 7 describes specific enforcement actions for a given emission point.
- Card 8 is an action comment record which provides additional information for an action record.

4.1.2 Edits Performed by CDS

The CDS Edit Program examines and validates all input transactions processed on the eight fixed card formats. Errors are classified as either "Warning" or "Fatal" and will appear on the right side of the Edit Report next to the transaction containing the error. Warning errors will have one asterisk preceding the error message; for example, *INVALID POLLUTANT CODE. Fatal errors will have three asterisks preceding the error message; for example, ***INVALID STATE CODE. The data element in error will have asterisks directly beneath it on the Edit Report printout line. A transaction with multiple errors will have multiple error messages.

If an input transaction has no edit error messages next to it on the Edit Report, it is a valid transaction and will be stored on the MOD File for processing in the next Update Cycle. One or more fatal errors next to a transaction will cause the transaction to be rejected by the Edit Program. Consequently, a transaction with one or more fatal errors will not be stored on the MOD File for processing by the Update Cycle. A transaction with only warning errors will be acceptable and stored on the MOD File, but the data elements in error will be blanked out.

Each card type has its own validation procedure within the Edit Program. Certain data elements, such as County Code, AQCR, Action Type, Results Code, and Personnel Code are validated by external table look-up procedures. To make a new code valid for any of these data elements, the national DBC must update the appropriate table so that it will contain the new value. Other data elements, such as Region, State, Compliance Status, Emission Category, etc., are validated by internal computer tables. These edits can be changed only by changing the Edit Program logic. Only the national DBC has the authority to change these edits.

Although the Edit examines all input transactions for possible key-punching and coding errors, the program has its limitations. The Edit cannot detect valid but incorrect Update Codes; only the Update Program can determine whether it is possible to add, change, or delete a record on the CDS Masterfile. The Edit cannot detect certain errors caused by punching data into the wrong card columns; if a valid date is placed in the Date Achieved columns, but the user meant to place the value in the Date Scheduled columns, the Edit will accept the data element as valid.

Even those transactions containing no Edit Errors should be examined by new users to make sure that they are preparing data for the system properly.

Figure 4-1 is a flow chart of the Edit Program. Input to the Edit consists of the various input card formats together with the appropriate Job Control Language needed to run the program. During the program, a number of external table files are used for validating changeable data elements, such as Action Type. These are four outputs from the program:

- o The Edit Report.
- o The MOD File containing all valid input transactions. With each run of the Edit, additional valid transactions are stored here until the update cycle applies these transactions to the Masterfile.
- o An Edit Log showing statistics, such as cards input, cards accepted, and cards rejected. These numbers are printed at the end of the Edit Report.
- o An optional Error File containing all records with fatal errors. This file may be placed on a WYLBUR data set for correction by those users familiar with WYLBUR usage.

4.1.3 Edit Error Messages

The Edit Program identifies the two kinds of errors, warning and fatal, made on the eight fixed card formats submitted as input data transactions. An error message describing the cause of the error will appear on the right hand side of the Edit Report preceded by one or three asterisks as explained in Section 4.2.2. Typical error messages are listed below.

FATAL	WARNING
*** INVALID STATE CODE	* SIC CODE SHOULD BE NUMERIC
*** LINE NUMBER MUST BE NUMERIC	* INVALID SIP CODE
*** DO NOT DELETE ØØØ	* INVALID POLLUTANT CODE

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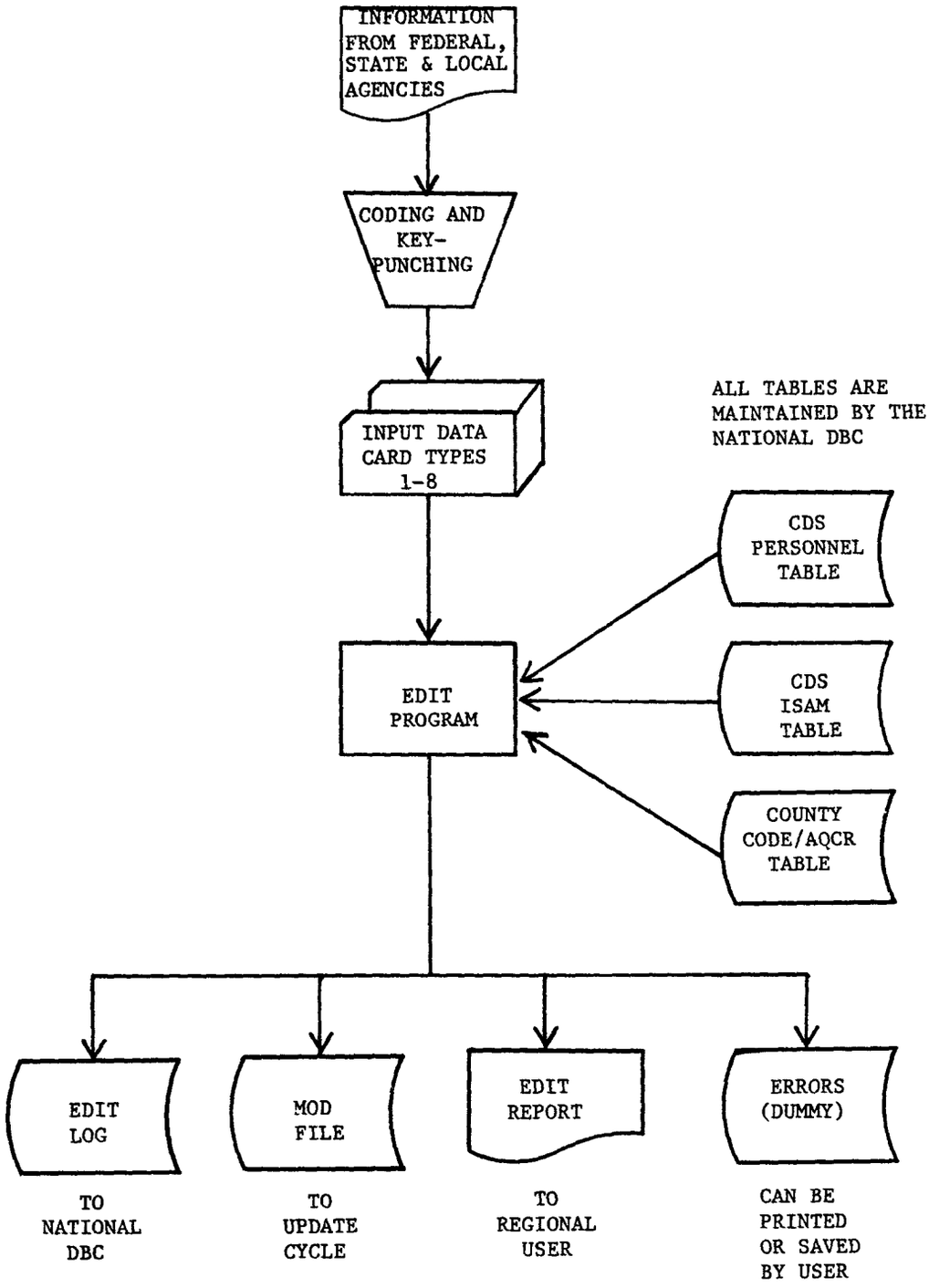
FIGURE 4-1

EDIT PROGRAM FLOW CHART



Valid values which can be entered on the card formats for each data element are listed in Appendix A. Each Data Element Sheet lists the appropriate coding values and coding considerations necessary for preparing card formats and for making corrections.

4.1.4 CDS MOD File

The CDS MOD File resides on a disk storage device. Input transactions validated by the Edit Program are saved on this file for use by the weekly update cycle. At the end of the update cycle, the data on the MOD File is erased to make room for input transactions for the next update cycle. As Edit Programs are run by the numerous regional users, transactions with non-fatal errors are added to this file. Any number of data submissions may be made to the Edit in between one update cycle and the next. Each submission adds additional data to the MOD file. At the beginning of the next update cycle, the data on the MOD File is copied to magnetic tape. Then the transactions on the file are sorted into Region, State, County, Source, Point, and Action Number order. Within this major sort key, transactions are also sorted by Update Code and by chronological order. For transactions with the same record ID (Region, State, County, Source, Point, and Action Numbers), delete transactions are applied first, then new transactions, and finally change transactions. For transactions with the same record ID and the same Update Code, transactions are applied chronologically.

In the past, only the last input submission via the Preliminary Edit would reach the Update since each input submission overlaid the previous input submission. With the MOD File, input transactions do not overlay

previous submissions; instead, input transactions are added to the file and are saved until the update cycle.

Once a transaction has been added to the MOD File, it is no longer necessary to resubmit the transaction again when additional transactions are being submitted for the same update cycle. However, the user should keep input transactions on cards or other information storage devices for at least one month for security and backup purposes.

4.2 Update Program

The CDS Masterfile is updated once a week by the Update Program. All transactions stored on the MOD File by the various runs of the Edit Program are processed by the Update Program. This is usually scheduled to run once a week on Wednesday nights by the national Data Bank Coordinator (DBC). Input to the update is the old (preceding week's) Masterfile and the week's input transactions placed on the MOD File by the Edit Program from all regional users. Output from the Update is an updated Masterfile and ten regional Update Reports.

Once the update cycle is complete, each regional user who had input data for the Update Program must request his regional Update Report. This report shows what action the Update Program took on each transaction passed to it by the various Edit runs. Whenever the Update Program cannot process the add, change, or delete transaction specified by the user, a reject message will explain why the transaction was not applied to the Masterfile.

4.2.1 Update Actions to CDS

Card types 1 through 8 processed by the Edit Program are used to add, change or delete information on the CDS Masterfile. The Masterfile contains records which correspond to the input card types. Input transactions perform the following functions:

NEW — When an Update Code "N" is used in the Update Code Column, the input transaction will add a new facility, point, action, or comment record to the CDS Masterfile.

CHANGE — The Update Code "C" is used to change one or more data elements on an existing Masterfile record.

DELETE — The Update Code "D" is used to delete one or more Masterfile records for a given facility.

4.2.2 Update Cycle Steps

In addition to applying input transactions to the CDS Masterfile, a number of other steps are taken in each update cycle:

- Input transactions from the MOD File are saved on tape.
- Input transactions are sorted into the same sequence as the Masterfile.
- A number of table lookups are performed during the Update.
- The CDS Masterfile is copied to ten regional disk Masterfiles.
- The MOD File transactions are erased to make room for the next cycle's input transactions.

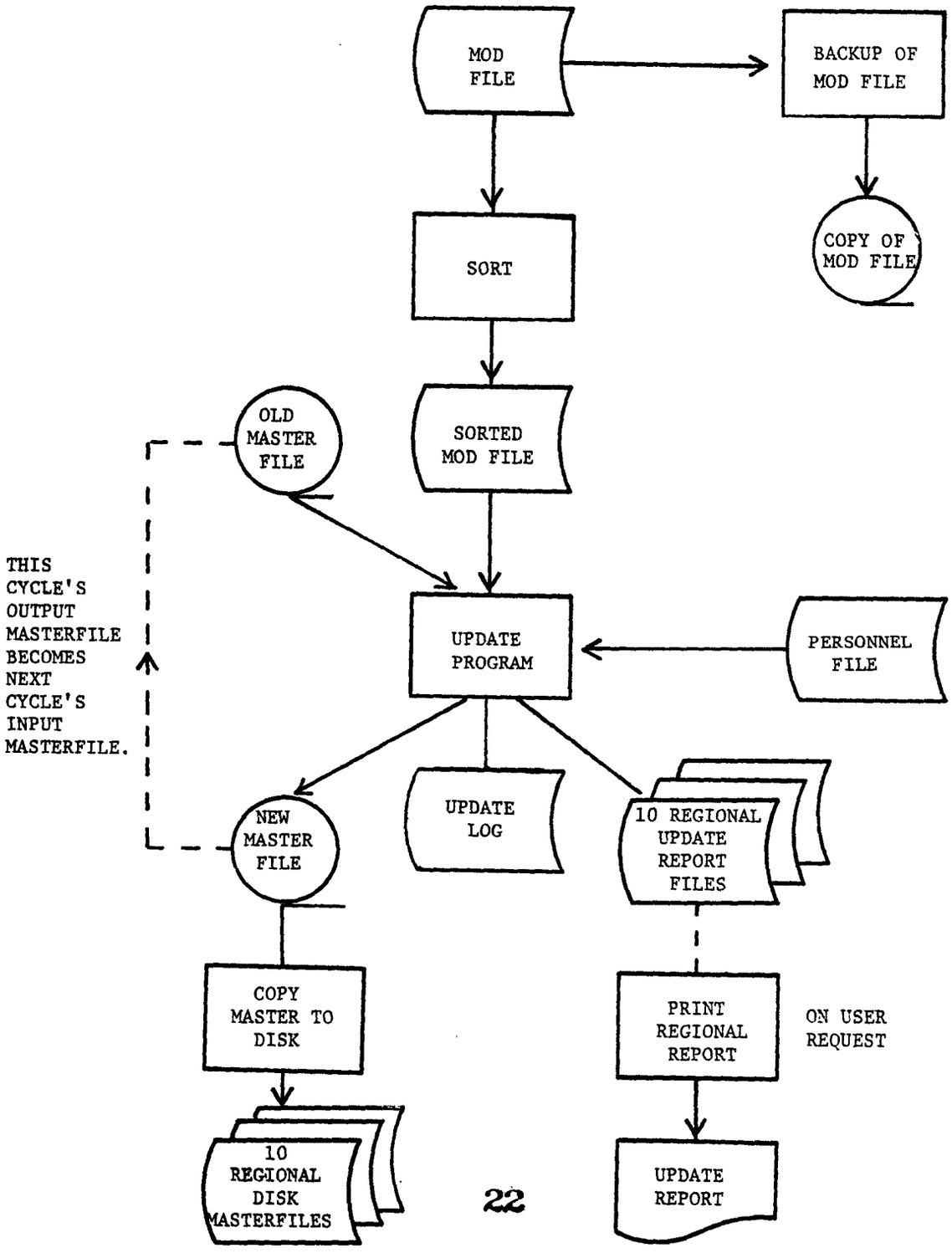
Figure 4-2, Update Flow Chart, shows this process.

4.2.3 Update Report Messages

On the Update Report there are several column headings which indicate what action has been taken by the Update Program on each transaction passed by the Edit. A normal Update Action Message is

FIGURE 4-2

UPDATE FLOW CHART



ADDED, CHANGED, or DELETED and indicates a successful Update Action. The word REJECT in the Update Action Column indicates that the Update Program could not perform the appropriate add, change or delete as indicated in the Update Code column. For each rejected transaction, there is a diagnostic error message printed out under the Error Message column.

Typical Update Error Messages are listed here.

- SOURCE NOT ON FILE
- POINT NOT ON FILE
- DUPLICATE TRANS
- ALREADY ON MASTERFILE.

When an ampersand appears in the Error Message column, it indicates that multiple changes have been applied to the Masterfile in chronological order. A complete listing of Update Error Messages and their causes is given in Section 8.

A column marked "ORIG" indicates the origin of the input transaction. The following values are used:

ORIG	Origin
blank	Regional input
HQ	Headquarters
GN	System generated
SC, TN, NE, etc.	For those states who have direct access to CDS, the state code is displayed to indicate the state entering the data.

4.2.4 The CDS Masterfile

The CDS Masterfile resides on magnetic tape. It contains data for stationary sources of air pollution for each of the ten EPA regions using CDS. Over 50,000 facilities exist on the Masterfile. For each facility there are a number of Masterfile records containing facility, emission point, action, and comment information. Data from each card type is placed on one of 7 Masterfile record formats. These Masterfile record formats are numbered 20, 21, 30, 34, 35, 46, 47 for internal computer identification purpos

The 7 Masterfile record formats contain the following general information:

- Record 20 contains facility level data from Cards 1 and 2. Each facility has one Record 20. Region, state, county, and source numbers identify a unique facility.

- Record 21 contains comment information for the facility record. Up to ten comments may be used for each facility. Each Card 4 added to the Masterfile creates a corresponding Record 21.

- Record 30 is the pollutant compliance record. One of these records is present whenever card 3 input is submitted to CDS. Data for up to 10 pollutants can be placed on this record.

- Record 34 is an emission point record created from the Card 5 input transaction. For a given facility there may be up to 1,000 emission points; each is identified by a sequential Emission Point Number. Emission Point 000 contains compliance data for the entire facility. The use of this special point is described in more detail in Section 3.

- Record 35 contains comment information for an emission point. Each emission point may have up to ten comments. Each card 6 added to the Masterfile creates a corresponding Record 35.

- Record 46 is an action record created from the Card 7. For a given emission point there may be up to 98 actions; each is identified by a sequential Action Number.

- Record 47 contains comment information for an action record. Each action may have up to 10 comments. Each Card 8 added to the Masterfile creates a corresponding Record 47.

Figure 4-3 shows the hierarchical relationship between the various masterfile record types.

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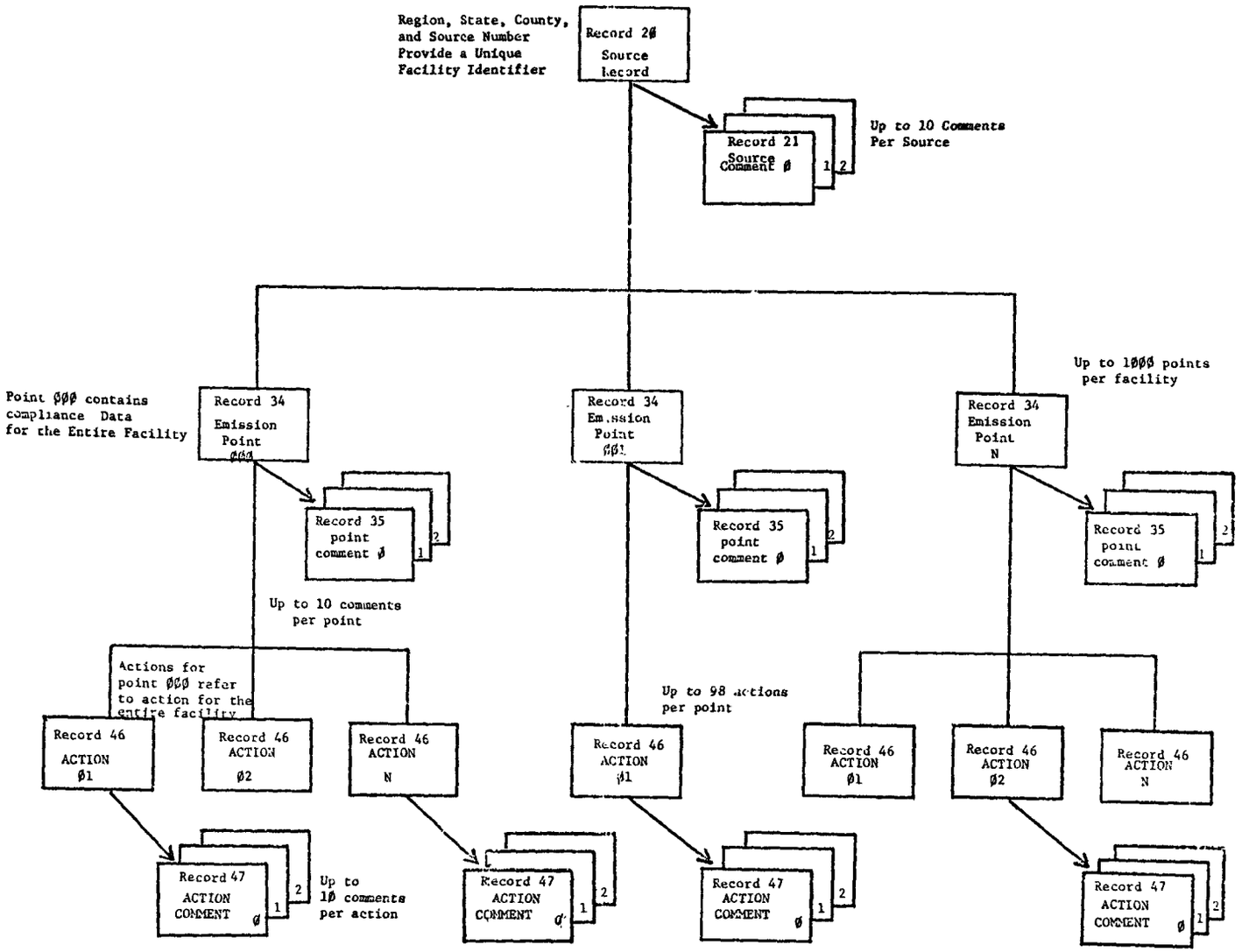


FIGURE 4-3

MASTERFILE HIERARCHY

4.2.5 Regional CDS Masterfile

In one of the last steps of the Update Program, the update CDS Masterfile is copied to create 10 separate regional Masterfiles, each of which resides on a disk storage device. Each of these files contains the most current version of the CDS Masterfile for only one region. All retrieval requests are based on the data contained on the regional Masterfiles.

Users should note that input transactions processed by the Edit are not retrievable until after the transactions have been applied to the regional Masterfiles by the update cycle.

4.3 Retrieval Program

The CDS Retrieval Program is used to prepare management reports based on the CDS Masterfile and was designed to meet the specific requests of regional users. All output reports, other than the Edit Report and the Update Report, are available on request from the Retrieval Program. These requests may be made at any time since they are processed independently of the Update Program. The Retrieval Program will produce the following management reports:

- Source Data Report
- Action Summary
- Questionnaire
- Milestone
- Quick Look Report
- Double Spaced Quick Look Report
- Compliance Action Report

4.3.1 Description of Reports Available from Retrieval Program

The retrieval capabilities of CDS are designed for maximum flexibility so that the user may design the output format to fit his own particular need. In addition, the amount of information retrieved for each source

is also determined by the user to meet his needs. This section briefly describes the principal reports which Region Management can request from CDS. Complete details regarding content of the reports and the means to obtain them can be found in Section 9.

Quick Look Report

The Quick Look Report is designed to print only some data elements for selected sources. This report is the most widely used of the seven reports formats available. Although all the data for a selected source is valuable, report requirements can often be met with a short report which shows only a few user-selected data elements. For example, management may need a report showing only the name, address, and compliance status of all the major facilities within a state. With the Quick Look Report, a user can easily format a report which contains only name, address, and compliance status. Not only can users select via the Retrieval's selection logic what facilities should appear on a report, but also they can select the data elements to be printed for these selected sources. Up to fourteen specified source, point and action data elements for a facility may be included on a single print line so long as this print line occupies 132 or fewer print positions.

Because of its flexibility and versatility, the Quick Look Report is the most commonly used CDS report format. It enables the user to see only those data elements which he needs to deal with a particular problem. The Quick Look Report can be used as a forecast report, a turnaround document, or whatever management report the user has a need for. This report can produce totals, subtotals, and pagebreaks as needed.

A variation of this report is the Double Spaced Quick Look which is identical to the Quick Look except that the user obtains double spacing. This feature is especially useful when the Quick Look is used as a turnaround document.

Because of space limitations, comment level data is not available on Quick Look reports.

Source Data Report

The Source Data Report is a complete listing of all data in the system regarding a specific facility. The report includes all facility, point, and action data for those facilities selected in the retrieval. In addition, comments at any of the three levels (facility, point, or action) are printed on the report. The Source Data Report can be sequenced in any user specified order such as Source Name, State, City, etc.

Action Summary Report

The Action Summary Report provides two lines of printed data about specific actions for which the user requires information. This report summarizes action data recorded on the Masterfile by Action Type. The user may vary the kind and amount of information printed on the report by his choice of selected criteria. For example, actions to be included on the report can be varied by dates. If a six-month period is selected, the actions summarized on the report will include only those which were scheduled during that period. The Action Summary Report can also be used as a turnaround document which can be sent to a State, filled in by the State, and then returned to the Regional Office.

Questionnaire Report

The Questionnaire Report was designed for Regional Offices to be used as a turnaround document. Its primary use is to show the status of various actions which are expected to be performed by a State within a specified period. Identifying data is printed on the Questionnaire

which is then sent to the State Agency for completion. After the State returns the filled-in report, the data can be keypunched for re-entry into CDS to update the Masterfile.

Milestone Report

The Milestone Report is a statistical report which enables Regions to evaluate the progress and effectiveness of State Enforcement Programs. The Standard Milestone provides a tally of the Compliance Status Codes for each state within a region based on the selection criteria specified on the input cards. This report can be used in conjunction with the Quick Look Report to substantiate the numbers on the Milestone Report. In this manner, the Milestone Reports provide Regional managers with a means to meet National Reporting requirements. The variable Milestone provides a tally of any two user-specified data elements in the system. For example, users may need a count of all action types by month achieved, a count of all SIC descriptions by AQCR, and a count of sources within a county by major and minor emission categories. The Milestone can provide each of these totals for the user.

Compliance-Action Report

The Compliance-Action Report summarizes the compliance status and enforcement actions for selected facilities on the CDS Masterfile. Source level information and compliance information is listed on one print line with the date achieved for the following actions:

- Inspections
- Notices of Violation
- Orders Issued
- Court Actions
- Terminations of NOV's

Because this report has been designed to meet specific enforcement action reporting requirements, all reportable totals are generated at the end of the report.

4.3.2 Retrieval Steps

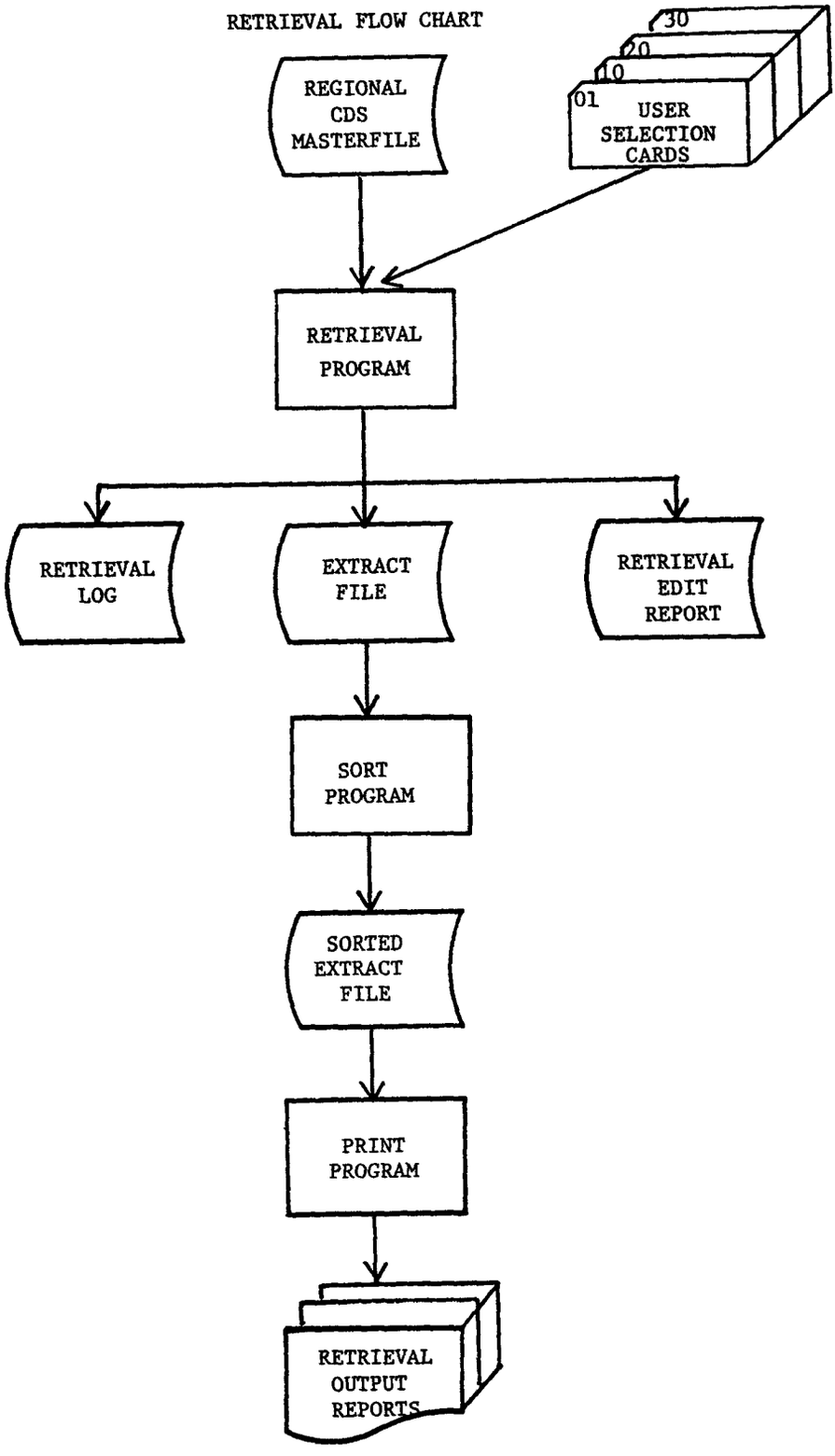
Each time a user requests a management report via the Retrieval, the following steps are taken by the various computer programs constituting the Retrieval:

- Retrieval selection cards are checked for validity. An Edit Report page is printed to show the logic used in preparing the Retrieval.
- CDS regional Masterfile records which satisfy all of the user's selection criteria are placed on a temporary extract file.
- Extracted records are sorted into a user-specified sort order.
- Sorted records are formatted for printing into user-specified print formats.

Figure 4-4, Retrieval Flow Chart, shows this process graphically.

FIGURE 4-4

RETRIEVAL FLOW CHART



5.0 DATA SUBMISSION PROCEDURES

5.1 Submission Steps

The following ten steps describe the procedures for using the Compliance Data System. These steps outline in chronological order a general summary of how CDS should be used by Regions. A detailed description of each step is provided in Sections 6, 7, 8 and 9.

1. Prepare Data. Fill out the appropriate coding sheets as described in Section 6.Ø. Have the coding sheets keypunched.

2. Run the Edit Program. After the CDS punch cards have been returned, prepare the appropriate Job Control Language (JCL) cards for running the Edit Program. The JCL for running the Edit is shown in Figure 7-2 on page 7-9. Submit the JCL and input punch cards to the computer. Submissions should be made on a priority basis since the Edit is inexpensive to run (approximately $2.ØØ per 1,ØØØ cards with PRIORITY =5). With a priority, the Edit will run prior to the update cycle, and thus the input data will be applied to the current week's update cycle.

   Since multiple runs of the Edit Program can be made in between update runs, experience indicates that it is best to submit data in several smaller batches during the week as soon as data is returned from keypunching.

3. Examine Edit Report. When the Edit Program is completed, the user must examine the Edit Report to determine if there were any edit errors on the input data. All transactions submitted to the Edit are listed on the Edit Report; transactions which are error-free have no error messages printed on the right hand column labeled "Error Messages". The format of the Edit Report is given in Figure 7-1 on page 7-6. It should be noted that the County Name generated by the Edit appears directly beneath the County Code for error-free Card 1 transactions with an Update Code "N".

   The Edit program identifies two types of errors, warning and fatal. Warning errors are identified on the report by an error message preceded by a single asterisk (such as "* INVALID STAFF CODE"). The Edit will blank out the data element in error but the transaction will be passed to the output MOD File for processing in the Update Cycle. One warning message is issued for each data element containing a non-fatal error.

   Fatal errors are identified on the report by an error message preceded by three asterisks (such as "*** INCORRECT COUNTY CODE FOR STATE"). One or more fatal errors on a transaction will prevent that transaction from being placed on the MOD File, and consequently, the transaction will not reach the update cycle.

Table 7-1 gives a complete list of all errors identified by the Edit Program.

For both warning and fatal errors, asterisks are placed directly underneath the data element found to be in error. These asterisks are designed to identify the data element which needs to be corrected.

4. Correct Edit Errors. Once edit errors have been located on the Edit Report, they must be corrected and resubmitted in another run of the Edit Program. All errors should be coded, keypunched, and submitted to CDS by repeating steps 1, 2, and 3 described above. Keep in mind that all valid data from the previous run of the Edit Program are saved on the CDS MOD File. Once valid data has been accepted by the Edit, the data does not have to be resubmitted again. Only corrections and data not yet submitted to the Edit should be entered after steps 1, 2, and 3 have been performed.

5. The Update Cycle. All valid transactions submitted by the Edit in between update cycles are stored on the MOD File. Once a week, usually on Wednesday night around midnight, the valid transactions on the MOD File are applied to the CDS Masterfile by the Update Program. Because of this schedule, it is important for users to have all of their weekly input ready on or before Wednesday noon.

   The scheduling and the maintenance of the update cycle is the responsibility of the national Data Bank Coordinator. Under unusual circumstances, the update cycle may be run more often than once a week. When holidays prevent a Wednesday night update cycle or when a special update cycle is scheduled, the national Data Bank Coordinator will inform all CDS users of the schedule change.

6. Verify Update Run. The national DBC will route a copy of the Update Report to the user's terminal by noon on Thursday. If the user has not received his report by noon, he should verify that the update cycle has run successfully and that the Update Report is available for this Region. Figure 8-2 shows the data set retrievable via COMNET under the name CN.EPAEXC.AØ26.CDS.SYSOUT This data set shows the date, the time, and the output serial number of the most recent update cycle. It shows which Regions participated in the update, and also it shows the number of transactions input to the update and the number of transactions accepted and rejected by the update for each Region.

7. Examine Update Report. The Update Report has one print line for each transaction sent to the Update Program by the Edit Program. Next to each transaction on the report there is an Update Action which shows that the transaction was either added, changed, deleted, or rejected from the CDS Masterfile. If the transaction was rejected, there will also be an error message explaining why the transaction could not be added, changed, or deleted. See Figure 8-1 for a sample Update Report.

8. Correct and Resubmit Update Errors. Transactions passing all of the validation routines of the Edit Program may still be rejected by the Update Program. The Update rejects all logic errors caused by an incorrect Update Code on the transaction; for example, the Update cannot apply a change transaction to a record which does not exist on the Masterfile. Table 8-1 shows the Update Error Messages generated by the Update.

   All errors appearing on the Update Report must be researched and recoded. Corrections should be resubmitted to CDS via the Edit Program.

9. Request Management Reports. CDS can produce the following management reports:

   - Quick Look Report
   - Milestone Report
   - Source Data Report
   - Questionnaire
   - Action Summary Report
   - Compliance Action Report

   The user should consult Section 9 for the procedurces to obtain the above reports.

6.0 DATA INPUT PREPARATION

6.1 General

All input data to the Compliance Data System (CDS) must be prepared in the format of one of the eight card layouts shown in Figure 6-1. These are the only formats that the system will accept. The data may be punched onto actual 8Ø column cards or prepared through special techniques such as WYLBUR or the EMS-to-CDS Converter.

Each card must have columns 1-19 (Region, State, County, Source, Point, Action Number, Card Code) and column 8Ø (Update Code) punched. The following data elements are unique for each card code:

Card Code 1	Card Column
* AQCR	2Ø-22
City Code	23-26
* Facility Name	27-46
Street Address	47-56
Regional Data Element 1	67
Regional Data Element 2	68
Regional Data Element 3	69
Regional Data Element 4	7Ø-74
Regional Data Element 5	75-79

Card Code 2	Card Column
* City Name	2Ø-34
Zip Code	35-39
State Registration Number	4Ø-54
* NEDS Cross Reference	55-58
* SIC Code	59-62
Federal Facility Code	64
Air Program Code	65
Air Program Status	66
Regional Data Element 6	67-76
Staff Personnel Code	77-79

* These data elements should be filled in when a new transaction is being added to the Masterfile.

MULTIPLE-CARD LAYOUT FORM

Company _____

Application CDS INPUT LAYOUT by TRC Date MARCH 1976 Job No. _____ Sheet No. _____

Card	Cols 1–2	Cols 3–4	Cols 5–8	Cols 9–13	Cols 14–16	Cols 17–18	Col 19	Cols 20–22	Cols 23–26	Cols 27–46	Cols 47–66	Col 67	Col 68	Col 69	Cols 70–74	Cols 75–79	Col 80
CARD 1	Region	State	County	Source	Point	Action#	Card code	AQCR	City Code	Source Name	Street Address	RDE 1	RDE 2	RDE 3	RDE 4	RDE 5	Update
CARD 2	Region	State	County	Source	Point	Action#	Card code	City Name		Zip code	State Registration Number	NEDXR	SIC	Filler / FED-FACIL / APCD / APST	RDE 6	STAFF	Update
CARD 3	Region	State	County	Source	Point	Action#	Card code	Filler	Pollutant 1: Drop / PLT CMST / PLT ECAT / PLT AOMA / PLT AOCR	Plut Loading Indicator	Pollutant 2: Drop / PLT CMST / PLT ECAT / PLT AOMA / PLT AOCR	Plt Loading Indicator	Pollutant 3: Drop / PLT CMST / PLT ECAT / PLT AOMA / PLT AOCR	Plt Loading Indicator	Facility Capacity	RDE 9	RDE 10 / RDE 11 / RDE 12 / Filler	Update
CARD 5	Region	State	County	Source	Point	Action#	Card code	SCC Code	CAPC / CMST / STP / PLUT	Federal/State/Local Regulation Number	ECAT	Process Description				MULT XREF / RDE 7 / CMS2	Update
CARD 7	Region	State	County	Source	Point	Action#	Card code	Optional Short Action Description		Filler	Penalty Amount	Act type	Date Achieved	Date Scheduled	Staff	Results / RDE 8	Filler / Update
CARD 4,6,8	Region	State	County	Source	Point	Action#	Card code / Line #	Comments									Update

Card Code 3	Card Column
Pollutant - ID	22, 34, 46
Delete Flag	24, 36, 48
Pollutant Compliance	25, 37, 49
Pollutant Emission Category	26, 38, 50
Pollutant Air Quality Maintenance Indicator	27, 39, 51
Pollutant Air Quality Control Indicator	28, 40, 52
Pollutant Loading	29-33; 41-45; 53-57
Facility Capacity	58-69
Regional Data Element 9	65-71
Regional Data Element 10	72-73
Regional Data Element 11	74-75
Regional Data Element 12	76

Card Code 4	Card Column
* Comment Line Number	2Ø
Source Comments	21-79

Card Code 5	Card Column
SCC Code	2Ø-27
Capacity Code	28-29
* Compliance Status	3Ø
* SIP Code	31
* Pollutant	32-33
State Regulation Number	34-48
* Emission Category	49
Process Description	5Ø-74
Multiple Cross Reference	75-77
Regional Data Element 7	78
Procedural Compliance	79

Card Code 6	Card Column
* Comment Line Number	2Ø
Point Comments	21-79

Card Code 7	Card Column
Penalty Amount	46-52
* Action Type	53-54
Date Achieved	55-6Ø
* Date Scheduled	61-66
Staff	67-69
Results	7Ø-71

Card Code 8	Card Column
* Comment Line Number	2Ø
Action Comments	21-79

* These data elements should be filled in when a new transaction is being added to the Masterfile.

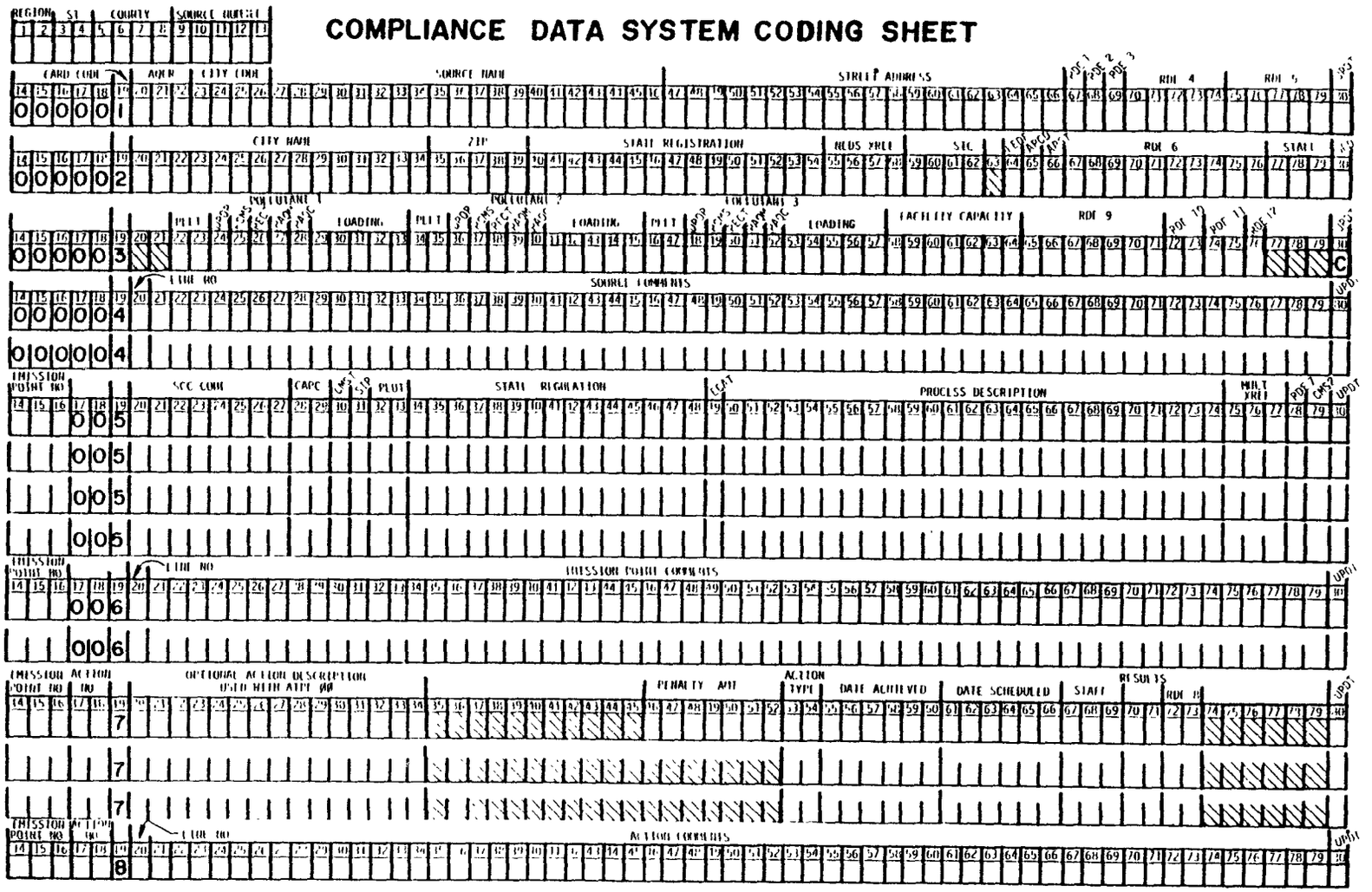


FIGURE 6-2

SAMPLE CODING SHEET

Actual data preparation is performed using coding sheets or a special data entry form. Data preparation techniques will vary from one regional office to another, and a variety of input formats will be developed. A suggested entry form is shown in Figure 6-2. This form includes space for the entry of all eight card types. Some regions will develop forms for specific card type formats only, depending on the frequency of specific types of input data.

A complete Data Element Description which lists CDS data names, values, edit error messages, and coding considerations for each card type is given in Appendix A. Some of this information is included in the following description but not in detail, so the user is urged to familiarize himself with the complete listing provided in Appendix A.

The sections which follow describe the specific procedures to be followed to add, change, or delete records on the CDS Masterfile. The first step in adding a new record to the CDS Masterfile is to code an input transaction with an Update Code "N" in column 8Ø for each card type needed to create a Masterfile record. Once a record has been added as new, a transaction with an Update Code "C" can be used to change the record or a transaction with an Update Code "D" can be used to delete the record.

6.2 Adding New Records to the CDS Masterfile

Card Type 1 with an Update Code "N" is used to add a new facility to the Masterfile. A facility in CDS represents all the site, emission, and enforcement action information for one particular source or plant. If a source is subject to several air programs, such as SIP, NSPS, and NSR, a separate source number is assigned for each affected air program.

To establish a new facility on the Masterfile, perform the following steps:

1. Request a Quick Look Report with the CDS Retrieval Package to verify that the facility being added is not already on the Masterfile.

2. Select a County Code/Source Number combination which will identify the facility by a unique number. The NEDS source numbering convention should be used wherever possible when adding a new source. Otherwise, assign the next highest sequential Source Number within the county. A County Code name corresponding to the County Code Number is generated by CDS when a new Card 1 is submitted.

3. Code columns 1-19 (Region, State, County, Source Number, Point, Action Number, and Card Type) and the Update Code "N" in column 8Ø. Region, State, County, and Source Number together identify a unique facility in the CDS system.

4. Code Source Name, columns 27-46. If additional data elements unique to Card Type 1 (See Appendix A) are available, they should also be entered at this time.

5. Additional card types with the same source identifier may be added for this update cycle or for a subsequent update cycle as new transactions.

Card Type 2 is used to add additional source level data such as City, SIC, Air Program, etc. to the Masterfile. Card 2 can be entered with an Update Code N only during the same update cycle as a new Card 1 for a given source. If any field on Card 2 is entered at a later date, use Update Code C. Update Code N on Card 2 is valid only when Cards 1 and 2 are entered during the same update cycle since the Card 2 is not used to create a Masterfile record. Perform the following steps to add a new Card 2:

1. Code columns 1-19 (Region, State, County, Source Number, Point, Action Number, and Card Type) and the Update Code "N" column 8Ø.

2. Code columns 2Ø-34 (City Name) and columns 59-62 (SIC codes). If additional data elements unique to Card 2 (see Appendix A) are available, they should also be entered at this time. If a Staff Code is placed in columns 77-79, a Staff Name associated with this Staff Code will be generated on the Masterfile.

Card Type 3 is used to add or change pollutant compliance data on the CDS Masterfile. In order to support the current program plan requirements to develop adequate SIP's for TSP, SO_2, HC, CO, and NO_x in non-attainment air quality control areas, the CDS system must carry a number of data elements which indicate worst-case compliance for each pollutant produced by a facility contributing to the non-attainment status of an AQCR. The pollutant information on the Card 3 replaces the functions of AIR2 and RDE1 as non-attainment indicators.

Card 3 data must be coded for all SIP sources impacting or of unknown impact on non-attainment standards. Both major (Class A) and minor (Class B) sources contributing to the non-attainment status of an AQCR must have Card 3 information for all regulated pollutants they emit. It is not enough to code in only the non-attainment pollutant(s). However, unregulated pollutants or pollutants not emitted by the facility should not be entered.

For each pollutant produced by a facility in a non-attainment AQCR, the following data elements should be added to CDS:

Data Field	Length	Coding Considerations
Update Code	1	Must be a "C" for all Card-3 transactions, whether a user is adding or changing data on this card.
Pollutant ID	2	Must be coded for each pollutant produced by the facility. Valid values are the same as for the Pollutant code on Card-5.
Pollutant Compliance	1	Must be coded for each applicable pollutant. This compliance status should represent the worst-case compliance of all the emission points producing that particular pollutant. Valid values are the same as for Compliance Status on Card-5.

Data Field	Length	Coding Considerations
Pollutant Emission Category	1	Must be coded for each applicable pollutant. Valid values are the same as for Emission Category on Card 5. This must represent the potential uncontrolled emissions for the pollutant.
Air Quality Maintenance Indicator	1	May be coded for facilities affecting AQMA standards as defined in 40 CFR, Section 52.22 entitled, "Maintenance of National Standards". Code "Y" if source is located within an AQMA. Otherwise leave blank.
Impacted AQCR Indicator	1	Must be coded as follows: a. Leave blank or enter on "A" if the facility does not contribute to the non-attainment status of the AQCR for this polluntant. b. Code "N" if the facility impacts the emission standards for this pollutant in a non-attainment AQCR. c. Code "U" if the impact of this pollutant on the non-attainment status of the AQCR is unclassified.
Pollutant Loading	5	May be coded. If it is used, it must be a numeric field representing actual tons per year.

To enter pollutant compliance data on the CDS Masterfile, users should code card columns 1-18 to match the data used for Cards 1 and 2 for a given facility. Column 19 must be a "3" and Column 80 must be "C" for adding, changing, or deleting pollutant data. Because a facility can produce numerous pollutants, the input punch card has room for three sets of

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pollutant data. Multiple Card 3's may be used to enter pollutant compliance data for facilities producing more than three different pollutants. Up to ten different pollutants may be stored on the Masterfile for one facility. The order in which pollutant data is entered into the system is not important for the five pollutants subject to SIP regulations; PT, SO_2, HC, CO, and NO_x are always stored on the CDS Masterfile in the same order. Other pollutants are stored on the Masterfile in the order in which they were input.

In addition to pollutant data, the Card 3 contains four new source level regional data elements and it also contains Facility Capacity. Facility Capacity is a seven-digit field used to indicate the output capacity of a plant. The following units of measurement should be used:

a. For general processes, use tons per year of output product. If a facility produces over 10 million tons per year, code all 9's in this field.

b. For refineries, use barrels of petroleum processed per day.

c. For petroleum storage facilities, use thousands of barrels total capacity.

d. For incinerators (sewage sludge or municipal refuse), use tons per day.

e. For electric utilities, use total megawatt capacity.

Users should note that pollutant data on the Card 3 may be entered many times since it is a repeating data element. However, Facility Capacity and RDE9-RDE12 are not repeating data elements. Only one value for each of these data elements can be stored on the CDS Masterfile at one time. If several Facility Capacities are coded on multiple Card 3's for a facility

during one update cycle, only the value on the last card will be placed on the CDS Masterfile.

See Table 6-3A for a complete list of all data elements on the Card 3. Refer to the appropriate pages of Appendix A for detailed definition and guidance on each individual data element on the Card 3.

Card Type 4 is a comment card used to add additional information about a facility which is different from the information supplied by the data elements on Card Types 1 and 2. There are 1Ø comment line numbers available on Card Type 4; up to 1Ø comments may be used to add information for each facility. New comments may be processed at the same time or after a Card Type 1 for a facility is added to the Masterfile. However, a source comment cannot be added to the Masterfile unless the source record already exists on the Masterfile.

1. Code columns 1-19 (Region, State, County, Source Number, Point, Action Number, and Card Type) and Update Code "N" in column 8Ø.

2. Code comment information in columns 21-79. Assign comment line numbers (column 2Ø) sequentially starting with number one or zero. If a facility has been previously added to the Masterfile, request a Source Data Report for that facility to determine what line numbers have already been used. A Card Type 4 comment must have a valid line number. The update code N can be used only when the comment line number is not on the Masterfile. Keep in mind that comments are not retrievable and cannot be printed on a Quick Look Report.

3. Code "A" or "B" in line number to indicate a mailing address if it is different from the street and city on Cards 1 and 2.

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Card Type 5 is used to add emission point data for each pollutant emitted by a facility. A CDS emission point represents information for one regulated pollutant coming from one process or smoke stack. Processes which emit two or more pollutants will be coded with multiple emission point numbers. Often regions will assign the first two digits of the CDS emission point to correspond to the NEDS emission point number while the third digit is pollutant specific. Thus, if a boiler produces both particulates and sulphur dioxide and has a NEDS point number Ø1, the CDS point number for particulates might be Ø1Ø and the SO_2 point number might be Ø11. For each facility, there can be up to 1,ØØØ emission points.

Point ØØØ contains compliance status and emission category information for the entire source. A point ØØØ transaction can be entered into the CDS with an Update Code "N" only at the same time that Card Type 1 is entered as new. Card Type 1, the system will generate this point number automatically. Consequently, point ØØØ information added to the Masterfile after Card Type 1 has been added must use an Update Code "C" in column 8Ø.

1. Code columns 1-19 (Region, State, County, Source Number, Emission Point Number, Action Number, and Card Type) and the Update Code "N" in column 8Ø. An emission point cannot be added to the Masterfile unless a corresponding source record is being added or has been added previously to the Masterfile.

   Emission point ØØØ is reserved for the entire source. All other emission point numbers are assigned sequentially. When one physical emission point (process) needs several emission point numbers (one for each pollutant or regulation), use the Multiple Cross-reference field (Card 5, columns 75-77) to tie together the various emission point numbers to one physical emission point or use the NEDS point number together with a pollutant specific third digit. When adding new additional point numbers for a facility, request a Source Data Report for the facility to make sure that the new point number does not already exist on the Masterfile.

2. Columns 3Ø-33, Compliance Status, SIP Code, and Pollutant, should be coded if information is available at the time Card Type 5 is prepared. Compliance Status must be coded for point ØØØ; SCC must be coded for all other points. If additional data elements unique to Card 5 (See Appendix A) are available, they should also be entered at this time.

Card Type 6 is a comment card used to add additional information about an emission point which is different from the information supplied by the data elements on Card Type 5. There are 1Ø comment line numbers available on Card Type 6; up to 1Ø comments may be used to add information. A point comment cannot be added to the Masterfile unless a corresponding emission point already exists on the Masterfile.

1. Code columns 1-19 (Region, State, County, Source Number, Point, Action Number, and Card Type) and the Update Code "N" in column 8Ø.

2. Code comment information in columns 2Ø-79. Assign comment line numbers (column 2Ø) sequentially starting with number one or zero. If an emission point has been previously added to the Masterfile, request a Source Data Report for that facility to determine what line numbers have already been used. A Card Type 6 comment must have a valid line number. The update code N can only be used when the comment line number is not on the Masterfile.

Card Type 7 is used to add information describing actions taken by the local, state, or federal regulatory agencies. Each region is responsible for defining the actions which will be tracked by CDS. Regions must obtain clearance from the National Data Bank Coordinator for new Action Types codes and descriptions. The National Data Bank Coordinator maintains a table which relates the Action Type to the Action Description.

1. Code columns 1-19 (Region, State, County, Source Number, Point, Action Number, and Card Type) and the Update Code "N" in column 8Ø.

   Action Numbers (columns 17-18) should be assigned sequentially starting with Ø1. When adding a new action to the Masterfile, Action Number 99 could be coded into columns 17-18. The system will convert 99 to the next highest sequential action number for that emission point.

   New action numbers cannot be added to the Masterfile unless the emission point for that action is also being added to the Masterfile or has been added during a previous cycle. Each action number must be associated with a specific emission point.

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2. Code columns 53-54 and 61-66, Action Type and Date Scheduled. Consult the regional action table for Action Type. If necessary, call the central Data Bank Coordinator to add or change values on the action table. When entering scheduled and achieved dates, enter them in month, day and year format.

3. Code additional data elements unique to Card Type 7 (See Appendix A) if they are available.

Card Type 8 is a comment card used to add additional information about an action which is different from the information supplied by the data elements on Card Type 7. There are 1Ø comment line numbers available on Card Type 8; up to ten comments may be used to add information. New action comments may be processed at the same time that a new action record is added to the Masterfile. However, an action comment cannot be added to the system unless there is a corresponding action record already in the Masterfile.

1. Code columns 1-19 (Region, State, County, Source Number, Point, Action Number, and Card Type) and Update Code "N" column 8Ø.

2. Code comment information in columns 2Ø-79. Assign comment line numbers (column 2Ø) starting sequentially with number Ø1 or zero. If an action has been previously added to the Masterfile, request a Source Data Report for that facility to determine what line numbers have already been used. A Card Type 8 comment must have a valid line number. The Update Code N can be used only when the comment line number is not already on the Masterfile.

6.2.1 Sample of a Completed Coding Sheet for a New Facility

Figure 6-3 is a sample coding sheet used to enter a facility for the first time on the Masterfile.

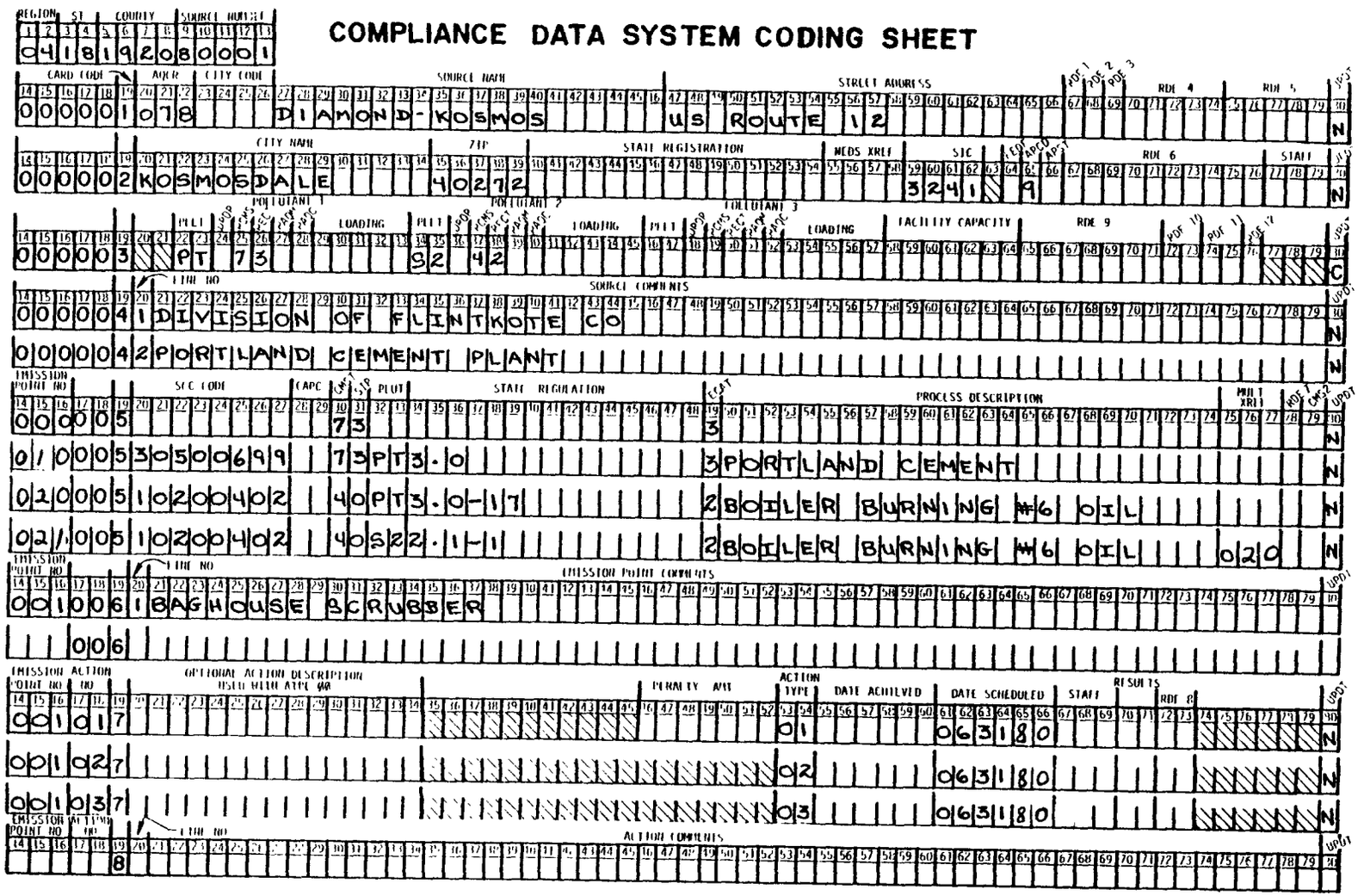

FIGURE 6-3

SAMPLE OF COMPLETED CODING SHEET FOR A NEW FACILITY

Card columns 1 through 13 are the same for all cards for this facility; these columns need to be coded only once at the top of this coding sheet. Zeros in columns 14 through 18 are preprinted on the coding sheet for Cards 1 through 4. For the Card 1, only columns 1 through 19, columns 26 through 46 (Source Name) and column 8Ø, Update Code, must be coded for a new facility. This is the minimum amount of information which will establish the facility on the Masterfile. Other information for this facility is also available, so it is coded in the appropriate card type and card columns.

If the emission point ØØØ data were not available at this time, the Update Program would generate an emission point ØØØ record on the Masterfile for this facility. However, the emission point ØØØ can be coded as new when it is entered at the same time as the new Card 1. In this example the Compliance Status and the SIP Codes for point ØØØ are the same as for point Ø1Ø since the Compliance Status and the SIP Codes of the entire source represent the worst case compliance status of any of the other emission points.

In this example, emission points Ø2Ø and Ø21 represent two different regulated pollutants being emitted from the same smokestack. The Ø2Ø in the Multiple Cross-reference field (columns 75-76) for emission point Ø21 indicates that emission point Ø21 represents another regulated pollutant for the same process described in emission point Ø2Ø.

Actions are entered at this time with a date scheduled but no date achieved since they represent actions to be performed in the future.

6.3 Changing Data on the CDS Masterfile

Once a record has been added to the CDS Masterfile by the update cycle, data on the Masterfile record can be changed in subsequent update cycles by using input transactions with an Update Code "C".

During a given update cycle, transactions with the same record identifier (Region, State, County, Source, Point, Action Numbers and Card Type) are applied in Update Code order. The Update Program processes deletes first, then adds, and finally changes. The Update will reject a change transaction other than a Card 3 if a delete or a new is being applied for the same card type during the same update cycle. However, the Update will process multiple changes for an existing Masterfile record. Multiple changes are applied in chronological order; if a given data element is being changed by several input transactions, all input transactions are printed out on the Update Report, but only the latest change will be found on the Masterfile.

Card columns 1-19 and 8Ø must be coded when preparing a change transaction. However, the data elements in columns 1-18 cannot be changed by processing as a change transaction. If transactions with incorrect State, County, Source, Point, or Action Numbers have been added to the CDS Masterfile, those records in error must be deleted and the corrections re-entered with an Update Code "N". When any of the data elements in columns 2Ø-79 need to be changed, only the data element that needs changing is coded on the input coding sheet.

The following steps should be performed for a change transaction:

1. Request a Source Data or Quick Look Report for that facility to determine what data values exist on the Masterfile.

2. Decide what data elements need to be changed and decide what card type should be used.

3. Code columns 1-19 on a coding sheet. Code a "C" in column 8Ø.

4. Code only those data elements which need changing. The update program will change only those data elements that are entered on the card; other data elements on the Masterfile will not be changed.

5. Have coding sheets keypunched and submit punchcards to the CDS Edit Program.

6. Use a Change transaction, and not a Delete transaction, to remove one or more data elements from a Masterfile record. Data elements in columns 2Ø through 79 of any card type can be blanked out by placing one or more asterisks (*) in the data element which is to be eliminated. An asterisk will remove only the data element to be blanked out and will not change any other data element on the Masterfile record for that card type. On the Card 7, an asterisk on Date Scheduled or on Date Achieved will zero-fill the data element since these data elements cannot be blanked out. An asterisk cannot be used to change any data elements in card columns 1 through 18; if a record with an incorrect State, County, Source Number, Point, or Action Number has been placed on the Masterfile, the incorrect data must be deleted with an Update Code "D" and the corrected cards re-entered with an Update Code "N".

   Since asterisks are used on change transactions to blank out a data element, asterisks may <u>not</u> be used on new transactions. A warning message (* ASTERISKS FOR CHANGES) is issued by the Edit Program if asterisks are found on any transaction with an Update Code "N". Asterisks are not placed on the Masterfile in the update cycle.

7. An Update Code C should be used for <u>adding</u> or <u>changing</u> pollutant data on a Card 3. A delete transaction is not valid for a Card 3. If a user wishes to delete all references to a pollutant on the Masterfile, he should code the appropriate pollutant code followed immediately by a 'D' in the Pollutant Delete Flag on the Card 3.

If a user wishes to blank out one or more data elements associated with a pollutant on a Card 3, he should place one or more asterisks (*) in the field to be blanked out. Because data is stored on the masterfile by pollutant code on a Card 3, changes to Pollutant Compliance Status or other pollutant related fields must always be accompanied by a Pollutant Code.

Users may make changes to the Pollutant Compliance Status of several pollutants regardless of the order in which this data was originally entered; all changes and adds are applied by pollutant.

6.3.1 Sample Completed Coding Sheet for Change Transactions

Once a facility has been entered as new on the CDS Masterfile, change transactions can be entered for records existing on the Masterfile. Columns 1 through 19 must be the same on the change transaction as they were on the new transaction already on the Masterfile; column 8Ø must be a "C" for each change transaction.

Figure 6-4 is a sample coding sheet used, to change some of the data input as new in Figure 6-3; it is also used to add new records which were not created in Figure 6-3.

Card 4, line 2, a source comment exists on the Masterfile with the following text: PORTLAND CEMENT PLANT. A change for Card 4, line 4, will replace this text with the text on the change transaction: PO BOX 753.

Card 5, point ØØØ, contains a "7" in the Compliance Status Code on the Masterfile. The change transaction will replace the Compliance Status Code and the Process Description; all other data on the Masterfile record will be unchanged. On Card 5, point ØØ1, only the Compliance Status Code will be changed on the Masterfile.

Since point Ø2Ø did not have any comments associated with it, comment 1 for point Ø2Ø is entered as new.

Action Ø1 for point Ø1Ø has no Date Achieved or Results Code on the Masterfile; a change transaction will add these two fields to the Masterfile record created during a previous update cycle.

Point Ø2Ø did not have any actions on the Masterfile. Thus, an action Ø1 is added with an Update Code "N".

6.4 Deleting Data from the CDS Masterfile

A delete transaction contains a "D" in column 8Ø, the Update Code; it is used to delete one or more records from the Masterfile. A Card 1 delete will remove all Masterfile records for a given facility. A Card 5 delete will remove one emission point together with all associated comments, actions, and action comments. A Card 7 delete will remove one action together with all associated action comments. A Card 4, 6, or 8 delete will remove one comment. A Card 2 or a Card 3 delete is invalid. Remember that if only some of the data elements on a particular card type are to be deleted, a "C" must be entered in column 8Ø and asterisks placed in these fields. A "D" in column 8Ø will delete the entire card type.

1. Deleting an Entire Source, Card 1. An entire source can be deleted by using a Card Type 1 with an update Code "D". Fill in columns 1-19 and code a "D" in column 8Ø. Do not fill in columns 21-79; no data may be coded in these columns. Before submitting this card, make certain that all the information on the source is no longer needed. This transaction will delete the entire source and all related points, actions, and comments.

2. Deleting an Emission Point, Card 5. Fill in columns 1-19 and place a "D" in column 8Ø. Do not fill in columns 21-79; no data is to be added to these columns. An emission point delete will remove the emission point, all associated emission point comments, actions, and action comments. A Card 5 delete for point ØØØ is invalid.

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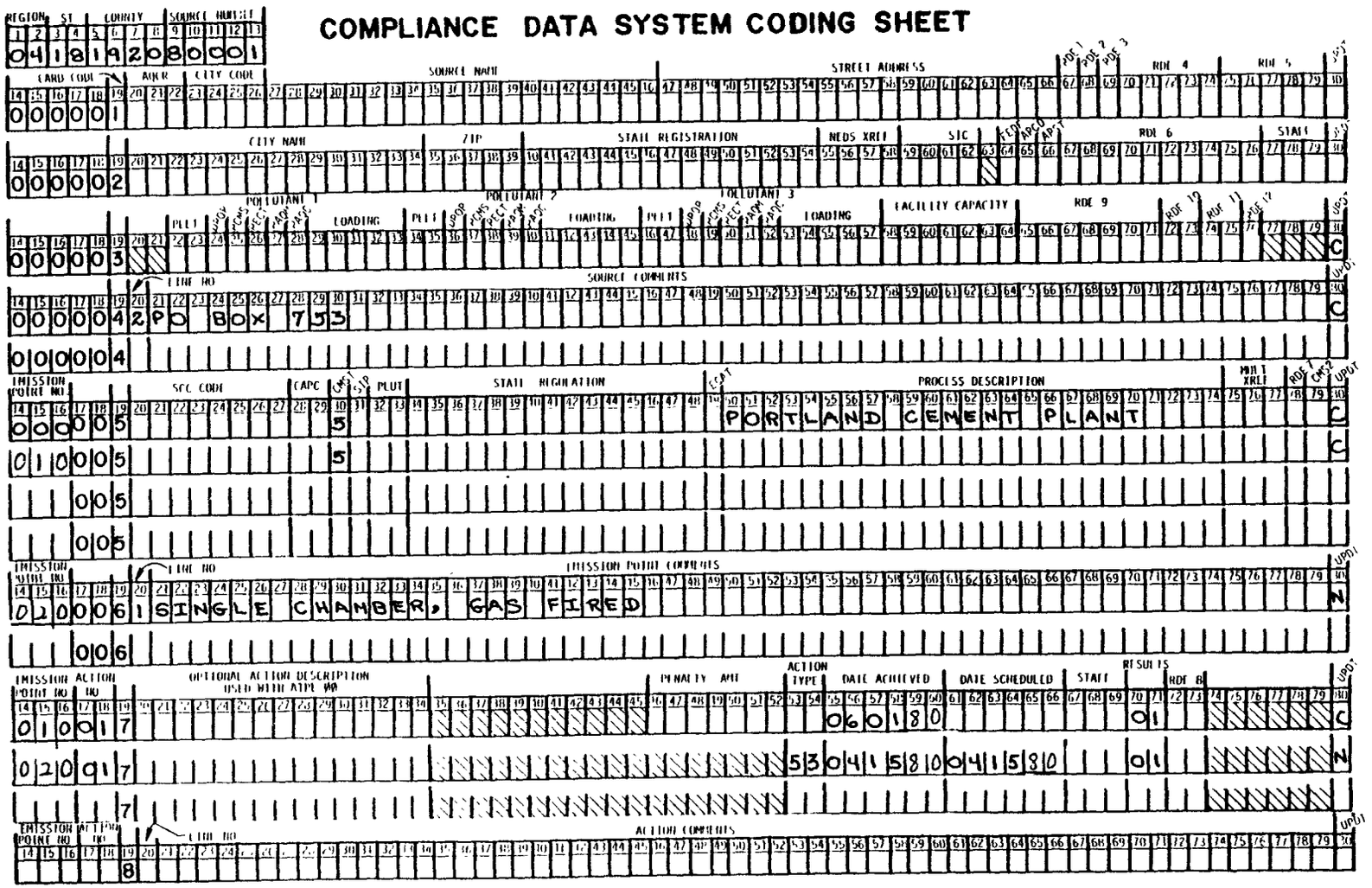

FIGURE 6-4

SAMPLE COMPLETED CODING SHEET FOR CHANGE TRANSACTION

3. Deleting an Action, Card 7. An action record can be deleted by using a Card 7 with an Update Code "D". Fill in columns 1-19 and place a "D" in column 8Ø. Do not fill in columns 21-79; no data is to be added to these columns. An action delete will remove the action record along with associated action comments.

4. Deleting a Comment, Cards 4, 6, and 8. A source, emission, or action comment may be deleted by using the appropriate Card Type 4, 6, or 8 and placing a "D" in the Update Code. This is a new capability in the system and does not require the use of asterisks. Columns 21-79 must be blank. Card column 2Ø must contain the line number of the comment to be deleted. A comment delete transaction will delete only one comment record.

   Use Card 4 to delete a Source comment;
   Card 6 to delete a Point comment;
   Card 8 to delete an Action comment.

5. Deleting a Pollutant. Once a pollutant record has been established on the Masterfile by a Card 3 transaction, it cannot be deleted unless the entire source is deleted. However, all references to any particular pollutant can be deleted by placing a D in the Pollutant Delete Flag. If all data for a pollutant is to be deleted, only the Pollutant Code and the Pollutant Delete Flag may be coded for that particular pollutant.

   On one Card 3 transaction it is possible to delete all data for one pollutant, change some data for another, and add new data for a third pollutant.

   Once a pollutant has a D in the Pollutant Delete Flag, that pollutant and all related data will not appear on any output reports. After a pollutant has been deleted, it may be reactivated by entering new data for it.

   By preventing users from deleting the entire Pollutant Record, the danger of accidentally losing data for many pollutants is eliminated. Coding errors can still be corrected, and unwanted data will never appear on any output report.

6.4.1 Sample Completed Coding Sheet for Delete Transactions

Masterfile records may be deleted from the Masterfile by placing the same numbers in columns 1 through 19 as the new transaction used to establish that record on the Masterfile. When an Update Code "D" is placed in column 8Ø, no other data may be coded in columns 21 through 79.

Figure 6-5 shows three delete transactions and one change transaction. A delete for emission point Ø4Ø will remove that emission point and all associated point comments, actions and action comments for that point.

A delete for emission point Ø2Ø, comment line 1, will delete only that one particular comment record from the Masterfile.

A delete for emission point Ø1Ø action Ø2 will delete one action together with any associated action comments.

To remove some data from a Masterfile record without removing the record from the Masterfile, use an Update Code "C"; code an asterisk in each field which is to be removed. In the example, a change transaction for emission point Ø2Ø, action Ø1 will blank out the Results Code Ø1 on the Masterfile because there is an asterisk in the Results Code field. Because Date Scheduled and Date Achieved cannot be blanked out, an asterisk in the Date Achieved field will replace the existing Masterfile value with zeros.

6.5 Keypunch Instructions

There are six different card layouts which must be typed by the keypunch operator for input transactions to CDS. The operator is responsible for typing only the information which is coded on the coding sheets or forms submitted by the user. However, card columns 1-19 and 8Ø must always be filled in by the operator on all card types.

This section contains a listing of the data elements on each of the card types which will be used by the operator to enter transactions onto the data base. Table 6-1 lists the data elements, 1-19 and 8Ø, which must be coded on all card types. Tables 6-2 through 6-6 list the data elements unique to each card type.

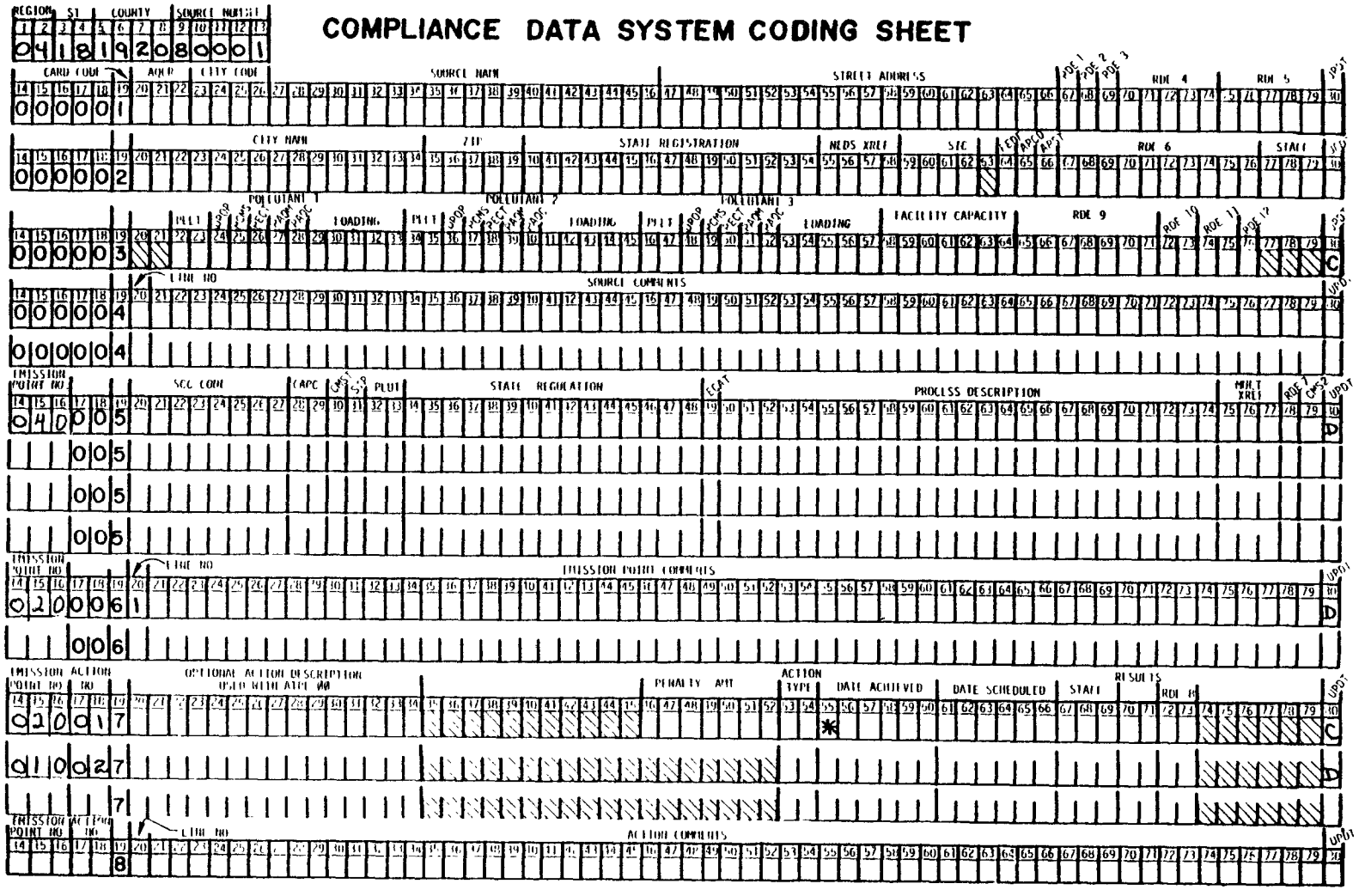

FIGURE 6-5

SAMPLE COMPLETED CODING SHEET FOR DELETE TRANSACTIONS

TABLE 6-1

KEYPUNCH INSTRUCTIONS
DATA REQUIRED ON ALL CARDS

Data Name	Card Column	Data Type	Data Element Length	Justified
Region	1-2	Numeric	2	Left
State	3-4	Numeric	2	Left
County Code	5-8	Numeric	4	Left
Source Number	9-13	Numeric	5	Left
Emission Point Number	14-16	Numeric	3	Left
Action Number	17-18	Numeric	2	Left
Card Code	19	Numeric	1	
Update Code	80	Alphanumeric	1	

TABLE 6-2

KEYPUNCH INSTRUCTIONS FOR CARD TYPE 1

CARD 1	Region State	County	Source	Point	Action# Card code	AQCR	City Code	Source Name	Street Address	RDE 1	RDE 2	RDE 3	RDE 4	RDE 5	Update
	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

Date Name	Card Column	Data Type	Data Element Length	Justified
AQCR	2Ø-22	Numeric	3	Left
City Code	23-26	Numeric	4	Left
Source Name	27-46	Alphanumeric	2Ø	Left
Street Address	47-66	Alphanumeric	2Ø	Left
Regional Data Element 1	67	Alphanumeric	1	
Regional Data Element 2	68	Alphanumeric	1	
Regional Data Element 3	69	Alphanumeric	1	
Regional Data Element 4	7Ø-74	Alphanumeric	5	
Regional Data Element 5	75-79	Alphanumeric	5	

TABLE 6-3

KEYPUNCH INSTRUCTIONS FOR CARD TYPE 2

CARD 2	Region State	County	Source	Point	Action# Card code	City Name	Zip code	State Registration Number	NEDXR	SIC	FED-FACIL	APCD	APST	RDE 6	STAFF	Update
	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

Date Name	Card Column	Data Type	Data Element Length	Justified
City Name	2Ø-34	Alphanumeric	15	Left
Zip Code	35-39	Numeric	5	Left
State Registration Number	4Ø-54	Alphanumeric	15	Left
NEDS Cross-reference	55-58	Alphanumeric	4	Left
SIC Code	59-62	Numeric	4	Left
Federal Facility Code	64	Numeric	1	
Air Program Code	65	Alphanumeric	1	
Air Program Status	66	Alphanumeric	1	
Regional Data Element 6	67-76	Alphanumeric	1Ø	
Staff Personnel Code-Source	77-79	Alphanumeric	3	Left

TABLE 6-3A

KEYPUNCH INSTRUCTIONS FOR CARD TYPE 3

Card 3	Region	State	County	Source	Point	Action#	Card code	Filler	Pollutant 1	Drop	PLT CMST	PLT ECAT	PLT AQMA	PLT AQCR	Plut Loading Indicator	Pollutant 2	Drop	PLT CMST	PLT ECAT	PLT AQMA	PLT AQCR	Plt Loading Indicator	Pollutant 3	Drop	PLT CMST	PLT ECAT	PLT AQMA	PLT AQCR	Plt Loading Indicator	Facility Capacity	RDE 9	RDE 10	RDE 11	RDE 12	Filler	Update
	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

Data Name	Card Column	Data Type	Length	Justified
Blank	20-21		2	
Pollutant 1	22-23	Alphanumeric	2	
Delete Flag 1	24	Alphanumeric	1	
Pollutant Compliance 1	25	Alphanumeric	1	
Pollutant Emission Category 1	26	Alphanumeric	1	
Pollutant Air Quality Maintenance Indicator 1	27	Alphanumeric	1	
Pollutant Air Quality Control Indicator 1	28	Alphanumeric	1	
Pollutant Loading 1	29-33	Numeric	5	Right
Pollutant 2	34-35	Alphanumeric	2	
Delete Flag 2	36	Alphanumeric	1	
Pollutant Compliance 2	37	Alphanumeric	1	
Pollutant Emission Category 2	38	Alphanumeric	1	
Pollutant Air Quality Maintenance Indicator 2	39	Alphanumeric	1	
Pollutant Air Quality Control Indicator 2	40	Alphanumeric	1	
Pollutant Loading 2	41-45	Numeric	5	Right
Pollutant 3	46-47	Alphanumeric	2	
Delete Flag 3	48	Alphanumeric	1	
Pollutant Compliance 3	49	Alphanumeric	1	
Pollutant Emission Category 3	50	Alphanumeric	1	
Pollutant Air Quality Maintenance Indicator 3	51	Alphanumeric	1	
Pollutant Air Quality Control Indicator 3	52	Alphanumeric	1	
Pollutant Loading 3	53-57	Numeric	5	Right
Facility Capacity	58-64	Alphanumeric	7	
Regional Data Element 9	65-71	Alphanumeric	7	
Regional Data Element 10	72-73	Alphanumeric	2	
Regional Data Element 11	74-75	Alphanumeric	2	
Regional Data Element 12	76	Alphanumeric	1	
Blank	77-79		3	

TABLE 6-4

KEYPUNCH INSTRUCTIONS FOR CARD TYPE 5

CARD 5	Region State	County	Source	Point	Action# Card code	SCC Code	CAPC	CMST	SIP	PLUT	Federal/State/Local Regulation Number	ECAT	Process Description	MULT XREF	RDE 7	CMS2	Updnte
	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

Date Name	Card Column	Data Type	Data Element Length	Justified
SCC Code	2Ø-27	Numeric	8	Left
Capacity Code	28-29	Numeric	2	Left
Compliance Status	3Ø	Numeric	1	
SIP Code	31	Numeric	1	
Pollutant Code	32-33	Alphanumeric	2	Left
State Regulation	34-48	Alphanumeric	15	
Emission Category	49	Numeric	1	
Process Description	5Ø-74	Alphanumeric	25	Left
Multiple Cross-reference	75-77	Numeric	3	Left
Regional Data Element 7	78	Alphanumeric	1	
Procedural Compliance	79	Alphanumeric	1	

TABLE 6-5

KEYPUNCH INSTRUCTIONS FOR CARD TYPE 7

CARD 7	Region	State	County	Source	Point	Action#	Card code	Optional Short Action Description	Filler	Penalty Amount	Act type	Date Achiev-ed	Date Sched-uled	Staff	Results	RDE 8	Filler	Update
	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

Date Name	Card Column	Data Type	Data Element Length	Justified
Short Action Description	2Ø-34	Alphanumeric	15	Left
Penalty Amount	46-52	Numeric	7	Right
Action Type	53-54	Numeric	2	Left
Date Achieved	55-6Ø	Numeric	6	Left
Date Scheduled	61-66	Numeric	6	Left
Action Staff Code	67-69	Alphanumeric	3	Left
Results Code	7Ø-71	Numeric	2	Left

TABLE 6-6

KEYPUNCH INSTRUCTIONS FOR CARD TYPES 4, 6, AND 8

CARD 4,6,8	Region	State	County	Source	Point	Action#	Card code	Line #	Comments	Update
	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

Date Name	Card Column	Data Type	Data Element Length	Justified
Line Number	2Ø	Numeric	1	
Comments	21-79	Alphanumeric	59	

6.6 Quality Assurance Considerations

6.6.1 Define the Problem

Understand the problem of what data needs to be entered and your role in solving it. Misunderstandings can come from poor instructions as well as from poor listening. Ask as many questions of your manager as necessary until you are sure of what must be done. A few extra hours at this step can save a lot of time and work at a later date. At this step, it is a good idea to outline your analysis of the problem. This way, any inconsistencies in your analysis can be corrected.

6.6.2 Status of Current Data

a. Evaluate the source documents

When possible, cross-reference the source documents to determine the validity of the documents. Do not assume that documents supplied by the states are always correct or complete. An example is cross-checking state EIS reports with the York Report for data on coal-fired boilers. Ask as many questions as necessary to ensure that the documents being worked on are the most accurate and up-to-date documents available.

b. Run CDS retrievals to determine what data is already in CDS

Use retrieval reports as the basis of a before/after comparison of the data. Usually it will be more beneficial to run five or six Quick Look reports instead of a single source data report. Quick Look reports have the advantage of allowing the user to view only those data elements in which he is interested and format the report lines such that all of the same data elements are lined-up. This last advantage makes it much easier to spot gaps in the data.

6.6.3 Code Data

a. Analyze data entry method

Before any coding is done, an analysis should be done to determine the best input medium. There are three kinds of input mediums: coding sheets, modified coding sheets, and retrievals. A modified coding sheet is one in which some data elements are precoded. Whenever possible, use a double spaced Quick Look as input documents. The fewer pen strokes needed to enter the data, the fewer mistakes that can be made.

b. Data from source documents

Code data from source documents carefully. There are four basic source documents that are coded from:

1) Data already in CDS (e.g. developing AQCR from County Codes).
2) Source documents supplied by the states.
3) Another computer system's printout (e.g. NEDS or EIS).
4) Source documents in the EPA files.

There are three types of coding changes that can be made. New data can be added, data already in the system can be changed to a different value and data can be deleted. Be aware that when you delete a record, all subsequent data elements under it in the file hierarchy are also deleted. Make sure that you consult your manager if there are going to be delays in your time estimate as soon as you know about them.

6.6.4 Random Check of Coding

Once all of the data has been coded, a "random check" of approximately 50% of the data should be checked against the source documents. The verification should not be done by the original coder. A more thorough verification will be performed at a later date. After the random check has been completed, an analysis of whether the coding has met the objectives of the problem definition should be done with your manager. When the coding is correct, send it to keypunching.

6.6.5 Computer Operations

a. Input to edit

Log out coding sheets as they are sent to keypunching. When the coding is returned from keypunching, the cards should be logged in and marked with the date and your initials. As soon as the cards are marked, they should be placed in the computer. The edit report should be checked for keypunch errors and any necessary corrections should be made immediately.

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b. Enter into the Update Cycle

Thursday mornings after the update has run, you should check the update report for errors. Any errors should be corrected at once. The correct data will not be placed on the masterfile until the next scheduled update.

c. Validate the Update Cycle Results

Run a second set of retrievals in the same format of those that were run in Step 6.6.2(b). These two sets of retrievals should be compared to ensure that the data you wanted have been posted correctly. As a final check, compare 100% of the coded data with the source documents.

d. Involve your Manager in Validation Work

After Step C has been completed, give your manager the retrievals run in Step C. These retrieval reports will allow your manager to recognize the quality and quantity of your work.

7.0 EDIT PROCESSING

7.1 Edit Program Usage

Once data for the CDS System has been coded and keypunched, users must validate the input transactions by running the CDS Edit Program. The Edit can be run at any time, and it can be run any number of times in between update cycles. However, it is best to coordinate the scheduling of Edit runs to correspond to the scheduling of the update cycle. Allow time to correct any errors that may be detected by the Edit before the weekly update.

Since the update cycle is usually run on Wednesday nights, users should schedule their data preparation, Edit runs, and corrections to be ready for the update cycle. At least one day before the update when the input transaction volume is under 2,ØØØ cards per week, the following would be an ideal schedule:

1. Punch cards are delivered to the regional CDS Data Bank Coordinator or to the operator of the communications terminal on Tuesday afternoon.
2. Input cards together with appropriate JCL cards are submitted on Tuesday night to COMNET.
3. The Edit Report is examined on Wednesday morning.
4. Edit errors are corrected Wednesday morning and resubmitted with a high priority on Wednesday afternoon.

When the volume of input transactions is over 2,ØØØ cards per week, or when keypunching is returned to the user in multiple batches, it is best to run the Edit several times during the week as soon as data is returned from keypunching.

The Edit validates each of the seven punched card types one at a time. Note that some transactions which pass the Edit may be rejected later. If a new facility is being entered into CDS, the Edit may

accept as valid all of the transactions for that facility except Card 1 which contains the Source Name and Address. In the update cycle, all of the transactions for that facility will be rejected since the facility level data was not passed to the Update. With the hierarchial relationship between source, point, and action transactions, an error at a higher level can create additional errors in the update cycle for transactions accepted by the Edit. For this reason it is very important to correct and resubmit Edit errors as quickly as possible.

7.1.1 Warning and Fatal Errors

All transactions are validated by the Edit Program. The Edit Report produced by the Edit Program lists the action taken on each input transaction. If an input transaction has no edit error message next to it on the Edit Report, it is a valid transaction. One or more error messages are printed on the Edit Report next to transactions in error. Errors are identified as either "Warning" or "Fatal". One or more fatal errors will prevent the transaction from being saved for the update cycle. A transaction with only warning errors will be saved for the update, but the data elements in error are blanked out. The user must review the Edit Report carefully to verify accepted data and to make appropriate corrections for rejected data.

7.2 Edit Error Messages

All of the errors identified by the Edit Program are listed in Table 7-1. All error messages preceded by three asterisks indicate a fatal error. Error messages preceded by one asterisk indicate a warning error.

TABLE 7-1

EDIT ERROR MESSAGES

Data Elements Name	Message		For Detailed Explanation, See Page:
Region	***	INVALID REGION CODE	A-22
State	***	INVALID STATE CODE	A-45
State	***	STATE NOT IN REGION	A-45
County Code	***	INCORRECT COUNTY CODE FOR STATE	A-9
Source Number	***	SOURCE NUMBER MUST BE NUMERIC	A-42
Card Code	***	INVALID CARD CODE	A-80
Update Code	***	INVALID UPDATE CODE	A-84
Emission Point Number	***	EMISSION POINT MUST BE ZEROS	A-55
Action Number	***	ACTION NUMBER MUST BE ZEROS	A-67
Source Name	***	SOURCE NAME REQUIRED ON NEW ENTRY	A-41
Line Number	***	LINE NUMBER MUST BE NUMERIC	A-82
Update Code	***	UPDATE CODE D INVALID FOR CARD 2 & 3	A-84
Emission Point	***	EMISSION POINT MUST BE NUMERIC	A-55
	***	POINT MUST BE GREATER THAN ZERO	
Compliance Status	***	INVALID COMPLIANCE STATUS CODE	A-51
Action Number	***	ACTION NUM MUST BE GREATER THAN ZERO	A-67
	***	ACTION NUMBER MUST BE NUMERIC	A-67
Action Type	***	INVALID ACTION TYPE	A-68
Update Code	***	NO DATA IN COL 21-79 FOR DELETES	A-84
Action Type	***	ACTION TYPE REQUIRED ON NEW ENTRY	A-68
Update Code	***	DO NOT DELETE POINT ØØØ	A-84
Update Code	***	UPDATE R ONLY FOR REVISED ACTION	A-84
Action Number	***	ACTION NUM 99 VALID ONLY FOR A NEW	A-67
Source Name	***	SOURCE NAME MUST BEGIN IN COL 27	A-61
	***	INVALID REGION ON CONTROL CARD	A-61
AQCR	*	INCORRECT AQCR FOR COUNT	A-5
City Code	*	CITY CODE SHOULD BE NUMERIC	A-7
Zip Code	*	SIP CODE SHOULD BE NUMERIC	A-49
SIC Code	*	SIC CODE SHOULD BE NUMERIC	A-34
Federal Facility Code	*	INVALID FEDERAL FACILITY CODE	A-12
Active/Passive Code	*	INVALID AIR PROGRAM CODE	A-1

TABLE 7-1 (Continued)

Data Element Name	Message		For Detailed Explanation, See Page:
Staff Personnel Code-Source	*	INVALID STAFF CODE	A-44
SCC Code	*	SCC SHOULD BE NUMERIC	A-62
SIP Code	*	INVLAID SIP CODE	A-63
Pollutant Code	*	INVALID POLLUTANT CODE	A-17
Emission Category	*	INVALID EMISSION CATEGORY	A-53
Mulitple Crossreference	*	MULTIPLE XREF SHOULD BE NUMERIC	A-56
Date Achieved	*	INVALID DATE ACHVD - OUTPUT ZEROS	A-69
Date Scheduled	*	INVALID DATE SCHED - OUTPUT ZEROS	A-71
	*	DATE SCHED SHOULD BE NEW - OP ZEROS	A-71
Results Code	*	INVALID RESULTS CODE	A-75
Update Code	*	ASTERISKS FOR CHANGES	A-84
Action Type	*	ACT DESC IGNORED - ATPE NOT 00	A-68
Pollutant Delete Flag	*	INVALID POLLUTANT DELETE FLAG	A-21
	*	NO DATA TO FOLLOW DELETE FLAG	A-21
Pollutant Compliance	*	INVALID POLLUTANT COMPLIANCE	A-18
Air Program Status	*	INVALID AIR PROGRAM STATUS	A-3
Air Quality Maintenance Area	*	INVALID AIR QUALITY MAINT AREA	A-14
AQCR Indicator	*	INVALID AQCR INDICATOR	A-15
Pollutant Emission Category	*	INVALID POLLUTANT EMISSION CATEGORY	A-19
Procedural Compliance	*	INVALID CMS2 CODE	A-59
Penalty Amount	*	PENALTY AMOUNT ONLY ON 2() ACTIONS	A-73
Penalty Amount	*	PENALTY AMOUNT SHOULD BE NUMERIC	A-73
Capacity Code	*	CAPACITY SHOULD BE NUMERIC	A-6
Source Compliance Code	*	INVALID SOURCE COMPLIANCE CODE	A-36
Source Emission Category	*	INVALID SOURCE EMISSION CATEGORY	A-39

Transactions with one or more fatal errors will not be placed on the MOD File. Transactions with no errors or with only warning errors will be placed on the MOD File for future processing by the Update. Keep in mind that a data element flagged with a warning message is blanked out by the Edit.

For a detailed explanation of the valid values for each data element in the CDS System, please consult Appendix A. Coding instructions are given for each data element; edit error messages by data element are repeated in this appendix. Certain data elements in Appendix A contain no edit error messages; these data elements are not validated by the Edit and may contain any alphanumeric characters.

7.3 Sample CDS Edit Report

A sample Edit Report is shown in Figure 7-1. Each page of the report contains the report title, the region name, the date, and the time at which the Edit was run by the computer. The report also contains column headings for the following data elements: Region, State, County, Source, Point, Action, Card Type, and Update Code. Directly beneath these column headings are two rows of numbers indicating card columns; the position of any data on the card can be determined by referring to these card column identifiers.

For each new Card 1 accepted by the Edit, a county name is generated and printed directly beneath the County Code; this county name is passed to the Update, where it is placed on the Masterfile together with all the other input data.

COMPLIANCE DATA SYSTEM EDIT REPORT
REGION 4-ATLANTA
TRANSACTIONS ENTERED ON 11/14/79 AT 13:33


```
                                CRD                                                                  UPDATE.     ERROR MESSAGES
RG ST CNTY SHCE  PNT AN TYP                    CARD COLUMNS:                                          CODE. *    WARNING - DATA ELEMENT REJECTED
0           1                  2         3         4         5         6         7                     8 . *** FATAL   - CARD REJECTED
12 34 5678 90123 456 78  9  0123456789012345678901234567890123456789012345678901234567890123456789 0
```

```
04 25 0600 60002 000 00  2                                                  6          C .
04 25 1920 60011 000 00  2                                                  6          C .
23 18 0420 10300 000 00  9                                                  6          C . *** INVALID REGION CODE
**                       *                                                             . *** INVALID CARD CODE
04 01 2120 60024 000 00  2                                                  6          C .
04 01 2520 60027 000 00  2                                                  6          C .
04 01 1920 60030 000 00  2                                                  6          C .
04 18 0420 10300 000 00  9                                                  6             . *** INVALID UPDATE CODE
                         *                                                             * . *** INVALID CARD CODE
04 01 2120 60033 000 00  2                                                  6          C .
04 01 1820 60036 000 00  2                                                  6          C .
04 01 1460 60045 000 00  2                                                  6          C .
04 01 2100 70012 000 00  2                                                  7          C .
04 18 2600 11111 000 00  2                                                  U          C . *   INVALID AIR PROGRAM CODE
                                                                            *             .
04 01 1980 80001 000 00  2                                                  8          C .
04 01 2260 80001 000 00  2                                                  8          C .
04 01 2400 80001 000 00  2                                                  8          C .
04 11 0980 80001 000 00  2                                                  8          C .
04 18 2600 11181 000 00  2                                                  8          C . *** SOURCE NUMBER MUST BE NUMERIC
           *****                                                                        .
04 11 1120 80001 000 00  2                                                  8          C .
04 11 1640 80001 000 00  2                                                  8          C .
04 11 4320 80001 000 00  2                                                  8          C .
04 11 4340 80001 000 00  2                                                  8          C .
04 11 5120 80001 000 00  2                                                  8          C .
04 11 5320 80001 000 00  2                                                  8          C .
04 18 2600 80001 000 00  2                                                  8          C .
04 34 0480 80001 000 00  2                                                  8          C .
04 34 0540 80001 000 00  2                                                  8          C .
04 34 1860 80001 000 00  2                                                  8          C .
04 34 1900 80001 000 00  2                                                  8          C .
04 11 1640 80002 000 00  2                                                  8          C .
04 18 2600 80002 000 00  2                                                  8          C .
04 11 1640 80003 000 00  2                                                  8          C .
04 11 2380 80003 000 00  2                                                  8          C .
04 01 2400 80004 000 00  2                                                  8          C .
04 11 1160 80007 000 00  2                                                  8          C .
04 11 0460 80009 000 00  2                                                  8          C .
04 34 0480 80011 000 00  2                                                  8          C .
04 11 0980 80016 000 00  2                                                  8          C .
04 11 2260 80018 000 00  2                                                  8          C .
04 11 3860 80029 000 00  2                                                  8          C .
04 34 0280 80032 000 00  2                                                  8          C .
04 11 0980 80036 000 00  2                                                  8          C .
04 11 1160 80044 000 00  2                                                  8          C .
04 11 1640 80054 000 00  2                                                  8          C .
04 34 1860 80163 000 00  2                                                  8          C .
04 34 1480 80173 000 00  2                                                  8          C .
04 11 2260 80268 000 00  2                                                  8          C .
```

FIGURE 7-1

Error messages are identified on the right hand side of the report. In addition to the error messages, data elements in error will have one or more asterisks directly beneath the data element to help pinpoint the problem area which needs to be corrected.

7.4 Edit Job Control Language (JCL)

To execute the Edit Program, use the JCL shown in Figure 7-2. Because a job cannot receive this priority unless it uses less than 30 seconds of CPU time and produces less than 2Ø,ØØØ lines of output, it is better to run two Edit jobs with 12,ØØØ cards.

A number of options are available with the Edit Program:

1. Card input on a "dummy" basis. This option enables the user to see the edit report produced by his input transactions without actually placing the transactions on the output MOD File. The "dummy" mode is particularly useful if the user is expecting a considerable number of errors which can be corrected and resubmitted prior to the update cycle. The user should remember that no valid transactions on the Edit Report are passed to the Update when the "dummy" mode is being used. Use the JCL shown in Figure 7-3.

2. Input from tape or disk. Input from a disk file or a tape file can be processed by the Edit just as easily as punchcard input. Use the JCL shown in Figure 7-4.

3. Saving the Reject File. All fatal errors identified by the Edit can be saved on a disk file for correction via WYLBUR, or they can be printed out for re-coding. This optional file is an 8Ø character card image of the rejected input transactions. If the Reject File is placed on an WYLBUR data set for corrections, the corrected file can be resubmitted as input to the Edit. Use the JCL shown in Figures 7-5 and 7-6.

4. Submitting Input via WYLBUR. If input data exists on an WYLBUR data set, JCL can be added to the data set in order to run the Edit. Use the procedures shown in Figure 7-7. This option should be used only if the user is already familiar with basic JCL and WYLBUR concepts.

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AUTHOR TRC	PROGRAM NAME CDS EDIT	TASK NUMBER	ATE	Page of	CARD NUMBER

JCL for using the CDS Edit with card input.

```
//EPAiii   JOB (aaaa,Miii),'USER ID',TIME=1,PRTY=4,PASSWORD=pppp
/*ROUTE  PRINT RMTrr
/*CNTL  CDS EXC
//CDSEDIT  EXEC CDSIPTn
//EDIT.CARDSIN  DD *
```

Place all input transaction immediately after the above JCL card.

```
//
/*EOF
```

The above two cards should be placed at the end of the input transactions.

Where:

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's remote; see figure 10-6 for a list of remote numbers
n	is the user's region number or state code. The valid values are 1 through 10, SC,TN,NE,etc.
pppp	is the user's password

FIGURE 7-2

CDS EDIT JOB CONTROL

AUTHOR TRC	PROGRAM NAME CDS EDIT	TASK NUMBER	DATE	Page of	CARD NUMBER

Using the CDS Edit with the "DUMMY" mode; with this mode, no data is saved on the MOD File.

```
//EPAiii    JOB (aaaa,Miii),'USER ID',TIME=1,PRTY=4,PASSWORD=pppp
/*ROUTE  PRINT  RMTrr
/*CNTL  CDS,EXC
//CDSEDIT  EXEC CDSIPTn,TYPE='DUMMY,'
//EDIT.CARDSIN  DD *
//
/*EOF
```

The above two cards should be placed at the end of the transaction deck.

Where:

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's remote; see figure 10-6 for a list of Remote numbers
n	is the user's region number or state code. The valid values are 1 through 10: SC,NY,TN,etc.
pppp	is the user's password

FIGURE 7 – 3

USING THE EDIT'S DUMMY OPTION

AUTHOR	TRC	PROGRAM NAME	CDS EDIT	TASK NUMBER	DATE	Page of	CARD NUMBER

Using tape input instead of punch card input to the CDS Edit

```
//EPAiii    JOB (aaaa,Miii)'USER ID',TIME=1,PASSWORD=pppp
/*ROUTE   PRINT RMTrr
/*CNTL   CDS,EXC
//CDSEDIT   EXEC CDSIPTn
//EDIT.CARDSIN DD DSN=xxxxxx,UNIT=3400-5,DISP=SHR
//                DCB=(RECFM=FB,LRECL=80,BLKSIZE=yyyyy),
//                VOL=SER=zzzzzz,LABEL=RETPD=15
//
/*EOF
```

Where

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's Remote; see figure 10-6 for a list of remote numbers.
n	is the user's region number or state code
xxxxxx	is the data set name of the tape file containing the input card images
pppp	is the user's password
yyyy	is the block size of the data on the tape; it must be a multiple of 80
zzzzzz	is the volume serial number found on the tape label

FIGURE 7-4

INPUT FROM TAPE

TRC

AUTHOR TRC	PROGRAM NAME CDS EDIT	TASK NUMBER	DATE	Page of	CARD NUMBER

Saving the optional REJECT File during a regular Edit run; this file can then be corrected via WYLBUR

```
//EPAiii    JOB (aaaa,Miii),'USER ID',TIME=1,PRTY=1,PASSWORD=pppp
/*ROUTE  PRINT RMTrr
/*CNTL  CDS,EXC
//CDSEDIT  EXEC CDSIPTn
//EDIT.REJECT DD DSN=CN.EPAiii.aaaa.ERRORS,UNIT=3330-1,
//              DISP=(NEW,KEEP),SPACE=(TRK,(2,2)),
                DCB=(RECFM=FB,LRECL=80,BLKSIZE=3120)
//EDIT.CARDSIN  DD *
```

Input transactions should be placed immediately after the above JCL card

```
//
/*EOF
```

The above two cards should be placed at the end of the transaction deck.

Where:

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's Remote; see figure 10-6 for a list of remote numbers
n	is the user's region number or state code
pppp	is the user's password

FIGURE 7-5

SAVING THE REJECT FILE

TRC

AUTHOR TRC	PROGRAM NAME CDS EDIT	TASK NUMBER	DATE	Page of	CARD NUMBER

Printing the optional REJECT file during a regular Edit run.

```
//EPAiii   JOB (aaaa,Miii),'USER ID',TIME=1,PRTY=4,PASSWORD=pppp
/*ROUTE  PRINT RMTrr
/*CNTL  CDS,EXC
//CDSEDIT  EXEC CDSIPTn
//EDIT.REJECT DD SYSOUT=A,DCB=BLKSIZE=80
//EDIT.CARDSIN DD *
```

Input transaction cards should be placed immediately after the above JCL card.

```
//
/*EOF
```

The above two cards should be placed at the end of the transaction deck.

Where:

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's Remote; see figure 10-6 for a list of remote numbers
n	is the user's region number or state code.
pppp	is the user's password

FIGURE 7-6

PRINTING THE REJECT FILE

```
WYL: NOT AN ACTIVE SYSTEM
SYSTEM? wylbur
WYLBUR: NOT AN ACTIVE SYSTEM
SYSTEM? wylbur
WYLBUR: NOT AN ACTIVE SYSTEM
SYSTEM? wylbur
SPECIFY GLOBAL FORMAT FOR SAVE COMMANDS
REPLY - DEFAULT, EDIT, TSO, CARD, OR PRINT
FORMAT? default
COMMAND ? collect 1.1
   1.1  ? //epaexc   job (a026,mexc),'cdsrtv reg4',time=1,prty=4
   1.2  ? /*route  print hold
   1.3  ? /*cntl  cds,exc
   1.4  ? //rtv4   exec cdsrtv
   1.5  ? //sys005 dd *
   1.6  ? 01 04    major sip facilities in region iv
   1.7  ? 10 apcd 1 2
   1.8  ? 10 ecat a 2
   1.9  ? 10 ecat a 3
   2.   ? 10 ptno m 000
   2.1  ? 20 ql
   2.2  ? 40 nohd regn stte cnty srce ptno
   2.3  ? //
   2.4  ? ***
COMMAND ? lis
   1.1    //EPAEXC   JOB (A026,MEXC),'CDSRTV REG4',TIME=1,PRTY=4
   1.2    /*ROUTE  PRINT HOLD
   1.3    /*CNTL  CDS,EXC
   1.4    //RTV4   EXEC CDSRTV4
   1.5    //SYS005 DD *
   1.6    01 04    MAJOR SIP FACILITIES IN REGION IV
   1.7    10 APCD L 2
   1.8    10 ECAT A 2
   1.9    10 ECAT A 3
   2.     10 PTNO M 000
   2.1    20 QL
   2.2    40 NOHD REGN STTE CNTY SRCE PTNO
   2.3    //
COMMAND ? run unn priority=5
743 IS YOUR JOB NUMBER.
COMMAND ? loc 743
JOB 743 EPAEXC    AWAITING EXECUTION A ANY
COMMAND ?
```

FIGURE 7-7

7.5 CDS Input Preparation via WYLBUR

WLYBUR is a powerful tool which can be used in conjunction with the CDS retrieval to create input punch card formats for the CDS Edit. WYLBUR should not be used to prepare punch cards for new facilities or highly changeable data.

When a uniform add, change, or delete must be made to one particular CDS punch card type, users should consider using WYLBUR rather than ordinary coding sheets. If the selection logic of the CDS retrieval can be used to extract those CDS masterfile records which must be changed, WYLBUR can be used to create the desired input.

Examples of successful WYLBUR applications are:

- Create a new action record with the same action type and date scheduled for all NSPS facilities.
- Generate a new action for all action which have been rescheduled within a certain time.
- Delete all actions which have been scheduled and performed prior to January 1, 1978.
- Change the Compliance Status for all sources which meet certain retrival selection criteria.
- Change a Regional Data Element for sources which meet certain retrieval selection criteria.
- Change the AQCR for all facilities within certain counties.

The following checklist gives some of the advantates and disadvantages of using WYLBUR for input data preparation:

Advantages	Disadvantages
Saves input data preparation coding time for uniform changes.	Input data must be retrievable from the CDS masterfile.
Provides "instant input" with no need to wait for keypunching.	WYLBUR sessions cost about $30/hour; this is much more than either coding or keypunchingcosts for variable data.

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WYLBUR commands, especially the change command, are powerful tools for data manipulation.	Users must possess basic WYLBUR knowledge to perform needed data manipulation tasks.

The following steps outline how WYLBUR might be used to perform any of the above tasks:

A) Formulate the Retrieval Selection Cards which will create a Quick Look Report which can then be manipulated and converted into input punch card formats. The 40-Card used for printline formatting should contain NOHD, REGN, STTE, CNTY, SRCE, and any other applicable data elements which will be needed for each input transaction.

B) If the retrieval is submitted via punch cards, a special JCL card must be added after the Job card to make it possible to fetch the retrieval output via WYLBUR:

```
          1*ROUTE   PRINT HOLD
Card
Column    1         10    16
```

If the user creates the retrieval via WYLBUR, he should submit the following command:

```
? RUN HOLD
```

This command will enable the user to manipulate the output from the retrieval. Users must note the job identifier of the job which will be retrieved by WYLBUR. Be sure to save your job number as it will be used to fetch the job into your workspace on WYLBUR.

As an aid in converting Retrieval output into CDS input transactions, users are urged to create the following two data sets on their WYLBUR source libraries:

1) Input Job Control Language (JCL). The JCL described in Figure 7-7 should be saved as a data set. For the example used here, TRC used a data set called IPT4JCL.

2) Retrieval Job Control Language (JCL). The JCL described in Figure 9-19 should be saved as a data set. For the example used here, TRC saved a data set called RTV4JCL.

7.6 CDS/WYLBUR Example

Region IV wished to place the letter "M" in Regional Data Element 3 for each of its major sources. Instead of coding this character for each of its 4,685 major sources, they used WYLBUR to create one transaction Card-1 for each facility. They did this by using the following steps:

A) Formulated the following Retrieval selection cards:

```
Ø1 Ø4 Major SIP Facilities in Region IV.
1Ø APCD L 2
1Ø ECAT A 2
1Ø ECAT A 3
1Ø PTNO M ØØØ
2Ø QL
4Ø NOHD REGN STTE CNTY SRCE PTNO
```

B) Submitted this retrieval with the following command:

```
? RUN HOLD UNN
```

C) Wait until the job had executed. Record the job ID number carefully since this information is necessary to retrieve the remote output for WYLBUR manipulation. The job ID for this retrieval was "1357"

D) Used the following WYLBUR commands to create input punch card transactions for processing by the CDS Edit:

1) Sign on according to the proper WCC conventions.

2) Fetch 1357
This command retrieves the output of job ID 1357 and allows users to load the output into Working Storage.

3) LIST OFFLINE REMOTE=37 UNN CC
This command lists the Retrieval output on the high speed printer at Remote 37. Users should route their output to their own remote number. If users are not sure of what data was retrieved, they should consult this printout before proceeding further.

4) DELETE NOT '04' 2/3 IN ALL
This command deletes each Quick Look print line which does not contain Region Code in columns 2-3. With one command, all heading lines are eliminated.

5) SET LENGTH=80

6) SET TERMINAL WIDTH=132

7) CHANGE ' ' TO " IN ALL NOLIST
Eliminate all embedded spaces between Region, State, County, Source, and Point numbers. Columns 1-16 of each punch card are now ready.

8) LIST
Check out what is in Working Storage.

9) CHANGE 80/80 TO 'C' IN ALL NOLIST
Generates "C" in column 80, update code.

10) LIST
Check out what is in Working Storage.

11) CHANGE 69/69 TO 'M' IN ALL NOLIST
Generates a "M" in column 69, RDE3.

12) CHANGE 17/19 TO '001' IN ALL NOLIST
Creates card columns 17-19.

13) COPY ALL TO .001 BY .001 FROM IPT10JCL
Copies the data set IPT10JCL into Working Storage starting at sequence number .001 and incrementing the copied file by .001. Creates the run JCL for this file.

14) LIST
Check out what is in Working Storage.

15) RUN UNN
Submit the job for processing by the CDS Edit.

16) LOGOFF
Sign off after all WYLBUR session is complete.

Figure 7-8 shows a sample WYLBUR session used to convert Retrieval output into input to the CDS Edit.

```
COMMAND ? fetch 743
COMMAND ? lis
   1.      10.59.54 JOB  743A RACINIT: USER=EPAEXC GRP=A026 A=A026 PB=36
   2.      10.59.54 JOB  743A $HASP373 EPAEXC   STARTED - INIT  8 - CLASS A
   3.      11.07.36 JOB  743A WCC005I * JOB EPAEXC   ENDED ON 11/29/79 AT 11:07:36, PRIORITY 5/5/5
   4.      11.07.36 JOB  743A $HASP395 EPAEXC   ENDED
   5.    1    1      //EPAEXC   JOB (A026,HEXC),'CDSRTV REG4',TIME=1,PRTY=4                    JOB  743
   6.                 **ROUTE P...
COMMAND ? delete not '04' 2/3 in all
COMMAND ? list
 342.      04   01   0240 00001 000
 343.      04   01   0240 00002 000
 344.      04   01   0240 00003 000
 345.      04   01   0260 00004 000
...
COMMAND ? set length = 80
COMMAND ? set terminal width = 132
COMMAND ? change ' ' to '' in all nolist
COMMAND ? list
 342.      040102400000 1000
 343.      040102400000 2000
 344.      040102400000 3000
 345.      040102600000 4000
 346.      040102600000 5000
 347.      |...
COMMAND ? change 80/80 to 'c' in all nolist
COMMAND ? list
 342.      040102400000 1000                                                    c
 343.      040102400000 2000                                                    c
 344.      040102400000 3000                                                    c
 345.      040102600000 4000                                                    c
 346.      040102...
COMMAND ? change 69/69 to 'm' in all nolist
COMMAND ? list
 342.      040102400000 1000                                          m         c
 343.      040102400000 2000                                          m         c
 344.      040102400000 3000                                          m         c
 345.      040102600000 4000                                          m         c
 346.      ...
COMMAND ? change 17/19 to '001' in all nolist
COMMAND ? list
 342.      040102400000 1000001                                       m         c
 343.      040102400000 2000001                                       m         c
 344.      040102400000 3000001                                       m         c
 345.      040...
COMMAND ? copy all to .001 by .001 from ipt4jcl
0.004 - LAST LINE.
COMMAND ? lis
   0.001  //EPAEXC10 JOB (A026,HEXC),'REG 0 CDS IPT',MSGLEVEL=(1,1),PRTY=4        00000100
   0.002  /*ROUTE PRINT REMOTE37                                                   00000200
   0.003  //EDIT     EXEC CDSIPT10                                                 00000300
   0.004  //EDIT.CARDSIN DD *                                                      00000400
 342.      040102400000 1000001                                       m         c
 343.      040102400000 2000001                                       m         c
 344.      040102400000 3000001                                       m         c
 345.      040102600000 4000001                                       m         c
 346.      04...
COMMAND ? run unm
IS IS YOUR JOB NUMBER.
COMMAND ? logoff
CLEAR OK? yes
EDITING TIME = 22.54 SECONDS
CONNECT TIME = 0:12:28
CHARGE = $0.00
END OF SESSION  THURSDAY  11/29/79  11:52:02 A.M.
```

FIGURE 7-8

8.0 UPDATE PROCESSING

The update cycle consists of a series of programs which apply input transactions to the Masterfile. All input transactions which contain no fatal errors are stored on the MOD File by each run of the Edit program. During the update cycle, all transactions placed on the MOD File since the last update cycle are applied to the Masterfile by the Update program. The update cycle is usually scheduled by the national DBC to run on Wednesday nights.

8.1 Update Program Description

Prior to the Update Program, all input transactions from the MOD File are sorted into the same sequence as the Masterfile. The output Masterfile from the previous update cycle becomes the input Masterfile to the current cycle. The Update applies input transactions to the Masterfile to produce a new version of the Masterfile as output. There are three major logic paths in the Update depending on the Update Code present on the transaction.

To add a new record to the Masterfile, the Update performs the following steps:

1. The records on the input Masterfile are copied to the output Masterfile until an input Masterfile record is found with a record identifier (Region, State, County, Source, Point, and Action Numbers) equal to or greater than the record identifier on the new transaction.

2. If an input Masterfile record already exists for that record identifier, the input transaction is rejected since the Update cannot perform the add logic.

3. If an input Masterfile record does not exist for that record identifier, the transaction is formatted into an output Masterfile record.

To change an existing record on the Masterfile, the Update performs the following steps:

1. The records on the input Masterfile are copied to the output Masterfile until the record identifier on the input Masterfile is equal to or greater than the record identifier on the change transaction.

2. If there is an input Masterfile record with the same record identifier as the input transaction, the data on the transaction is applied to the input Masterfile. After all multiple change transactions have been applied to the input Masterfile record, it is then placed on the output Masterfile.

3. If there is no input Masterfile record with the same record identifier as the input transaction, the change transaction is rejected. Special logic has been developed to allow users to create a new Masterfile record with a Card 3 change transaction to avoid rejects.

To delete an existing record from the Masterfile, the Update performs the following steps:

1. The records on the input Masterfile are copied to the output Masterfile until the record identifier on the input Masterfile is equal to or greater than the record identifier on the delete transaction.

2. If there is no input Masterfile record with the same record identifier as the input transaction, the delete transaction is rejected.

3. For a comment delete, the input Masterfile record which matches the record identifier of the input transaction is not copied to the output Masterfile.

4. For an action delete, input Masterfile records with the same Region, State, County, Source, Point, and Action numbers as the delete transaction are not copied to the output Masterfile.

5. For an emission point delete, input Masterfile records with the same Region, State, County, Source, and Point numbers as the delete transaction are not copied to the output Masterfile.

6. For a facility delete, input Masterfile records with the same Region, State, County, and Source numbers as the delete transaction are not copied to the output Masterfile.

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The Update will reject input transactions under the following conditions:

1. Because of the Masterfile hierarchy, an action cannot be added to the Masterfile without a corresponding emission point, nor can an emission point be added to the Masterfile without a corresponding source record. Comments cannot be added without their corresponding source, point, or action records.

2. A new and a change transaction for the same record identifier cannot be applied to the Masterfile during the same update cycle. The change transaction will be rejected.

3. A delete and a change transaction for the same record identifier cannot be applied to the Masterfile during the same update cycle. The change transaction will be rejected.

In addition to applying adds, changes, and deletes to the Masterfile, the Update also performs a table lookup on all personnel codes on the Masterfile. No change transactions need to be coded to change personnel names on the CDS Masterfile. Whenever a name associated with a personnel code is changed by the national Data Bank Coordinator, the personnel name and the associated table for that personnel code will be placed by the update cycle onto the CDS Masterfile. This will be accomplished for personnel at both source and action levels. Refer to Section 10.1.2 for a full description of the personnel code processing.

Regional users should call the national Data Bank Coordinator to add, change or delete entries on personnel tables.

8.2 Update Scheduling

The scheduling and maintenance of the update cycle is the responsibility of the national Data Bank Coordinator. Once a week, usually on Wednesday night, the valid transactions on the MOD File are applied to the CDS Masterfile by the Update Program. Because of this schedule, it is important for users to have all of their weekly input ready for keypunching on or before Tuesday noon.

If a sufficiently large number of regional users request an additional update, a special update run will be scheduled. When holidays prevent a Wednesday night update cycle or when a special update cycle is scheduled, the national Data Bank Coordinator will inform all CDS users of the change.

On Thursday mornings and an all mornings following an update cycle, an Update Report will be routed to each region by the DBC. If the report is not available by noon, users should verify that the update cycle has run successfully by examining the Update Status Log described in Section 8.5, and then users should obtain their Update Reports by using the Job Control Language described in Section 8.6.

8.3 Update Report

The Update Program produces an Update Report which is stored on a Regional file. If the user had transactions which were entered into the update cycle normally, the national DBC will run the Update Report for each user. However, if the report is not available by 12 noon following an update, then the user must request his Update Report by submitting the Update Report Job Control described in Figure 8.3. This must be done prior to the next update cycle. As soon as the next update cycle is run, the previous week's report is no longer on the disk file. A new report replaces the previous week's report on the disk file. TRC keeps copies of weekly Update Reports in its files; however, the user should keep his own file of weekly Update Reports.

The Update Report has one print line for each transaction sent to the Update Program by the Edit Program. Next to each transaction on the report, there is an Update Action column which shows that the

transaction was either added, changed, deleted or rejected from the CDS Masterfile. If the transaction was rejected, there will also be an error message explaining why the transaction could not be added, changed, or deleted.

All errors appearing on the Update Report should be corrected, coded, and then resubmitted to CDS via the Edit Program.

A sample Update Report is shown in Figure 8-1. The title, region number, and output serial number are recorded at the top of the report. Column headings are listed across the top of the page. Update Action is located on the right side of the page with an accompanying message if the transaction was rejected. Update error messages are listed in Table 8-1. The origin of the the input transaction is shown in the far right hand column. These include:

blank	The transaction was entered by the regional office or by an authorized representative of the region.
HQ	The transaction was entered by EPA Headquarters.
GN	The transaction was generated by the EDIT Program for further processing in the Update.
SC, TN, NE, etc.	A state code is placed in this column if a state entered the data into CDS.

8.4 Update Report Messages

On the Update Report, the Update Action column indicates the action taken by the Update Program on each transaction passed by the Edit. The normal Update Action message is ADDED, CHANGED, or DELETED. An ampersand

next to the word CHANGED indicates that the Update has applied multiple changes to the same Masterfile record in chronological order.

The word REJECT in the Update Action column indicates that the Update Program could not perform the appropriate add, change, or delete indicated by the transaction's Update Code. For each rejected transaction, there is a diagnostic error message printed out. Table 8-1 lists all of the errors identified by the Update. An explanation of the corrective procedures for each update error message is also given in this table.

8.5 Update Status Log

The Update Program produces an Update Status Log which shows the most recent successful run of the Update Cycle. This log is available to those users having access to a WYLBUR computer terminal. This Update Log shows the date, the time and the output serial number of the most recent update cycle. The log shows which regions participated in the update. In addition, it also shows the number of transactions input to the update and the number of transactions accepted and rejected by the update for each region.

To obtain the log, perform the following steps:

1. Follow the standard WCC sign-on procedures by typing in the user account, initials, keyword, and terminal identifier.

2. As soon as WYLBUR gives the prompt, COMMAND?, type in the following and then hit the carriage return:

   ```
   USE $CN.EPAEXC.AØ26.CDS.SYSOUT
   LIST
   ```

3. Figure 8-2 shows the contents of the log produced by following the above steps.

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TABLE 8-1

UPDATE ERROR MESSAGES

Update Error Message	Explanation
SOURCE NOT ON FILE	Cards 2 through 8 cannot be added to the Masterfile with an Update Code "N" unless the Card 1 has been added as new during this update cycle or during a previous update cycle. Make sure that the source exists on the Masterfile; verify that the correct State, County, and Source Number is being used on the transaction.
POINT NOT ON FILE	Cards 6 through 8 cannot be added to the Masterfile with an Update Code "N" unless there is a corresponding Card 5 on the Masterfile. Make sure that the Emission Point is being added as new or has already been added as new when emission comment or action information is being added to the Masterfile.
ACT NUM NOT ON FILE	An action comment Card 8 cannot be added to the Masterfile unless a corresponding action (Card 7) already exists on the Masterfile.
NEW 2 INVALID	Card 2 can be added to the Masterfile as new only during the same update cycle as the Card 1 is added as new. Once the source exists on the Masterfile, use an Update Code "C" to change the data elements found on the Card 2.
DUPLICATE TRANS	If two or more transactions with the same Region, State, County, Source, Point, and Action numbers have an Update Code "N" the first transaction is added to the Masterfile; and the second and subsequent transactions are rejected with this message. A change transaction following a new transaction for the same Record ID is rejected. Duplicate delete transactions are also rejected.
NOT ON FILE	The Update cannot apply a change transaction or a delete transaction against a non-existent Masterfile record. Verify the State, County, Source, Point, and

TABLE 8-1 (Continued)

Update Error Message	Explanation
	Action Numbers being used on the transaction.
ALREADY ON MF	A transaction with an Update Code "N" cannot be added to the Masterfile if a Masterfile record already exists with the same Region, State, County, Source, Point, and Action numbers. Also a new comment cannot be added if a comment with the same record identifier and line number already exists on the Masterfile.
98 ON MF	When the next sequential action number is not known on the Masterfile, action number 99 can be coded; the Update will convert the 99 to the next highest sequential action number. To prevent the Masterfile from going out of sequence, no action number over 98 will be added to the Masterfile.
&(AMPERSAND)	When an ampersand appears in the Error Message column of the Update Report, it indicates the presence of a multiple change transaction to the Masterfile. This is <u>not</u> an error message; it is only a warning that multiple changes have been applied to the Masterfile in chronological order.
S2 REJ	If one or more sets of pollutant compliance data cannot be added to the Masterfile because there are already 10 sets of pollutant compliance data on the Masterfile, a reject message is issued for each of the rejected pollutants. The Pollutant Code together with the letters "REJ" is printed in the Error Message column. Since the Card 3 has room for three sets of pollutant compliance data, up to three different reject messages may exist on one line.
ATPE WRONG FOR PCTY	On a change transaction, Penalty amount can be entered only for certain action types such as 21, 22, 23, etc.

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UPDATE REPORT

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PUERTO RICO DATA FOR REGION 2 - NEW YORK

OUTPUT SERIAL 438

STATE CODE	CNTY CODE	SOURCE CODE	EM PT	ACT NO	CARD CODE	CARD COLUMNS: 2 3 4 5 6 7		UPDT CODE	UPDATE ACTION	ERROR MESSAGE
0		1						B		
34	5678	90123	456	78	9	0123456789012345678901234567890123456789012345678901234567890123456789		0		B = MULTIPLE CHANGE ORIG
40	1240	00004	000	06	7	SITE INSPECTION	S8081579081579P01MC	N	ADDED	
40	1280	00003	000	00	3	1		C	CHANGED	GA
40	1280	00003	000	00	5	1		C	CHANGED	
40	1280	00003	000	09	7	SITE INSPECTION	S8082479082479P01MV	N	ADDED	
40	1280	00003	000	09	8	1OPACITY VIOLATION.		N	ADDED	
40	1280	00005	000	00	3	3		C	CHANGED	GA
40	1280	00005	000	00	5	3		C	CHANGED	
40	1280	00005	000	08	7	SITE INSPECTION	S8100179100179P01MC	N	ADDED	
40	1280	00007	000	00	3	3		C	CHANGED	GA
40	1280	00007	000	00	5	3		C	CHANGED	
40	1280	00007	000	05	7	SITE INSPECTION	S8070579070579P01MC	N	ADDED	
40	1320	00001	000	00	3	3		C	CHANGED	GA
40	1320	00001	000	00	5	3		C	CHANGED	
40	1320	00001	000	03	7	SITE INSPECTION	S8082879082879P01MC	N	ADDED	
40	1320	00003	000	00	3	5		C	CHANGED	GA
40	1320	00003	000	00	5	56		C	CHANGED	
40	1320	00003	000	09	7	SITE INSPECTION	S8083079083079P01MV	N	ADDED	
40	1320	00003	000	09	8	1IN COMPLIANCE W/SCHEDULE.		N	ADDED	
40	1320	00006	000	00	3	3		C	CHANGED	GA
40	1320	00006	000	00	5	3		C	CHANGED	
40	1320	00006	000	06	7	SITE INSPECTION	S8092679092679P01MC	N	ADDED	
40	1320	00007	000	00	3	3		C	REJECT NOT ON FILE	GA
40	1320	00007	000	00	5	3		C	REJECT NOT ON FILE	
40	1320	00007	000	04	7	SITE INSPECTION	S8080379080379P01MC	N	REJECT SOURCE NOT ON FILE	
40	1380	07001	000	19	7	SITE INSPECTION	S8091079091079P01MC	N	ADDED	
40	1380	07002	000	00	2	8		C	CHANGED	
40	1380	07002	000	10	7	EPA SURV ACTION	52092679092679006MC	N	ADDED	
40	1620	00001	000	00	3	4		C	CHANGED	GA
40	1620	00001	000	00	5	4		C	CHANGED	
40	1620	00002	000	00	3	3		C	CHANGED	GA
40	1620	00002	000	00	5	3		C	CHANGED	
40	1620	00002	000	03	7	SITE INSPECTION	S8080879080879P01MC	N	ADDED	
40	1620	00005	000	00	3	3		C	CHANGED	GA
40	1620	00005	000	00	5	3		C	CHANGED	
40	1620	00005	000	03	7	SITE INSPECTION	S8080879080879P01MC	N	ADDED	
40	1620	00010	000	00	3	3		C	CHANGED	GA
40	1620	00010	000	00	5	3		C	CHANGED	
40	1620	00010	000	04	7	SITE INSPECTION	S8080879080879P01MC	N	ADDED	
40	1620	00011	000	00	3	3		C	CHANGED	GA
40	1620	00011	000	00	5	3		C	CHANGED	
40	1620	00011	000	05	7	SITE INSPECTION	S8080879080879P01MC	N	ADDED	
40	1620	00013	000	00	3	3		C	CHANGED	GA
40	1620	00013	000	00	5	3		C	CHANGED	
40	1620	00013	000	03	7	SITE INSPECTION	S8091979091979P01MC	N	ADDED	
40	1700	00003	000	00	3	3		C	CHANGED	GA
40	1700	00003	000	00	5	3		C	CHANGED	

FIGURE 8-1

```
wyl
READY TO WCC ON C00

ILLEGAL TERMINAL TYPE
ajb32
ANDERSON-JACOBSON AJ832



WYLBUR SYSTEM AT COMNET  PORT 3  THURSDAY  11/01/79  9:39:54 A.M.
10/31/79: ARCHIVING TO RESUME NOVEMBER 11        - SEE NEWS ALERT
10/26/79: ONE NEWS FILE FOR ALL TERMINAL USERS - SEE NEWS MVS110
10/22/79: NEW SPACEL PROC FOR TSO AND WYLBUR USERS- SEE NEWS FA120
10/31/79: RESTRICTION ON MVT SETUP JOBS          -SEE NEWS ALERT
10/26/79: ALPHA NEWS FILE TO BE DISCONTINUED      - SEE NEWS MVS110
10/31/79: VETERANS DAY AND THANKSGIVING SCHEDULE - SEE NEWS SE030
USERID  ? epaexc
ACCOUNT ?
PASSWORD?
SPECIFY GLOBAL FORMAT FOR SAVE COMMANDS
REPLY - DEFAULT, EDIT, TSO, CARD, OR PRINT
FORMAT? card
COMMAND ? use .cds.sysout
COMMAND ? lis
   1.      FIRST VALUE/91031
   2.      00000000000000000000          CDS MASTER FILE OUTPUT SERIAL  00043/ ON 10/31/79
   3.                                                  /91131
   4.
   5.       UPDATE REPORT PRINT-LINES FOR REGION 01= 00113    RECORDS INPUT = 00113   ACCEPTED = 00105   REJECTED = 00008
   6.
   7.       UPDATE REPORT PRINT-LINES FOR REGION 02= 00006    RECORDS INPUT = 00006   ACCEPTED = 00006   REJECTED = 00000
   8.
   9.       UPDATE REPORT PRINT-LINES FOR REGION 03= 01356    RECORDS INPUT = 01356   ACCEPTED = 01277   REJECTED = 00079
  10.
  11.       UPDATE REPORT PRINT-LINES FOR REGION 04= 01543    RECORDS INPUT = 01543   ACCEPTED = 01519   REJECTED = 00024
  12.
  13.       UPDATE REPORT PRINT-LINES FOR REGION 05= 00056    RECORDS INPUT = 00056   ACCEPTED = 00054   REJECTED = 00002
  14.
  15.       UPDATE REPORT PRINT-LINES FOR REGION 06= 00267    RECORDS INPUT = 00267   ACCEPTED = 00265   REJECTED = 00002
  16.
  17.       UPDATE REPORT PRINT-LINES FOR REGION 07= 00848    RECORDS INPUT = 00848   ACCEPTED = 00799   REJECTED = 00049
  18.
  19.       UPDATE REPORT PRINT-LINES FOR REGION 08= 00030    RECORDS INPUT = 00030   ACCEPTED = 00030   REJECTED = 00000
  20.
  21.       UPDATE REPORT PRINT-LINES FOR REGION 09= 02364    RECORDS INPUT = 02364   ACCEPTED = 02356   REJECTED = 00008
  22.
  23.       UPDATE REPORT PRINT-LINES FOR REGION 10= 00007    RECORDS INPUT = 00007   ACCEPTED = 00005   REJECTED = 00002
  24.
  25.          UPDATE FINISHED AT 2123
  26.
COMMAND ?
```

FIGURE 8-2

AUTHOR	TRC	PROGRAM NAME	CDS Regional Update Report	TASK NUMBER	DATE	Page of	CARD NUMBER

JCL for obtaining the CDS Update Reprot for a given region.

```
//  EPAiii    JOB (aaaa,Miii), 'USER ID', TIME=1, PRTY=4, PASSWORD=pppp
/*ROUTE  PRINT RMTrr
/*CNTL  CDS  EXC
//  CDSRPT    EXEC CDSRPTn
//
/*EOF
```

Where:

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's Remote; see figure 10-6 for a list of remote numbers
n	is the user's region number or state code. The valid values are 1 through 10; SC,TN,NE etc.
pppp	is the user's password

FIGURE 8-3

CDS UPDATE REPORT JOB CONTROL

8.6 Update Report Job Control Language

The user is responsible for requesting his region's Update Report for each update cycle for which the region had input data. To execute the program which produces the Update Report, use the JCL shown in Figure 8-3. This JCL should be submitted immediately after each update cycle for which the user had input. Normally the user should submit this JCL on Thursday mornings and on mornings following special update cycles.

If the user does not submit this JCL prior to the next update cycle, the information from the update run is overlaid by the next update cycle's Update Report.

The Update Report provides the only audit trail of all transactions placed on the CDS Masterfile; therefore, it is important to keep this report on file so that errors can be researched and corrected.

9.0 RETRIEVAL PROCESSING

The Compliance Data System Retrieval is used to prepare management reports based on information on the Masterfile. The Retrieval has been developed to provide a great deal of flexibility to users in selecting and formatting management reports. Data can be formatted, sequenced and selected based on criteria developed to meet specific needs.

All output reports other than the Edit Report and the Update Report are produced on request from the CDS Retrieval Program. Requests for management reports may be made at any time since they are processed independently of the Update Cycle. The Retrieval provides users with the capability of seeing what data is on the Masterfile in a format that meets the user's needs.

To obtain reports from the Retrieval Program, the user must carefully prepare a Retrieval request form and submit this form to have the selection cards keypunched. The keypunched selection cards and appropriate Job Control Language cards are used to run the Retrieval. The user submits this input to the central computer site via the terminal or by WYLBUR. Output from the Retrieval Program consists of a Retrieval Edit Report and the management reports requested by the user.

The Retrieval Program provides the following features:

- Quick turnaround - the package operates on a "demand" basis and will usually provide overnight or faster turnaround, depending on the backlog of work at the computer center. In many cases, requests requiring less than 20,000 lines of printout can be met within one hour.

- Improved selectivity - Information can be selected from the Masterfile to meet the specific needs of the user so that smaller, more pertinent reports can be prepared. For example, if the user needs to have a list of point source facilities within a State or AQCR, he could get a Quick Look Report which shows only these

facilities and the particular information he wants to know (Name, Size, Compliance Status, etc.) on a single line.

- o Selection logic - Each user can select from his entire Regional Masterfile only that data which is of interest to him for his particular needs. The user can select data based on the presence or absence of information on the Masterfile depending on the type of selection criteria he specified on the logic selection input card.

- o Variable sequence - The Retrieval program permits the user to select the sequence in which he would like to view the data he has selected.

- o Variable output format - Regions can select from seven print formats depending on need. One of the formats is a single line report with a user option allowing inclusion of any specific data elements desired.

Since all management reports are based on CDS' retrieval capability, users should place data on the Masterfile in a manner which will permit efficient retrievals. At the present, comment information cannot be used in the retrieval's selection or sorting criteria. When preparing input data for CDS, users should be aware of the validation procedures for each data element performed by the CDS Edit as well as the selection, sorting, and printing criteria available in the Retrieval.

9.1 Reports Available from the Retrieval

Management reports are not automatically generated; the user must request reports from the Retrieval System to suit his own particular needs. The user must determine what information available on the Regional Masterfile is of interest to him. The user may obtain all of the information on the Masterfile or a limited amount based on his needs.

Any of the defined data elements can be used as a selection criteria. Since the selection, sorting and printing criteria in the Retrieval Program operate independently, the user may select a report on one set of data elements, sort on another set of data elements, and select different data elements for printing. Selection criteria cannot be based on information found in comment records. If none of the nationally defined data elements meet the user's selection criteria, one of the Regional Data Elements should be used to facilitate retrieval selection.

Reports are printed in Region, State, County and Source Number sequence unless the user selects his own sorting sequence. Up to six data elements, other than comments, may be used to create the user sort sequence.

The Source Data Report, the Questionnaire Report, the Action Summary Report, and the Milestone Report will present user selected and sorted information in a fixed format. The Quick Look Report allows the user to design his own report format. All data elements other than comments can be formatted for printing in a user selected sequence. A detailed description of each Report is provided in the following paragraphs.

9.1.1 Quick Look Report

The Quick Look is the most widely used report type available from the Retrieval. For each source, point, or action which meets the user's selection criteria, a single line containing user-selected data elements is formatted for printing. The user may specify what data elements are printed, and also he may specify the spacing of these data elements.

A standard Quick Look print line contains State, County, Source, Point, and Action Numbers together with up to fourteen other user-selected data elements. The only restriction is the print line length of 132 characters. Users may suppress State, County, Source, Point, and Action Numbers on each Quick Look line by using the No-header (NOHD) option. This option allows the full use of the 132 character print line for user-selected data elements.

Data elements are printed on the Quick Look line in the same order as they are requested on the print-format selection card. For spacing purposes, the user may select one of the two special data elements: BLK1 produces a blank column five characters wide; BLK2 produces a blank column 15 characters wide. These two data elements may be used repeatedly for spacing as required. BLK1 and BLK2 are especially useful when the Quick Look is used as a turnaround document.

If the user does not wish to see repeating data, the suppression option can be used. Using this option, source level data will print only when there is a change in data to be printed at the source level. Point level data will print only when a new point is to print. Action level data will always print.

Note that if only source and point information have been requested on the Quick Look Report, only source level suppression will take place. If only source level data has been requested no suppression will occur. Figure 9-1 shows a Quick Look Report with data suppression.

At the end of the Quick Look Report, a total is given for the number of lines printed. This total represents the sum of all items meeting the user's selection criteria. A page-break and subtotals are also available on the user-selected data elements. The user is cautioned

QUICK LOOK REPORT

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MAJOR ACTIONS FOR FY79

SOURCE NAME	CITY NAME	ST	SIC	POINT PROCESS DESCRIPTION	ECAT	CMST	ATPE	DATE ACP
							05	12/31/77
				DEMOLITION-CP HRT ENG1R4	0	5	03	01/13/77
				DEMOLITION-CP HRT ENG2R3	0	5	03	12/31/77
REPUBLIC STEEL	CHICAGO	IL		COKE MTRY #2	2	4	03	/ /
RICHLAND FOUNDRY CO	BELLEVILLE	IL	3321	GRAY IRON FOUNDRIES	2	4	05	/ /
ROCHELLE MUN DIESEL	ROCHELLE	IL	4911	ELECTRICAL SERVICES	3	4	63	12/10/75
ROESCH ENAMEL & MFG	BELLEVILLE	IL	3461	ENTIRE SOURCE	2	4	51	00/00/00
S ILLINOIS POWER	MARION	IL		UNIT #4	0	1	63	07/05/79
S ILLINOIS UNIV	CARBONDALE	IL		ENTIRE SOURCE	2	6	51	04/27/78
SAVANNA ARMY DEPOT	SAVANNA	IL		ENTIRE SOURCE	0	5	03	/ /
							04	/ /
							05	/ /
SHEFFIELD FOUNDRY	CHICAGO	IL	3561	ENTIRE SOURCE	2	5	63	10/24/74
SHELL OIL	BEDFORD PARK	IL	2911	PETROLEUM REFINING	2	1	63	04/30/79
SHELL OIL	HARRISTOWN	IL		ENTIRE SOURCE	2	1	63	07/10/79
							63	07/10/79
SHELL OIL	ROYALTON	IL	2911	PETROLEUM REFINING	3	1	05	/ /
							63	08/01/79
							63	08/01/79
SHELL OIL CO	ARLINGTON HTS	IL	2911	PETROLEUM REFINING	2	1	63	05/02/79
SHELL OIL CO	FARMER CITY	IL	2911	PETROLEUM REFINING	2	1	63	03/09/79
							63	05/09/79
SHELL OIL-ANLIN	HARTFORD	IL	2819	SULFURIC ACID PLANT	0	2	63	09/30/77
SHERREX	MAPLETON	IL	2894	ENTIRE SOURCE	3	8	52	11/16/77
							51	10/06/77
							63	03/31/78
							63	03/31/78
SKOKIE MUNI INCIN	SKOKIE	IL	4953	REFUSE SYSTEMS	2	9	63	02/20/74
				MUNICIPAL INCINERATOR	0	5	02	07/12/74
							05	07/26/74
SMITH DOUGLAS	HAMPSHIRE	IL	2041	FLOUR & OTHER GRAIN MILL	2	5	05	/ /
STEPAN CHEMICAL	ELWOOD/JOLIET	IL	2818	ENTIRE SOURCE	2	5	63	02/06/75
							05	/ /
STERLING STEEL CAST	SAUGET	IL	3312	BLAST FURNACES AND STEEL	2	4	51	02/15/78
							51	02/15/78
							05	/ /
TEXACO	LAWRENCEVILLE	IL	2911	PETROLEUM REFINING	3	4	63	03/26/74
							63	07/11/79
				STORAGE TANK #578	3	4	03	10/15/74
				STORAGE TANK #583	3	4	03	10/15/74
				STORAGE TANK #584	3	4	03	08/13/75
				STORAGE TANK #169	0	5	03	09/17/74
				STORAGE TANK #433	0	5	03	09/17/74
				STORAGE TANK #430	0	5	03	11/18/74
				STORAGE TANK #561	0	5	03	01/21/74
				STORAGE TANK #675	0	5	03	08/13/75
				STORAGE TANK #58	0	5	03	03/24/75

FIGURE 9-1

to request page-breaks and subtotals only for those data elements which produce logical groupings, such as State, AQCR, Action Type, etc.

The user may select his own sequencing for the Quick Look Report. Often two Quick Look Reports with the same selection criteria provide the user with a great deal of insight when the reports are sequenced differently.

Since three different Retrieval report formats can be requested from the same Retrieval, the Quick Look Report can serve as a summary or index to one of the longer report formats such as the Source Data Report.

9.1.2 Double Spaced Quick Look Report

This report is identical to the Quick Look Report except that a double space is provided between print lines. This feature is especially useful when the report is to be used as a turnaround document. The Quick Look and Double Spaced Quick Look Reports cannot be requested simultaneously.

Figures 9-1 and 9-2 are samples of the Quick Look Report and the Double Spaced Quick Look obtained by using the same selection, sorting, and printing criteria.

Logic selection was based on Illinois facilities which have had major compliance actions.

Sorting was based on Source Name.

Print line selection was based on the following data elements: Source Name, City, State, Emission Category, Compliance Status, Action Description, Date Scheduled, and Date Achieved.

QUICK LOOK REPORT

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CONFIDENTIAL REPORT - FOR EPA INTERNAL USE ONLY

MAJOR ACTIONS FOR FY79

SOURCE NAME	CITY NAME	ST	SIC	POINT PROCESS DESCRIPTION	ECAT	CMST	ATPE	DATE ACH
AMERICAN BRICK	CHICAGO	IL	3251	KILN & CRUSHING OPS	0	0	08	00/00/00
AMERICAN BRICK	CHICAGO	IL	3251	KILN & CRUSHING OPS	0	0	08	00/00/00
AMERICAN BRICK	CHICAGO	IL	3251	KILN & CRUSHING OPS	0	0	08	00/00/00
AMERICAN BRICK	CHICAGO	IL	3251	KILN & CRUSHING OPS	0	0	08	00/00/00
AMERICAN BRICK	CHICAGO	IL	3251	KILN & CRUSHING OPS	0	0	08	00/00/00
AMERICAN BRICK	CHICAGO	IL	3251	KILN & CRUSHING OPS	0	0	08	00/00/00
AMERICAN BRICK	CHICAGO	IL	3251	KILN & CRUSHING OPS	0	0	08	00/00/00
AMERICAN BRICK	CHICAGO	IL	3251	KILN & CRUSHING OPS	0	0	08	00/00/00
AMOCO CHEMICAL	JOLIET	IL	2911	PETROLEUM REFINING	3	4	63	05/07/75
AMOCO OIL	WOOD RIVER	IL	2944	6STEAM BOILERS	0	5	05	00/00/00
AMOCO OIL	WOOD RIVER	IL	2944	14 PROCESS HEATERS	0	5	05	04/20/77
AMOCO OIL	WOOD RIVER	IL	2944	REIPOINTS 900,901-REPORT	0	5	08	06/30/75
AMOCO OIL	WOOD RIVER	IL	2944	REIPOINTS 900,901-REPORT	0	5	08	09/30/75
AMOCO OIL	WOOD RIVER	IL	2944	REIPOINTS 900,901-REPORT	0	5	08	12/31/75
AMOCO OIL	WOOD RIVER	IL	2944	REIPOINTS 900,901-REPORT	0	5	08	04/01/76
AMOCO OIL	WOOD RIVER	IL	2944	REIPOINTS 900,901-REPORT	0	5	08	07/12/76
AMOCO OIL	WOOD RIVER	IL	2944	REIPOINTS 900,901-REPORT	0	5	08	09/29/76
AMOCO OIL	WOOD RIVER	IL		PROCESS HEATER #H-503	0	2	03	04/17/78
ARMOUR DIAL	MONTGOMERY	IL	2841	ENTIRE SOURCE	2	5	52	08/05/77
ARMOUR DIAL	MONTGOMERY	IL	2841	ENTIRE SOURCE	2	5	51	07/01/77
ARMOUR DIAL	MONTGOMERY	IL	2841	ENTIRE SOURCE	2	5	05	/ /
AURORA PAPERBOARD	AURORA	IL	2645	ENTIRE SOURCE	1	4	51	/ /
B F GOODRICH	HENRY	IL	2821	1 REACTOR OPENING	0	4	02	04/05/77

FIGURE 9-2

9.1.3 Source Data Report

The Source Data Report is the most comprehensive report available from the Retrieval. All data elements for a facility are included on this report; this is the only report which gives complete source information, source comment information, point information, point comment information, action information, and action comment information.

Each new facility is printed on a new page. Facilities with many points and actions use multiple pages per facility.

For those in charge of maintaining the accuracy of the CDS Masterfile, Source Data Reports by state provide an essential coding tool. For those interested only in a part of the Masterfile, report selection criteria can be based on any retrievable data elements.

There are four level options available, and one of these four levels must be specified in the selection criteria. Level A provides a printout of all data for a facility. Level S provides only source and source comment data. Level P provides all data except action and action comment data. Level C provides data for only those source, point, or action levels which meet the user's selection criteria. If no level code is specified, the default is Level A.

Although Source Data Reports can be sorted by any user-selected data elements retrievable on the Masterfile, users should not select point or action level data elements as their major sort key; in order to produce a meaningful report, users should keep all of the records for a given facility together by sorting on the source level. If no user sort key is specified, Source Date Reports are printed in the Masterfile sort order: Region, State, County, Source, Point, and Action Numbers.

Figure 9-3 gives a sample of a Source Data Report.

```
                                        SOURCE DATA REPORT
11/28/79                                COMPLIANCE DATA SYSTEM                                                    PAGE     49
                                  CONFIDENTIAL REPORT - FOR EPA INTERNAL USE ONLY
CARGILL                             MAJOR ACTIONS FOR FY79
STATE  IL     COUNTY COOK                                                                  FEDF   NON-FED        RDE1 1
COUNTY 1540   SOURCE 00014   AQCR 067   CITY 1220                                          APCD 0 SIP SOURCE      RDE2
                                                                                           APST   OPERATING       RDE3
SOURCE NAME    CARGILL                    STATE REGIST  031600AAE          SIC  2075        RDE6
ADDRESS        122ST & TORRENCE AVE       NEDS XREF     0014               RDE4             STAFF MEMBER
CITY, STATE    CHICAGO IL 60617           PRIORITY                         RDE5             LAST-UPDATE     6/27/79
SOURCE COMPLIANCE STATUS  5 IN VIOL-MEETING SCHD      SOURCE EMISSION CATEGORY 3 OVER 1000 TPY
FACILITY CAPACITY          RDE 9                      RDE 10                    RDE 11                RDE 12
POLLUTANT                  COMPLIANCE                 EMISSION CATEGORY         AQCR INDICATOR        AQRA INDICATOR      LEADING
POINT NUMBER  000     MULT                 SOURCE CMPL 5 IN VIOL-MEETING SCHD    STATE/LOC REGUL                           CFS2
POLLUTANT                                  SOURCE-SIP    NO SCHEDULE             SOURCE EMIS CAT 3 OVER 1000 TPY           RLE7 R
DESCRIPTION    ENTIRE SOURCE               CAPACITY                              SCCB CODE

     ACTION 01 SCHD    /  /    ACHV 10/ 1/77  ACT-TYPE 50   114 LETTER PLANNED
                                                             STAFF    K01                 RESULTS                          RLER
     ACTION 02 SCHD 10/ 1/78  ACHV    /  /    ACT-TYPE 05   FINAL COMPLIANCE
                                                             STAFF                        RESULTS                          RLEE
POINT NUMBER  010     MULT                 POINT CMPL  0 COMPL STATUS UNKNOWN    STATE/LOC REGUL 203(H)                    CFS2
POLLUTANT     PT                           POINT-SIP     NO SCHEDULE             PT EMIS CAT     3 OVER 1000 TPY           RLE7
DESCRIPTION   MISC FOOD VENTS              CAPACITY      01                      SCCB CODE       30299998
POINT NUMBER  020     MULT                 POINT CMPL  0 COMPL STATUS UNKNOWN    STATE/LOC REGUL 203(H)                    CFS2
POLLUTANT     PT                           POINT-SIP     NO SCHEDULE             PT EMIS CAT     3 OVER 1000 TPY           RLE7
DESCRIPTION   MISC FOOD CONVY              CAPACITY      01                      SCCB CODE       30299999
POINT NUMBER  022     MULT 020             POINT CMPL  0 COMPL STATUS UNKNOWN    STATE/LOC REGUL 203(F)                    CFS2
POLLUTANT     PT                           POINT-SIP     NO SCHEDULE             PT EMIS CAT     3 OVER 1000 TPY           RLE7
DESCRIPTION   MISC FOOD CONVY              CAPACITY      01                      SCCB CODE       30299999
```

FIGURE 9-3

9.1.4 Milestone Report

Two different types of Milestone Reports are available to the user. The first is the Standard Milestone Report, which tallies Compliance Status Code by State. The second is the Variable Milestone Report. It is similar to the Standard Milestone Report, but tallies are based on the two data elements chosen by the user. The presence of a 50 card in the retrieval selection cards indicates that the report will be a Variable Milestone Report rather than a Standard Milestone Report.

Standard Milestone Report

To facilitate National Reporting requirements by managers, the Standard Milestone Report was designed to provide a tally of the Compliance Status Code of selected emission points within a Region. The report shows the number of emission points broken down by Compliance Status for the States within a Region and for the Region as a whole. Subtotals are produced for emission points In Compliance, Out of Compliance, and of Unknown Compliance. Regional totals are developed for only those States included in the selection criteria.

Since the numbers developed by the Milestone Report represent the totals of all emission points selected by the Retrieval, great care must be exercised in preparing the appropriate retrieval selection cards in order to create a meaningful report. For most Milestone Reports, selection will be based on point number ØØØ. For specific reports, such as count of all Federal Facilities, the selection criteria must be based on the Federal Facility Code.

Figure 9-4 gives a sample Standard Milestone Report. The selection criteria included only New Source Performance sources in Region V.

MILESTONE REPORT

11/28/79

COMPLIANCE DATA SYSTEM
REGION V NSPS COMPLIANCE MILESTONE

	COMPLIANCE STATUS	REGION 5 TOTAL	ILLINOIS 14	INDIANA 15	MICHIGAN 23	MINN 24	OHIO 36	WISCONSIN 51
	COMPL STATUS UNKNOWN							
0	COMPL STATUS UNKNOWN	2	2	0	0	0	0	0
1	IN VIOL-NO SCHEDULE	10	4	4	0	0	2	0
2	IN COMPL-SOURCE TEST	68	24	1	18	7	17	1
3	IN COMPL-INSPECTION	2	0	2	0	0	0	0
4	IN COMPL-CERTIFICATN	102	17	36	15	4	22	8
5	IN VIOL-MEETING SCHD	9	5	0	0	0	3	1
6	IN VIOL-NOT MTG SCHD							
7	IN VIOL-UNK WRT SCHD							
8	NO APPLIC STATE REG							
9	IN COMPL-SHUT DOWN	2	0	0	0	0	0	2
	TOTALS FOR 2, 3, 4, 9	174	41	39	33	11	39	11
	TOTALS FOR 1, 5, 6	19	9	4	0	0	5	1
	TOTALS FOR 0 AND 7	2	2	0	0	0	0	0
	GRAND TOTALS	195	52	43	33	11	44	12

FIGURE 9-4

Variable Milestone Report

The Variable Milestone Report produces a tally of data based on two data elements which are selected by the user. Any two retrievable data elements at the source, point or action level may be chosen. One data element determines the rows that will be produced. The other data element determines the columns that will be produced. Note that the user chooses the row data element and the Variable Milestone Report will produce one line of output for each different value found on the file for that data element. To determine which values for the column data element are to be printed, the user supplies the column data element and the specific values for that data element. A maximum of ten values will be accepted.

As in the Standard Milestone Report, the totals produced by the Variable Milestone report reflect only data selected by the retrieval. Care should be taken in preparing retrieval selection cards so that the report produced is meaningful.

Figure 9-5 shows a sample Variable Milestone Report.

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MILESTONE REPORT

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COMPLIANCE DATA SYSTEM
CONFIDENTIAL REPORT - FOR EPA INTERNAL USE ONLY
REGION 3 NSPS COMPLIANCE MILESTONE

	COMPLIANCE STATUS	REGION 3 TOTAL	DELAWARE 08	WASHTN DC 09	MARYLAND 21	PENNS 39	VIRGINIA 48	W. VIRGIA 50
	COMPL STATUS UNKNOWN							
0	COMPL STATUS UNKNOWN	1	0	0	1	0	0	0
1	IN VIOL-NO SCHEDULE	22	0	0	8	9	2	3
2	IN COMPL-SOURCE TEST	9	0	0	1	5	0	3
3	IN COMPL-INSPECTION	20	0	0	1	12	4	3
4	IN COMPL-CERTIFICATN	10	0	0	2	7	0	1
5	IN VIOL-MEETING SCHD	155	1	5	14	49	61	25
6	IN VIOL-NOT MTG SCHD	1	0	0	0	1	0	0
7	IN VIOL-UNK WHT SCHD							
8	NO APPLIC STATE REG							
9	IN COMPL-SHUT DOWN	2	0	0	1	0	1	0
	TOTALS FOR 2, 3, 4, 9	187	1	5	18	68	66	29
	TOTALS FOR 1, 5, 6	10	0	0	1	6	0	3
	TOTALS FOR 0 AND 7	22	0	0	8	9	2	3
	GRAND TOTALS	220	1	5	28	83	68	35

9.1.5 Questionnaire Report

This report has been used by some regions for direct reporting by State Agencies. The report format provides a turnaround document used to report the status of various actions. Identifying data is printed on the questionnaire and it is then sent to the State Agency for completion. After the State returns the filled-in report, the data is keypunched for re-entry to the CDS data base.

The questionnaire indicates all increments of progress that have been scheduled during a period specified by the region. Status Code and Date Achieved should be listed in the appropriate columns. Although the Quick Look Report may serve the same purpose as the Questionnaire Report, the Questionnaire provides more information about the source and has additional room for comments.

Figure 9-6 shows a sample Questionnaire for Region IX. Selection was based on actions scheduled but not achieved between June 1, 1979. and November 1, 1979. Sorting was based on Source Name.

COMPLIANCE DATA SYSTEM QUESTIONNAIRE
FOR STATE OF
CALIFORNIA

STATUS CODES 1=ACTION ACHIEVED 2=ACTION NOT ACHIEVED

POINT SOURCE IDENTIFICATION	EMISSION POINT, POLLUTANT EMITTED	STATE/LOCAL REGUL, CONTROL PROJECT, POINT SIP	SCHEDULE INCREMENTS OF PROGRESS	ACHIEVEMENT OF INCREMENTS OF PROGRESS
PARAMOUNT 5740 DOUGLAS OIL 14708 DOWNEY AVE STATE REGISTRATION	TANKS	NO SCHEDULE	8/ 8/79 FINAL COMPLIANCE REPORT 09-05-4200-00029-001-17-7, COL 80 = R EPA CL CODE COL 30 09-05-4200-00029-001-00-5, COL 80 = C	STATUS CODE.....COL 71 DATE ACHIEVED-COL 55-60 MO DAY YR COMMENTS
FRESNO NO CITY CODE FMC CORPORATION 2501 SUNLAND AVE. STATE REGISTRATION SOURCE SIP NO SCHEDULE	PESTICIDE FORMUL-ATING PL	SJ 79-08	9/17/79 CONSTRUCTION COMMENCED 09-05-2820-05027-000-06-7, COL 80 = R	STATUS CODE.....COL 71 DATE ACHIEVED-COL 55-60 MO DAY YR COMMENTS
	PESTICIDE FORMUL-ATING PL	SJ 79-08	9/17/79 CONSTRUCTION COMMENCED 09-05-2820-05027-999-06-7, COL 80 = R	STATUS CODE.....COL 71 DATE ACHIEVED-COL 55-60 MO DAY YR COMMENTS
MIDWAY SUNSET NO CITY CODE GENERAL AMERICAN OIL SEC. 16-32S-23E LEA. STATE REGISTRATION SOURCE SIP NO SCHEDULE	OIL AND GAS EXTR-ACTION	NO SCHEDULE SJ 77-24	10/28/79 START OF ON-SITE CONSTRU-CT/PROCESS CHANGE REPORT 09-05-3480-05071-000-05-7, COL 80 = R	STATUS CODE.....COL 71 DATE ACHIEVED-COL 55-60 MO DAY YR COMMENTS

FIGURE 9-6

9.1.6 Action Summary Report

This report is a summary report of what actions are in the system and lists these actions by action type. The report gives two lines of information for each action which satisfies the selection criteria. This report lists comments as opposed to the Quick Look Report. If no sequence is specified, the report will be sequenced first by Action Type and then the Masterfile sequence.

Figure 9-7 shows a sample Action Summary Report for Region IV. Selection was based on a specific range of actions. Sorting was based on State and Source Name.

9.1.7 Compliance-Action Report

A new report format has been developed for the CDS Retrieval Package. This report, called the Compliance-Action Report, summarizes the compliance status and enforcement actions for selected facilities on the CDS masterfile.

Figure 9-8 is a sample of the Compliance-Action Report. It is available by coding "CA" on the Report Format 20 Card. The left side of the printout contains basic source information such as Source Name, AQCR, City, State, and Staff Member for the sources selected by the retrieval. The middle columns contain the Point Number, Compliance Status, and Emission Category of the points selected by the retrieval. The right side of the printout contains the Date Achieved for nine specific action types:

- Federal Inspections
- State Inspections
- Federal Notices of Violation

ACTION SUMMARY REPORT

11/21/79 COMPLIANCE DATA SYSTEM PAGE 1

ACTION SUMMARY FOR NESHAPS

TYPE OF ACTION
NESHAPS SOURCE TEST

STAFF MEMBER AND TITLE	SOURCE NAME AND LOCATION	DATE SCH. DATE ACH.	STATUS CODE	STATE NO. COUNTY NO.	SOURCE NO. POINT NO.	POLLUTANT
	ATL-RM CLAYTON STP ATLANTA GA	2/10/76 2/10/76		11 2260	80268 000	
	ATL-RM CLAYTON STP ATLANTA GA	2/10/76 2/10/76		11 2260	80268 001	HG
	ATL-UTOY CREEK STP ATLANTA GA	2/11/76 2/11/76		11 2260	80375 000	HG
	ATL-UTOY CREEK STP ATLANTA GA	2/11/76 2/11/76		11 2260	80375 001	HG
	CITY OF SAVANNAH STP SAVANNAH GA	5/14/76 5/14/76		11 0980	80036 001	HG
	DEKALB COUNTY UNT PC DECATUR GA	2/15/77 2/15/77		11 1640	80054 000	
	DEKALB COUNTY UNT PC DECATUR GA	2/15/77 2/15/77		11 1640	80054 001	HG

FIGURE 9-7

COMPLIANCE-ACTION REPORT

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CONFIDENTIAL REPORT - FOR EPA INTERNAL USE ONLY

FY79 COMPLIANCE ACTIONS

SOURCE NAME / CITY	ST	AQCR / ATMT	STAFF	PTNO	COMPLIANCE STATUS / EMISSION CATEGORY		INSPECT	RSLT CODE	NOTICE OF VIOL	RSLT CODE	ORDER ISSUED	RSLT CODE	CLERT ACTION	RSLT CODE
ARK P&L-INDEPENDENCE		020	S. SPRUIELL	001	4 IN COMPL-CERTIF	FEDERAL								
NEWARK	AR				3 OVER 1000 TPY	STATE								
ARK P&L-INDEPENDENCE		020	S. SPRUIELL	002	8 NO APPLIC STATE	FEDERAL								
NEWARK	AR				3 OVER 1000 TPY	STATE								
ARK P&L-L. CATHERINE		016		000	8 NO APPLIC STATE	FEDERAL	6/22/78	01						
JONES MILL	AR	N			3 OVER 1000 TPY	STATE								
ARK P&L-L. CATHERINE		016	MARTIN BRITTAIN	000	4 IN COMPL-CERTIF	FEDERAL	5/ 2/79							
JONES MILL	AR				2 100 TO 1000 TPY	STATE								
ARK P&L-NUCLEAR ONE		016		000	3 IN COMPL-INSPEC	FEDERAL	12/ 8/77	01						
RUSSELLVILLE	AR				1 LESS THAN 100 T	FEDERAL	11/ 7/78	01						
						STATE								
ARK P&L-RICHIE PLANT		020		000	8 NO APPLIC STATE	FEDERAL	5/15/75	01						
HELENA	AR	N			3 OVER 1000 TPY	STATE								
ARK P&L-WHITE BLUFF		016		000	3 IN COMPL-INSPEC	FEDERAL								
REDFIELD	AR	N			2 100 TO 1000 TPY	STATE	3/ 7/77	01						
						STATE	6/15/78	01						
						STATE	6/ 5/79	01						
ARK P&L-WHITE BLUFF		016	S. SPRUIELL	001	8 NO APPLIC STATE	FEDERAL								
REDFIELD	AR	N			2 100 TO 1000 TPY	STATE								
ARK P&L-WHITE BLUFF		016	S. SPRUIELL	002	8 NO APPLIC STATE	FEDERAL								
REDFIELD	AR	N			2 100 TO 1000 TPY	STATE								
ARK RIV VALLEY GRAIN		016		000	3 IN COMPL-INSPEC	FEDERAL								
MORRILTON	AR				2 100 TO 1000 TPY	STATE	3/ 4/77	01						
						STATE	10/ 4/78	01						
ARK WRECKING CO.,INC		016	MARTIN BRITTAIN	000	4 IN COMPL-CERTIF	FEDERAL								
HOT SPRINGS	AR	N			0 UNKNOWN	STATE								
ARK. CEMENT CORP.		022	S. SPRUIELL	000	3 IN COMPL-INSPEC	FEDERAL	6/19/74	01						
FOREMAN	AR	A			2 100 TO 1000 TPY	FEDERAL	4/15/75	01						
						STATE	9/30/75	01						
						STATE	2/23/76	01						
						STATE	7/14/76	01						
						STATE	1/ 7/77	01						
						STATE	2/ 7/77	01						
						STATE	7/12/77	01						
						STATE	7/13/78	01						

FIGURE 9-8

- State Notices of Violation
- Federal Orders Issued
- State Orders Issued
- Federal Court Actions
- State Court Actions
- Federal Terminations of Notices of Violation

When multiple actions with the same action type are selected by the retrieval, multiple lines are printed, one for each Date Achieved.

In using this report, the following items should be kept in mind:

- The retrieval selection logic is the same as for any other retrieval. Users should be careful to specify in their selection criteria only those sources and points of interest to them. No selection cards are needed to limit the report to the nine specific action types available on the report, but selection criteria may be used on other action level data elements such as Date Scheduled.

- The report is produced only in one sort order: alphabetical by Source Name within a state. If other reports are selected on the 2Ø Card at the same time as the CA, the other reports will be printed in the order specified on the Report Sequence card.

- Totals for each of the nine action types are produced at the end of the report. These totals are designed to meet a number of reporting requirements.

Special PSD Report

At the request of EPA Region VI, there is a new report format designed to show the status of facilities undergoing the permit review steps associated with Prevention of Significant Deterioration (PSD).

For each facility selected via the retrieval, two lines of output are created. The first line contains the following data elements:

Source Name
Application Number
Date of PSD Application Submission
Date of PSD Application Determined Complete
Date of PSD Review Received
Date of PSD Notice Drafted
Date of PSD Public Notice
Date of PSD Public Hearing
Date of PSD Permit Issued

The second line contains only facility location information.

Since the report lists seven different action dates side by side, Regions VI has found this report extremely useful in tracking the progress of the permit review process for all of their PSD facilities.

Although this report is currently available only for Regions IV, VI, and VII, other CDS users can obtain this report if they inform TRC of the action types associated with each of the actions which are being tracked in the region's PSD permit review process. (See Sample PSD Report, Figure 9-9).

9.2 Check List for Request Submission

The following list of steps is provided as a guide for users submitting requests for retrievals. The list is roughly sequential, in that an inexperienced user would proceed in chronological order.

A. Determine what you want.

1. Review the need for information from the data base. Determine the best way to respond using the Retrieval Package. What information does the ultimate user need to meet his requirements?

B. Code the form.

1. Formulate a meaningful title for the report(s) and enter it on the "01" card line. It will be printed on each output page. Also, code the region code, and the level code only if the Source Data Report is requested.

2. Create the selection logic (the "10" cards) to be used to extract needed data items. This is the most complex part of the job, and it is suggested that the instructions be reviewed the first few times the Package is used.

3. Select the best format from those available. Use more than one if appropriate. Put the correct format on the "20" card line, using the proper 2-digit abbreviation (SD, QL, MS, AC or Q2).

4. Select the sequence of the items in the report, and fill in the "30" card line on the form.

5. Review entries on the form to see that all data element abbreviations are correct.

6. If the "Quick Look" report format is being requested, add the data elements needed on the "40" line so they will appear on the output. Do not exceed the print line size. Check the abbreviations.

PREVENTION OF SIGNIFICANT DETERIORATION REPORT

04/18/79 COMPLIANCE DATA SYSTEM PAGE 1

CONFIDENTIAL REPORT--FOR EPA INTERNAL USE ONLY

TEXAS PSD FACILITY STATUS

SOURCE NAME LOCATION	APPLICATION NUMBER	PSD APPLIC SUBMITTED	PSD APPLIC DETD COMPL	PSD REVIEW RECEIVED	PSD NOTICE DRAFTED	PSD PUBLIC NOTICE	PSD PUBLIC HEARING	PSD PERMIT ISSUED	COMMENTS
AIR PRODUCTS AND CHE CHANNELVIEW TX	PSD-TX-115	08/03/78	09/07/78						CHANNELVIEW
AMF TUBOSCOPE HOUSTON TX	PSD-TX-207 A	02/16/79	02/21/79	N/A	02/21/79	04/09/79			HOUSTON
AMOCO TEXAS REFINING TEXAS CITY TX	PSD-TX-023	05/10/77			06/03/77	06/14/77		07/27/77	TEXAS CITY
AMOCO TEXAS REFINING TEXAS CITY TX	PSD-TX-107	08/01/78	09/07/78	01/11/79	01/13/79	01/13/79		03/04/99	TEXAS CITY
AMOCO TEXAS REFINING TEXAS CITY TX	PSD-TX-119	08/04/78	09/11/78	03/23/79	03/28/79				TEXAS CITY
ARCO CHEMICAL COMPAN BAYTOWN TX	PSD-TX-116	08/03/78	09/06/78						BAYTOWN
ARMCO STEEL CORPORAT HOUSTON TX	PSD-TX-027	05/19/77			06/15/77	06/29/77		09/26/77	HOUSTON
AUSTIN WHITE LIME CO MCNEIL TX	PSD-TX-114	08/03/78	09/02/78	03/05/79	03/06/79				MCNEIL
BOARD OF TRUSTEES GALVESTON TX	PSD-TX-169 A	10/02/78	11/06/78	N/A	11/16/78	11/25/78		01/19/79	GALVESTON
CAM COMPANY TEXAS CITY TX	PSD-TX-110	08/02/78	09/01/78						TEXAS CITY
CAPITOL CEMENT SAN ANTONIO TX	PSD-TX-120	08/04/78	09/07/78	03/02/79	03/05/79				SAN ANTONIO
CENTRAL POWER & LIGH FANNIN TX	PSD-TX-009	02/03/77			03/01/77	04/01/77		05/10/77	FANNIN
CHAMPLIN PETROLEUM CORPUS CHRISTI TX	PSD-TX-096	07/24/78	09/06/78	01/23/79	02/23/79	03/28/79			CORPUS CHRIS
CHAMPLIN PETROLEUM CARTHAGE TX	PSD-TX-206	02/20/79							CARTHAGE
CHAMPLIN PETROLEUM C CORPUS CHRISTI TX	PSD-TX-036	07/22/77			11/04/77	11/16/77		01/18/78	CORPUS CHRIS

FIGURE 9-9

C. Verify the completed form.

1. Review the request form to see that all needed entries have been made.

2. If the selection logic to be used is fairly complex, mentally "walk through" several cases and see if the logic meets user requirements.

D. Punch retrieval cards.

1. Arrange to have punched cards prepared from the request form.

2. Check the cards to ensure that the data was punched correctly.

E. Build your retrieval deck of cards.

1. Add a job card priority card, and any routing or hold cards to the deck of cards. Check for appropriate account number, printing class, output line count, and execution time. Terminal operations personnel can provide assistance.

2. Add the two JCL cards described in Section 9.4. They go just before the "Ø1" card.

   Add/*EOF card as the last card in the deck.

3. Review the sequence of cards.

F. Submit job and wait.

1. Submit the deck to the central computer facility (WCC) via the locally available terminal.

G. Review output.

1. The printout should be returned within a few hours, or at most on an overnight basis. Check with the terminal operator if not received.

2. When the printout is returned, check the edit list to determine if any error was detected. If necessary, correct the cards and resubmit the deck.

3. Review the decoded parameters on the edit page to see if the instructions (request cards) were decoded as the requestor intended.

4. If possible, check the retrieval package processing of a source known to the requestor to verify that the select logic worked as anticipated. In any case, review the results to determine if the desired information was extracted.

5. Call TRC (203-563-1431) if you are having difficulties getting the desired output.

COMPLIANCE DATA SYSTEM
Report Request Form

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

01			
1 2	4 5	7	9 ... 52
	Region	Level	Report Title

10			
1 2	4 ... 7	9	11 ... 18
	Data Element	Cond.	Value (Left Justified)

10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			

CONDITION CODES (10 CARD)
M - MUST EQUAL
A - ALTERNATE (Used for Multiple Values of a Given Data Element)
U - UNEQUAL
G - EQUAL OR GREATER THAN
L - EQUAL OR LESS THAN
P - PRESENT ANY ENTRY
B - BLANK OR ZEROS

REPORT FORMATS (20 CARD)
QL - QUICK LOOK
Q2 - DOUBLE SPACED QL
SD - SOURCE DATA REPORT
AC - ACTION SUMMARY
QT - QUESTIONNAIRE
MS - MILESTONE
CA - COMPLIANCE-ACTION

See reverse side for a list of all CDS data elements and their abbreviations.

LEVEL CODES (01 CARD)
REQUIRED FOR SD REPORT ONLY. VALID ARE:
A - ALL DATA
C - CRITERIA MATCH ONLY
P - POINT & SOURCE
S - SOURCE ONLY

REPORT FORMATS

20				
1 2	4 5	7 8	10 11	14 ... 21
				PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

30							
1 2	4 ... 7	9 ... 12	14 ... 17	19 ... 22	24 ... 27	29 ... 32	39
							Number of subtotalling data elements

SEQUENCE LIMITED TO 40 CHARACTERS

QUICK LOOK REPORT FORMAT

40																			
1 2	4 ... 7	9 ... 12	14 ... 17	19 ... 22	24 ... 27	29 ... 32	34 ... 37	39 ... 42	44 ... 47	49 ... 52	54 ... 57	59 ... 62	64 ... 67	69 ... 72	74 ... 77	80
	Enter Data Elements to be Included on Report Limited to 132 Characters with NOHD Option; Limited to 110 With Standard Heading															"2" Stops With NOHD Only Suppression

MILESTONE REPORT FORMAT

50														
1 2	4 ... 7	9 ... 12	14 ... 17	19 ... 22	24 ... 27	29 ... 32	34 ... 37	39 ... 42	44 ... 47	49 ... 52	54 ... 57	59 ... 62
	ROWS DATA ELEMENT	COLUMNS DATA ELEMENT	VALUES OF COLUMN DATA ELEMENTS (USE "BLNK" FOR BLANK VALUE)									

FIGURE 9-10

DATA ELEMENT	ABBR	DATA TYPE	SPECIAL CHARS	NUMBER OF DIGITS 10 & 30 CARD	NUMBER OF DIGITS 40 CARD
AIR PROGRAM CODE	APCD	S		1	5
AIR PROGRAM DESCRIPTION	APDS	S		10	12
AIR PROGRAM STATUS	APST	S		1	5
AIR PROGRAM STATUS DESCR	APSD	S		10	11
AIR QUALITY CONTROL REGION	AQCR	S		3	5
BLANKS (5 SPACES)	BLK1	S			5
BLANKS (15 SPACES)	BLK2	S			15
CAPACITY - FACILITY	FCAP	S	C	7	8
CITY CODE	CTCD	S		4	5
CITY NAME	CTNM	S		15	16
COUNTY CODE	CNTY	S		4	5
COUNTY NAME	CTNM	S		17	18
DATE LAST UPDATED	UPDA	S		6	9
FEDERAL FACILITY	FEDF	S		1	5
NEDS SOURCE CROSS-REFERENCE	NEXS	S		4	5
POLLUTANT AIR QUAL MAINT AR	PAQM	S	R	1	5
POLLUTANT AIR QUAL CONT REG	PAQC	S	R	1	5
POLLUTANT - BASIC SUMMARY	BPLT	S		60	61
POLLUTANT CODE - SOURCE	PLLT	S	R	2	5
POLLUTANT COMPLIANCE STATUS	PCMS	S	R	1	5
POLLUTANT EMISSION CATEGORY	PECT	S	R	1	5
POLLUTANT LOADING	LOAD	S	R	5	6
PRIORITY CODE	PRIO	S		1	5
REGION	REGN	S		2	5
REGIONAL DATA ELEMENT 1	RDE1	S		1	5
REGIONAL DATA ELEMENT 2	RDE2	S		1	5
REGIONAL DATA ELEMENT 3	RDE3	S		1	5
REGIONAL DATA ELEMENT 4	RDE4	S		5	6
REGIONAL DATA ELEMENT 5	RDE5	S		5	6
REGIONAL DATA ELEMENT 6	RDE6	S		10	11
REGIONAL DATA ELEMENT 9	RDE9	S		7	8
REGIONAL DATA ELEMENT 10	RD1Ø	S		2	5
REGIONAL DATA ELEMENT 11	RD11	S		2	5
REGIONAL DATA ELEMENT 12	RD12	S		1	5
SIC CODE	SICC	S		4	5
SIC CODE DESCRIPTION	SICD	S		30	31
SOURCE COMPLIANCE STATUS	SCMS	S		1	5
SOURCE COMPLIANCE STAT DESC	SCSD	S		20	21
SOURCE COMP STATUS - 8 QTRS	SCSØ	S		8	9
SOURCE COMP STATUS - 1ST QTR	SCS1	S		1	5
SOURCE COMP STATUS - 2ND QTR	SCS2	S		1	5
SOURCE COMP STATUS - 3RD QTR	SCS3	S		1	5
SOURCE COMP STATUS - 4TH QTR	SCS4	S		1	5
SOURCE COMP STATUS - 5TH QTR	SCS5	S		1	5
SOURCE COMP STATUS - 6TH QTR	SCS6	S		1	5
SOURCE COMP STATUS - 7TH QTR	SCS7	S		1	5
SOURCE COMP STATUS - 8TH QTR	SCS8	S		1	5
SOURCE EMISSION CATEGORY	SECT	S		1	5
SOURCE EMISSION DESCR	SECD	S		13	14
SOURCE NAME	SNME	S		20	21

In special characteristics column, "C" indicates a confidential data element; "R" indicates a repeating data element.

DATA ELEMENT	ABBR	DATA TYPE	SPECIAL CHARS	NUMBER OF DIGITS 10 & 30 CARD	NUMBER OF DIGITS 40 CARD
SOURCE NUMBER	SRCE	S		5	6
STAFF NAME - SOURCE	STFS	S		15	16
STAFF PERSONNEL CODE - SOURCE	PERS	S		3	5
STATE	STTE	S		2	5
STATE ABBREVIATION	STAB	S		2	5
STATE REGISTRATION NUMBER	STRG	S		15	16
STREET ADDRESS	STRT	S		20	21
ZIP CODE	ZIPC	S		5	6
CAPACITY CODE	CAPC	P	C	2	5
COMPLIANCE STATUS CODE	CMST	P		1	5
COMPLIANCE STATUS DESCR	CMDS	P		20	21
EMISSION CATEGORY	ECAT	P		1	5
EMISSION CATEGORY DESCR	ECDS	P		13	14
EMISSION POINT NUMBER	PTNO	P		3	5
MULTIPLE CROSS-REFERENCE	MULT	P		3	5
OLD COMP STATUS - 8 QTRS	OCSØ	P		8	9
OLD COMP STATUS - 1ST QTR	OCS1	P		1	5
OLD COMP STATUS - 2ND QTR	OCS2	P		1	5
OLD COMP STATUS - 3RD QTR	OCS3	P		1	5
OLD COMP STATUS - 4TH QTR	OCS4	P		1	5
OLD COMP STATUS - 5TH QTR	OCS5	P		1	5
OLD COMP STATUS - 6TH QTR	OCS6	P		1	5
OLD COMP STATUS - 7TH QTR	OCS7	P		1	5
OLD COMP STATUS - 8TH QTR	OCS8	P		1	5
POLLUTANT CODE - POINT	PLUT	P		2	5
PROCEDURAL COMPLIANCE	CMS2	P		1	5
PROCESS DESCRIPTION	PRDS	P		25	26
REGIONAL DATA ELEMENT 7	RDE7	P		1	5
SCC THREE-DIGIT CODE	SCC3	P		3	5
SCC SIX-DIGIT CODE	SCC6	P		6	7
SCC EIGHT-DIGIT CODE	SCC8	P	C	8	9
SIP CODE	SIPC	P		1	5
SIP CODE DESCRIPTION	SIDS	P		20	21
STATE REGULATION	SREG	P		15	16
ACTION DESCRIPTION	ADES	A		15	16
ACTION NUMBER	ANUM	A		2	5
ACTION TYPE	ATPE	A	C	2	5
DATE ACHIEVED	DTAC	A		6	9
DATE ACHIEVED YEAR/MONTH	DAYM	A		4	5
DATE SCHEDULED	DTSC	A		6	9
DATE SCHEDULED YEAR/MONTH	DSYM	A		4	5
PENALTY AMOUNT	PLTY	A		7	11
REGIONAL DATA ELEMENT 8	RDE8	A		2	5
RESULTS CODE	STAC	A		2	5
RESULTS DESCRIPTION	RSTD	A		15	16
STAFF NAME - ACTION	STFA	A		15	16
STAFF PERSONNEL CODE - ACTION	PERA	A		3	5
STAFF TITLE	TITL	A		15	16

In special characteristics column, "C" indicates a confidential data element.

FIGURE 9-10 (continued)

Mailing Label Option

This option provides individual users with the capability to request printed mailing labels as the output from CDS retrieval processing. A print program has been developed for this purpose. The labels produced in this processing are the standard 3-up, self-sticking labels which can be printed on facilities currently available to CDS users.

The mailing label option has been designed to use source level information available on a standard CDS Source Data Report. The user will request a Source Data Report, level S, with the mailing label print feature. This special print feature will be invoked through the use of job control procedures developed for this purpose. There is a catalogued job control procedure available to all CDS users.

Each mailing level will carry five lines:

- o Managers Name
- o Facility Name
- o Street Address (if available)
- o City, State, Zip Code

Two new source level comment lines on card type 4 have been provided for the entry of information that does not already exist at the source level. Comment line number "A" will be used for entry of the name of the manager receiving the correspondence. If the facility address information entered on card types 1 and 2 is not the correct mailing address, comment line number "B" should be used for coding this information. If address information is coded on comment line "B", the print program will use this as the mailing address, otherwise source level address information is printed. (see Figure 9-10A)

Revised 12/79

FORTRAN CODING FORM

AUTHOR	PROGRAM NAME	TASK NUMBER	DATE	Page of	CARD NUMBER
TRC	MAILING LABEL JOB CONTROL				

C	STMT NO	cont	FORTRAN STATEMENT
			//EPAiii JOB (aaaa,Miii),'USER ID',TIME=1,PRT4=4,PASSWORD=PPPP
			/*ROUTE PRINT RMTnn
			/*CNTL CDS,EXC
			//CDS EXEC CDSLABEL,REGN=rr,REG=REGr,LOG=RGrrLOG,FORM=2302
			//RTV.SYS005 DD *
01			Must have an Ø1 Title Card
10			No Selection Cards are required
20	SD		Mailing labels must be run by the Source Data Report Format
30			The Sequence selection 3Ø card is optional
			//STEP3.LABELS DD DCB=(RECFM=FB,LRECL=94,BLKSIZE=940)
			//
			/*EOF

iii is the user's initials

aaaa is the user's account number
PPPP is the user's password
nn is two digit region or state code. Valid values are 1 through 10
rr is the user's remote; see figure 10-6 SC, TN, NK, ETC.
for a list of Remote numbers

FIGURE 9-10A

9.3 Preparing Retrieval Selection Cards

To request reports from the Reporting Program, the Regional user must prepare a Report Request Form as shown in Figure 9-10. The Report Request Form contains a layout of the standardized cards which will be submitted to the central data center. In addition, the Report Request Form contains pertinent information necessary to fill out the form.

The standardized cards used for requesting reports are listed here and described in detail in the following paragraphs.

CARD	TITLE
Ø1	Title Card
1Ø	Logic Selection Card
2Ø	Report Format Card
3Ø	Report Sequence Card
4Ø	Quick Look Data Selection Card
5Ø	Variable Milestone Data Selection Card

Card Ø1 - Title Card

Card Ø1 has entry spaces for the Card Code Number, Region, Level and Report Title. The Card Code Number, Ø1, must be put into columns 1 and 2. The Region code, columns 4 and 5, is the numeric region number of the EPA Region requesting the report. A leading Ø must be placed before all numbers less than 1Ø. The level code (column 7) determines the level of data that will be included for a Source Data Report. However, the level code is necessary only when requesting a Source Data Report. This column may be left blank when requesting the remainder of the six types of reports.

Level codes which may be used when requesting a Source Data Report are shown in the upper right-hand corner of the Report Request Form and are listed here. If no level code is specified, the default value is "A".

Revised 12/79

S - Source Only
Only source level information is included in the report--no point or action data.

P - Point + Source
No action data is included in the report. Only those points which match point and/or action level selection criteria are included.

A - All Data
If a match is made on the selection criteria anywhere in the source, point, and/or action data, all the data for that source is given.

C - Criteria Match Only
Only the information satisfying the selection criteria is included. This level code would be used when only the actions (plus their respective points and sources) which meet the selection criteria are desired in the report. It should be noted that the selection criteria (type "10" cards) should include action record data elements, or this level code will result in the same report level as an S or a P level code.

The Report Title (columns 9-80) is the user specified title which will appear on every page of the output report. Titles should be carefully chosen and include an English language description of the selection criteria to identify various printouts which are produced. Experience has shown that if a number of reports are prepared without adequate titles, it is difficult to remember the specific criteria for each report and information may be misused.

Card 10 - Logic Selection Card

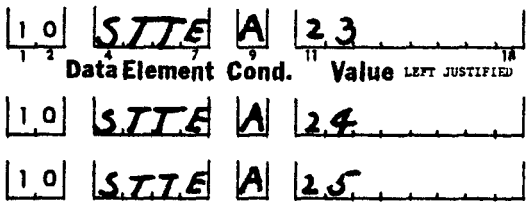
Card 10 provides the user with entry spaces for the Card Code Number, Data Element, Condition Code and Value. Specific data records to be selected for inclusion in the output reports are obtained by using card 10. Up to twenty cards can be submitted in a given retrieval. The Data Element (columns 4-7) field is used to specify a particular data element to be used in the logic selection of records. The data elements

are identified by the abbreviations shown in the box in the center of the request form. For example, the abbreviation for "region" is "REGN." Use of other abbreviations will cause an error and the run will be aborted. Only the data elements indicated in the table can be used for logic selection purposes.

The Condition Code (column 9) is used to specify how the data element is selected. The entry is a single alphabetic character selected from the codes shown on the right side of the form. A brief explanation of the codes follows:

- o M - Must Equal - A record will be excluded unless it equals the value specified in the value field. When testing for a value of blank, use the condition code M with no value entry in columns 11 through 18.

- o A - Alternate - This code provides the capability of including records with different values for the same data element. For example, three states might be selected and all given the condition code of A on three separate 1Ø cards. The output report would include the data for all three states. If an M had been used, no output would be received because clearly no record will match all three state codes. For example:



- o U - Unequal - This code excludes records of the value specified in the value field. It would be used where specific values are not wanted on the report but all other data is desired.

- o G - Equal or Greater Than - This code can be used to include values greater than or equal to a specified value. Or, this code may be used in combination with the L code (Equal or Less Than) to provide a range of values, such as all the action types equal to or above 5Ø, and equal to or below 7Ø. More importantly, it can be used with the "date scheduled" or "date achieved"

field to provide a chronological range. The date should be entered in month, day, year, sequence. For example, the following entries would provide a range between January 1 and the end of 1980.

1 0	D T S C	G	0 1 0 1 8 0
1 2	4 7 Data Element	9 Cond.	11 18 Value LEFT JUSTIFIED

1 0	D T S C	L	1 2 3 1 8 0

- o L - Equal or Less Than - This code is the opposite of the G code and includes items which are equal or less than the value specified. If a comparison is made using a field which is either alphabetic or blank, the results will depend on the exact entries found in the data base. Letters will compare lower than numbers, and blanks will compare the lowest.

- o P - Present-Any-Entry - This condition code will qualify an entry if the entire field is not blank or zero. That is, if any entry has been made, the record will qualify for inclusion on the output. No "value" entry is required in columns 11-18.

- o B - Blank - This is the opposite of the P code and will qualify an entry where the specified field is completely blank or zero. No "value" entry is required. Use the condition code "M" to select only blanks or only zeros.

Value Field (columns 11-18) is used to enter the actual value to be used for comparison with the data base. In some cases, this is the coded data actually carried in the data field. It is not used if the condition code does not call for a value. Entries should be made beginning in column 11, the left-most portion of the field.

The number of digits for each data element is given on the Retrieval Request form immediately to the right of the Retrieval abbreviation for that data element. If a data element has fewer than eight positions, the number of digits in columns 11 on up must correspond exactly to the number of digits on the data element. For example, if a selection is based on State Code, only columns 11 and 12 may be used on the selection card.

If a data element, such as Source Number, has five digits, users must code ØØØ69 in columns 11 through 15; the retrieval logic will not work if only 69 is coded into columns 11 and 12.

If a data element, such as Source Name, has more than eight digits, the Retrieval will base its selection logic only on the first eight positions of Source Name. No value may be made on the selection card beyond column 18.

Note that entries in the value field must be exactly as shown in the data base. For example, if a state code is desired, the numeric code must be entered. If a regulation has been entered in several ways, such as REG 31 or REG-31, two alternate entries must be made to obtain both results.

Card 2Ø - Report Format Card

This card allows the region to select up to three output formats in a given run, and must be included. The codes to be used are shown in the "report formats" block at the lower right of the input form. Entries should be made in columns 4-5, 7-8, and 1Ø-11. Start with the left-most field. The available report formats are:

QL - Quick Look
SD - Source Data Report
AC - Action Summary
QT - Questionnaire
MS - Milestone
Q2 - Double Spaced QL
CA - Compliance Action

REPORT FORMATS

2 0	Q L			GE22 46
1 2	4 5	7 8	10 11	14 21

PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

CDS Confidentiality

Certain data elements identified on the back of the Retrieval Request form in CDS are password protected. If the user wishes to obtain confidential data on his output report, he must place his password on column 14 of the Card 2Ø.

Comments at all levels (source, point and action levels) will no longer appear on any Source Data Report unless a password is supplied and accepted. This will mean that Source Data Reports may be considerably shorter. If comment information is desired, you must supply the appropriate password, and all comments will be included in the Source Data Report.

Certain action types have been determined to be confidential and will not be retrievable without a proper password. The following four action types are confidential for all regions:

ACTION TYPE	ACTION TYPE DESCRIPTION
L2	CIVIL ACTION BY STATE
L3	STATE CRIMINAL ACTION
L6	EPA CIVIL ACTION
L7	EPA CRIMINAL ACTION

In addition to these, certain other action types are confidential for specific regions:

REGION	ADDITIONAL CONFIDENTIAL ACTION TYPES
01	NONE
02	61, 62, 79, 80
03	65
04	B5, B6
05	26, 27, 31, 75, 77
06	A7, A8, E3, G3
07	32, 57
08	58
09	33
10	14, 22

Please be aware that confidential action types will no longer appear on any reports when no password is supplied. Quick Look Reports will not show confidential action types. Milestone Reports requesting action level data on the 50 card will not include any actions which have confidential action types. Confidential action types will be missing from all Source Data Reports. When confidential action type data is required, supply the correct password for your region, and all confidential action type data will be extracted and supplied as part of the reports.

Card 3Ø - Report Sequence Card

The report sequence card permits the user to select the sequence of entries on the reports he has selected. For example, sources might be alphabetized within a state or grouped by pollutant code. In every case, reports will be sequenced by the following elements after (or in the absence of) the selected user sequence--Action type (Action Summary Report only) or Region, State, County, Source, Point, and Action Number for all other reports.

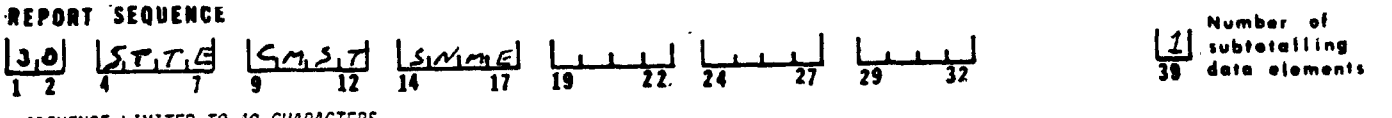
Entries are made using the four-digit abbreviation for individual data elements shown in the block in the center of the page. For example, to sequence by source name, "SNME" is entered. Care must be used in limiting the length of the sequence elements to 4Ø digits. For example, a sequence of Source Name (2Ø digits) and Process Description (25 digits) would result in a fatal edit error as the sequence length is 45 digits. However, in utilizing all six possible sequence entries with SIC Code (5 digits), Federal Facility Code (1 digit), Active Passive Code (1 digit), Compliance Status Code (1 digit), Pollutant (2 digits), and SIP Code (1 digit), we only have a total of 11 digits, well within the 4Ø-digit limit.

It is important to note that in certain cases it is possible to request a meaningless report because of illogical sequencing. For example, a user sequence of Date Scheduled, especially on a source data report, would result in the action records of several sources being separated and grouped away from their sources. However, the same user intent may be achieved by requesting a sequence of Source (Name or

Number) followed by Date Scheduled. This would keep all the actions with the correct source. A rule of thumb to follow would be to ensure that the primary, or first, sequencing element is on the source level, and that it is unique to each source (such as Source Number or Source Name). This rule mainly applies to Source Data Reports. Quick Look reports, being one-line reports where no line must be related to any other line, may be sequenced in any manner with no problem.

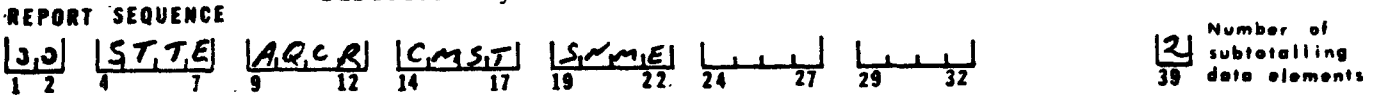
Page breaks and subtotals are available on the QL report by placing a number ranging from 1 to 6 in column 39 of the 3Ø card. For example, if column 39 of the 3Ø card is left blank, no page breaks are produced. A 1 in column 39 will produce a page break on the first data element of the 3Ø card. A 2 in column 39 will produce a page break on the first two data elements of the 3Ø card. A 3 in column 39 will produce a page break on the first three data elements of the 3Ø card. Page breaks can be obtained on a maximum of 6 data elements.

Example:



SEQUENCE LIMITED TO 40 CHARACTERS

The above card will provide page breaks with subtotals by state.



SEQUENCE LIMITED TO 40 CHARACTERS

The above card will provide page breaks with subtotals by state and by AQCR.

Revised 12/79

Currently CDS users who need to sequence their enforcement actions receive Quick Look or Source Data reports with actions listed in order from the earliest to the most recent. With this standard ascending sort sequence, the presence and importance of the most recent enforcement action is often lost.

In order to highlight the most recent enforcement action for facilities with numerous action, TRC has developed two parameters which allow users to list first the most recent action for a given facility. Previous actions will be listed from the most current to the oldest.

A Quick Look Report which lists the most current actions first must have the following Report Sequence card:

30	STTE	SNME	CNTY	SRCE	DTSC		1
1 2	4 7	9 12	14 17	19 22	24 27	29 32	39

Number of subtotalling data elements

Date Achieved (DTAC) may be substituted for Date Scheduled (DTSC) if desired.

In addition to this special report sequence card, users must also insert a job control (JCL) card after all of the Retrieval parameters. The format of this card is as follows:

```
//SORT.SYSIN DD DSN=CN.EPAEXC.AØ26.ACTNSORT,DISP=SHR
```

The above card should be used only if the users desire the special sorting on actions.

Revised 12/79

Card 4Ø - Quick Look Data Selection Card

Card 4Ø provides a means to request specific data elements for inclusion on the single line printed for each match on the Quick Look Report output. Data elements should be entered from left to right in the same sequence as required on the report. Data element abbreviation used should be the same as those shown in the block of Figure 9-10.

Note that State, County, Source Number, Emission Point Number, and Action Number Codes will automatically be placed at the left most side of the line by the system. However, if the user does not wish to have these data elements on the Quick Look Report, these data elements can be suppressed by coding NOHD in columns 4-7. The total QL print line length is determined as follows:

- o With the NOHD option, up to 132 print positions are available. The sum of the digits listed in the--NUMBER OF DIGITS-4Ø CARD-- column of the Report Request Form must be 132 or less for the data elements on the 4Ø card.

- o With the regular heading of State, County, Source, Point, and Action Numbers, up to 11Ø print positions are available. The sum of the digits listed next to each selected data element in the NUMBER OF DIGITS-4Ø CARD column of the Report Request Form must be 11Ø or less for the data elements on the 4Ø Card.

If the data elements on to 4Ø Card require more space than is available on the 132 character print line, the QL will not be produced. Data elements are printed left to right in the same sequence as they are coded.

If a Quick Look Report with data element suppression is not desired, a '2' must be coded in column 8Ø of the 40 card. Using this option, source level data will print repeatedly for each point and action. Point level data will print.

Revised 12/79

Card 5Ø - Variable Milestone Data Selection Card

The 50 card provides a means to request the row and column data elements to be shown on the Variable Milestone Report. Data element abbreviations should be the same as shown in Figure 9.7. The first data element supplied determines the rows for the report. The second data element determines the columns. Column data element values should be entered from left to right in the sequence desired on the report.

If the user desires to have all blanks as one of his column values, 'BLNK' should be entered as the corresponding value on the 50 card.

Note that the 50 card will be rejected if a Milestone Report (MS) was not requested on the 2Ø card. It is the presence of the 5Ø card that determines that the Variable Milestone Report should be produced. If a Milestone Report (MS) was requested on the 2Ø card and no 50 card is found, the Standard Milestone Report will be generated.

To produce a Variable Milestone Report showing the number of actions for Action Types 01, 02, 03, 04, 05 for all the counties within a state, perform the following steps:

1. Choose an appropriate title on an Ø1 Card.
2. Use a 1Ø Card to select the appropriate state.
3. Use 1Ø Cards to select the desired action types.
4. Code MS on the 2Ø Card.
5. Code the 5Ø card as follows:

MILESTONE REPORT FORMAT

50	CNTY	ATYPE	01	02	03	04	05				
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52	54 57 59 62
	ROWS DATA ELEMENT	COLUMNS DATA ELEMENT	VALUES OF COLUMN DATA ELEMENTS (USE "BLNK" FOR BLANK VALUE)								

This request will produce five columns of numbers, one column for each of the selected action types. On the right hand side of the page, totals are generated for all actions for a given county. One line is produced for

each value of County Code selected by the retrieval. At the end of the report, totals are produced for each action type and for the number of counties selected.

Up to ten values may be coded on the 5Ø Card, one value for each column to be totaled. If the data element values to be totaled are less than four positions, the values must be left justified. If the data element values to be totaled are greater than four positions, totals are produced only on the first four positions of the specified data element values.

9.3.1 Special Considerations for Pollutant Compliance Retrievals

Once pollutant compliance and other pollutant data is placed on the Masterfile, it is stored as a repeating data element which can occur up to 10 times. The processing for data such as Facility Capacity or Regional Data Element 9, each of which occurs only once per facility on the Masterfile, is different from the processing of repeating data elements such as Pollutant Compliance Status. There will be no changes to the report selection or the report printing of non-repeating data elements. The following sections describe the changes to the selection, sorting, and printing of repeating data elements such as Pollutant Compliance.

9.3.2 Pollutant Compliance Logic Selection

Associated with each pollutant are the following data elements:

Name	Retrieval Abbreviation
o Pollutant	PLLT
o Pollutant Compliance Status	PCMS
o Pollutant Emission Category	PECT
o Pollutant AQMA Indicator	PAQM
o Pollutant AQCR Indicator	PAQC
o Pollutant Loading	LOAD

Whenever one of the above repeating data elements is used on a 10 Card, each of the ten groups of pollutant data is examined independently to see if the information should be selected for further processing. For example, assume that the Masterfile contains the following four sources:

Source	Source Compliance	Pollutant	Pollutant Compliance
A	4	-	-
B	1	PT	4
		S2	1
C	1	PT	4
		S2	4
		HC	1
D	4	PT	4
		S2	4
		HC	4

The following selection criteria will extract data for Sources B, C, and D

```
10   PLLT   M   PT
10   PCMS   M   4
```

because each of those sources has the selected pollutant and the selected compliance status.

The following selection criteria will extract data for Sources B and C

```
|1,0| |P,C,M,S| |M| |1                |
```

because each of those sources has one pollutant out of compliance.

The following selection criteria will extract Sources C and D

```
|1,0| |P,L,L,T| |M| |HC               |
```

since those two sources contain hydrocarbon data.

Because the selection criteria for repeating data elements are applied independently to each group of data associated with a pollutant, the Condition Code "A" must be used to select a range of values for pollutants or for pollutant compliance status. The alternate logic does not allow users to select only those sources which are in compliance with particulate regulations and are also out of compliance with SO_2 regulations. Users will get no hits with the following selection criteria:

```
|1,0| |P,L,L,T| |M| |P,T              |
|1,0| |P,C,L,T| |M| |S2               |
```

9.3.3 Pollutant Compliance Sorting

Quick Look Reports may be sorted by whatever data elements the user needs. Page breaks and sub-totals can be developed for any user selected data elements.

On a Source Data Report users may not sort on any of the repeating data elements present for each pollutant. Pollutant data will print on a Source Data Report as follows:

1. Facility Capacity and Regional Data Elements.

2. If any data exists for particulates, SO_2, hydrocarbons, CO, or NO_x, the data will always be printed in the following order: PT, S2, HC, CO, N2.

3. Pollutants other than PT, S2, HC, CO, and N2 will be printed in the order in which the pollutants were originally input.

A separate line is printed for each pollutant entered via the Card 3.

9.3.4 Printing Pollutant Compliance Data

The presence of repeating pollutant data elements on a Quick Look 40 Card and a Milestone 50 Card require certain restrictions; otherwise, changes to output formats will be minor.

If a source has pollutant compliance data, the pollutant data will print on a Source Data Report directly after the source or source comment data and before the point 000 data. One line will be produced per pollutant. No changes to the Source Data Report will be noticed if there is no pollutant record for the Source.

The Quick Look Report will be significantly affected when repeating pollutant data is requested on the 40 Card. At the present, only source level and pollutant data may be printed on one line. One line will be printed for each pollutant. Suppression of redundant source data will be helpful on this type of report.

The restriction of not printing point or action level data when pollutant data is printed may be lifted at a later date.

Similarly, a variable milestone report which specifies repeating pollutant data on one axis cannot have point or action level data on the other axis. Milestone reports may be requested with source level data items

in one direction and repeating pollutants in the other direction. Also, requests may be made for repeating pollutant data items in both directions. For instance, users may need a milestone with pollutants as the row data element and pollutant compliance as the column data element.

Due to the fact that repeating pollutant data elements are not directly related to any point or action level data elements, neither Milestone Reports or Quick Look Reports may be produced with repeating pollutant data together with action and point data. This restriction is necessary because there is no meaningful way to cross-reference multiple pollutants with multiple points and actions.

9.3.5 Sample of a Filled-in Retrieval Request

The Quick Look Report shown in Figure 9-2 were obtained by filling out the Retrieval Request Form shown in Figure 9-11.

The Source Data Report shown in Figure 9-3 was obtained by filling out the Retrieval Request Form shown in Figure 9-12.

The Milestone Report shown in Figure 9-4 was obtained by filling out the Retrieval Request Form shown in Figure 9-13.

The Variable Milestone Report shown in Figure 9-5 was obtained by filling out the Retrieval Request form shown in Figure 9-14.

The Questionnaire shown in Figure 9-6 was obtained by filling out the Retrieval Request Form shown in Figure 9-15.

The Action Summary shown in Figure 9-7 was obtained by filling out the Retrieval Request Form shown in Figure 9-16.

The Compliance Action Report shown in Figure 9-8 was obtained by filling out the Retrieval Request Form shown in Figure 9-17.

The special PSD Report shown in Figure 9-9 was obtained by filling out the Retrieval Request From in Figure 9-18.

COMPLIANCE DATA SYSTEM
Report Request Form

FIGURE 9-11

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

01	05		MAJOR ACTIONS FOR FY79
1 2	4 5	7	9
	Region	Level	Report Title

10	STAB	M	IL
1 2	4 7	9	11 18
	Data Element	Cond.	Value (Left Justified)

10	ATPE	A	02
10	ATPE	A	03
10	ATPE	A	04
10	ATPE	A	05
10	ATPE	A	08
10	ATPE	A	51
10	ATPE	A	52
10	ATPE	A	63
10	ATPE	A	07
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			

CONDITION CODES (10 CARD)

- M - MUST EQUAL
- A - ALTERNATE (Used for Multiple Values of a Given Data Element)
- U - UNEQUAL
- G - EQUAL OR GREATER THAN
- L - EQUAL OR LESS THAN
- P - PRESENT ANY ENTRY
- B - BLANK OR ZEROS

REPORT FORMATS (20 CARD)

- QL - QUICK LOOK
- Q2 - DOUBLE SPACED QL
- SD - SOURCE DATA REPORT
- AC - ACTION SUMMARY
- QT - QUESTIONNAIRE
- MS - MILESTONE
- CA - COMPLIANCE-ACTION

See reverse side for a list of all CDS data elements and their abbreviations.

LEVEL CODES (01 CARD)

REQUIRED FOR SD REPORT ONLY. VALID ARE:

- A - ALL DATA
- C - CRITERIA MATCH ONLY
- P - POINT & SOURCE
- S - SOURCE ONLY

REPORT FORMATS

20	QL			
1 2	4 5	7 8	10 11	14 21

PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

30	SNME						
1 2	4 7	9 12	14 17	19 22	24 27	29 32	39
							Number of subtotalling data elements

SEQUENCE LIMITED TO 40 CHARACTERS

QUICK LOOK REPORT FORMAT

40	NOHD	SNME	CHNM	STAB	SICC	PRDS	ECAT	CMST	ATPE	DTAC
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52

Enter Data Elements to be Included on Report
Limited to 132 Characters with NOHD Option;
Limited to 110 With Standard Heading

54 57	59 62	64 67	69 72	74 77	80	
					"Z" Stops With NOHD Only Suppression	

MILESTONE REPORT FORMAT

50										
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52
	ROWS DATA ELEMENT	COLUMNS DATA ELEMENT	VALUES OF COLUMN DATA ELEMENTS (USE "BLANK" FOR BLANK VALUE)							
									54 57	59 62

COMPLIANCE DATA SYSTEM
Report Request Form

FIGURE 9-12

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

01	05		MAJOR ACTIONS FOR FY79	
10	ATPE	A	02	
10	ATPE	A	03	
10	ATPE	A	04	
10	ATPE	A	05	
10	ATPE	A	08	
10	ATPE	A	51	
10	ATPE	A	52	
10	ATPE	A	03	
10	ATPE	A	77	
10	STTE	M	14	

Region Level Report Title

Data Element Cond. Value (Left Justified)

CONDITION CODES (10 CARD)

- M - MUST EQUAL
- A - ALTERNATE (Used for Multiple Values of a Given Data Element)
- U - UNEQUAL
- G - EQUAL OR GREATER THAN
- L - EQUAL OR LESS THAN
- P - PRESENT ANY ENTRY
- B - BLANK OR ZEROS

REPORT FORMATS (20 CARD)

- QL - QUICK LOOK
- Q2 - DOUBLE SPACED QL
- SD - SOURCE DATA REPORT
- AC - ACTION SUMMARY
- QT - QUESTIONNAIRE
- MS - MILESTONE
- CA - COMPLIANCE-ACTION

See reverse side for a list of all CDS data elements and their abbreviations.

LEVEL CODES (01 CARD)

REQUIRED FOR SD REPORT ONLY. VALID ARE:

- A - ALL DATA
- C - CRITERIA MATCH ONLY
- P - POINT & SOURCE
- S - SOURCE ONLY

REPORT FORMATS

20 SD

PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

30 SNME

Number of subtotalling data elements

SEQUENCE LIMITED TO 40 CHARACTERS

QUICK LOOK REPORT FORMAT

40

Enter Data Elements to be Included on Report
Limited to 132 Characters with NOHD Option;
Limited to 110 With Standard Heading

"2" Stops With NOHD Only Suppression

MILESTONE REPORT FORMAT

50

ROWS DATA

COLUMNS DATA

VALUES OF COLUMN DATA ELEMENTS (USE "BLANK" FOR BLANK VALUE)

COMPLIANCE DATA SYSTEM
Report Request Form

FIGURE 9-13

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

01 | 05 | REGION V NSPS COMPLIANCE MILESTONE
Region, Level, Report Title

10 | APCD | M | 9
Data Element, Cond., Value (Left Justified)

10
10
10
10
10
10
10
10
10
10
10
10
10
10
10
10
10
10
10
10

CONDITION CODES (10 CARD)
M - MUST EQUAL
A - ALTERNATE (Used for Multiple Values of a Given Data Element)
U - UNEQUAL
G - EQUAL OR GREATER THAN
L - EQUAL OR LESS THAN
P - PRESENT ANY ENTRY
B - BLANK OR ZEROS

REPORT FORMATS (20 CARD)
QL - QUICK LOOK
Q2 - DOUBLE SPACED QL
SD - SOURCE DATA REPORT
AC - ACTION SUMMARY
QT - QUESTIONNAIRE
MS - MILESTONE
CA - COMPLIANCE-ACTION

See reverse side for a list of all CDS data elements and their abbreviations.

LEVEL CODES (01 CARD)
REQUIRED FOR SD REPORT ONLY. VALID ARE:
A - ALL DATA
C - CRITERIA MATCH ONLY
P - POINT & SOURCE
S - SOURCE ONLY

REPORT FORMATS

20 | MS
1 2 4 5 7 8 10 11 14 21

REPORT SEQUENCE **PASSWORD** (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

30
1 2 4 7 9 12 14 17 19 22 24 27 29 32

SEQUENCE LIMITED TO 40 CHARACTERS

39 Number of subtotalling data elements

QUICK LOOK REPORT FORMAT

40
1 2 4 7 9 12 14 17 19 22 24 27 29 32 34 37 39 42 44 47 49 52

Enter Data Elements to be Included on Report
Limited to 132 Characters with NOHO Option;
Limited to 110 With Standard Heading

54 57 59 62 64 67 69 72 74 77 80

"2" Stops
With NOHO Only Suppression

MILESTONE REPORT FORMAT

50
1 2 4 7 9 12 14 17 19 22 24 27 29 32 34 37 39 42 44 47 49 52

ROWS DATA ELEMENT — COLUMNS DATA ELEMENT — **VALUES OF COLUMN DATA ELEMENTS** (USE "BLANK" FOR BLANK VALUE)

54 57 59 62

COMPLIANCE DATA SYSTEM
Report Request Form

FIGURE 9-14

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

01	Ø3		REGION 3 NSPS COMPLIANCE MILESTONE
1 2	4 5	7	9 20 30 40 50 52 53 60 70 80
	Region	Level	Report Title

10	APCD	M	Q
1 2	4 7	9	11 18
	Data Element	Cond.	Value (Left Justified)

10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			

CONDITION CODES (10 CARD)
M - MUST EQUAL
A - ALTERNATE (Used for Multiple Values of a Given Data Element)
U - UNEQUAL
G - EQUAL OR GREATER THAN
L - EQUAL OR LESS THAN
P - PRESENT ANY ENTRY
B - BLANK OR ZEROS

REPORT FORMATS (20 CARD)
QL - QUICK LOOK
Q2 - DOUBLE SPACED QL
SD - SOURCE DATA REPORT
AC - ACTION SUMMARY
QT - QUESTIONNAIRE
MS - MILESTONE
CA - COMPLIANCE-ACTION

See reverse side for a list of all CDS data elements and their abbreviations.

LEVEL CODES (01 CARD)
REQUIRED FOR SD REPORT ONLY. VALID ARE:
A - ALL DATA
C - CRITERIA MATCH ONLY
P - POINT & SOURCE
S - SOURCE ONLY

REPORT FORMATS

20	MS			CDS
1 2	4 5	7 8	10 11	14 21

PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

30						
1 2	4 7	9 12	14 17	19 22	24 27	29 32

SEQUENCE LIMITED TO 40 CHARACTERS

Number of subtotalling data elements (39)

QUICK LOOK REPORT FORMAT

40										
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52

Enter Data Elements to be Included on Report
Limited to 132 Characters with NOHD Option;
Limited to 110 With Standard Heading

54 57	59 62	64 67	69 72	74 77	80

"2" Stops Suppression With NOHD Only

MILESTONE REPORT FORMAT

50										
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52

ROWS DATA ELEMENT — COLUMNS DATA ELEMENT — VALUES OF COLUMN DATA ELEMENTS (USE "BLNK" FOR BLANK VALUE)

54 57	59 62

COMPLIANCE DATA SYSTEM
Report Request Form

FIGURE 9-15

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

01	Ø9		ACTIONS SCHEDULED BUT NOT ACHIEVED
1 2	4 5	7	9 20 30 40 50 52 53 60 70 80
	Region	Level	Report Title

10	STAB	M	CA
1 2	4 7	9	11 18
	Data Element	Cond.	Value (Left Justified)

10	DTSC	G	Ø6Ø179
10	DTSC	L	11Ø179
10	DTAC	B	
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			

CONDITION CODES (10 CARD)
M - MUST EQUAL
A - ALTERNATE (Used for Multiple Values of a Given Data Element)
U - UNEQUAL
G - EQUAL OR GREATER THAN
L - EQUAL OR LESS THAN
P - PRESENT ANY ENTRY
B - BLANK OR ZEROS

REPORT FORMATS (20 CARD)
QL - QUICK LOOK
Q2 - DOUBLE SPACED QL
SD - SOURCE DATA REPORT
AC - ACTION SUMMARY
QT - QUESTIONNAIRE
MS - MILESTONE
CA - COMPLIANCE-ACTION

See reverse side for a list of all CDS data elements and their abbreviations.

LEVEL CODES (01 CARD)
REQUIRED FOR SD REPORT ONLY. VALID ARE:
A - ALL DATA
C - CRITERIA MATCH ONLY
P - POINT & SOURCE
S - SOURCE ONLY

REPORT FORMATS

20	QT			CDS
1 2	4 5	7 8	10 11	14 21

PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

30	SNME						
1 2	4 7	9 12	14 17	19 22	24 27	29 32	38
							Number of subtotalling data elements

SEQUENCE LIMITED TO 40 CHARACTERS

QUICK LOOK REPORT FORMAT

40											
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52	
	54 57	59 62	64 67	69 72	74 77	80					

Enter Data Elements to be Included on Report
Limited to 132 Characters with NOHD Option;
Limited to 110 With Standard Heading

"2" Stops Suppression
With NOHD Only

MILESTONE REPORT FORMAT

50											
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52	
	ROWS DATA ELEMENT	COLUMNS DATA ELEMENT									
			54 57	59 62							

VALUES OF COLUMN DATA ELEMENTS (USE "BLNK" FOR BLANK VALUE)

COMPLIANCE DATA SYSTEM
Report Request Form

FIGURE 9-16

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

01 | 04 | | ACTION SUMMARY FOR NESHAPS
1 2 | 4 5 | 7 | 9 ... 20 ... 30 ... 40 ... 50 52 | 53 ... 60 ... 70 ... 80
Region | Level | Report Title

10 | ATPE | G | U1
1 2 | 4 ... 7 | 9 | 11 ... 18
Data Element | Cond. | Value (Left Justified)

10 | ATPE | L | W4
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |
10 | | | |

CONDITION CODES (10 CARD)
M - MUST EQUAL
A - ALTERNATE (Used for Multiple Values of a Given Data Element)
U - UNEQUAL
G - EQUAL OR GREATER THAN
L - EQUAL OR LESS THAN
P - PRESENT ANY ENTRY
B - BLANK OR ZEROS

REPORT FORMATS (20 CARD)
QL - QUICK LOOK
Q2 - DOUBLE SPACED QL
SD - SOURCE DATA REPORT
AC - ACTION SUMMARY
QT - QUESTIONNAIRE
MS - MILESTONE
CA - COMPLIANCE-ACTION

See reverse side for a list of all CDS data elements and their abbreviations.

LEVEL CODES (01 CARD)
REQUIRED FOR SD REPORT ONLY. VALID ARE:
A - ALL DATA
C - CRITERIA MATCH ONLY
P - POINT & SOURCE
S - SOURCE ONLY

REPORT FORMATS

20 | AC | | | CDS
1 2 | 4 5 | 7 8 | 10 11 | 14 ... 21

PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

30 | STTE | SNME | | | | |
1 2 | 4 ... 7 | 9 ... 12 | 14 ... 17 | 19 ... 22 | 24 ... 27 | 29 ... 32

SEQUENCE LIMITED TO 40 CHARACTERS

39 — Number of subtotalling data elements

QUICK LOOK REPORT FORMAT

40
1 2 | 4 ... 7 | 9 ... 12 | 14 ... 17 | 19 ... 22 | 24 ... 27 | 29 ... 32 | 34 ... 37 | 39 ... 42 | 44 ... 47 | 49 ... 52
54 ... 57 | 59 ... 62 | 64 ... 67 | 69 ... 72 | 74 ... 77 | 80

Enter Data Elements to be Included on Report
Limited to 132 Characters with NOHD Option;
Limited to 110 With Standard Heading

80 — "2" Stops Suppression With NOHD Only

MILESTONE REPORT FORMAT

50
1 2 | 4 ... 7 | 9 ... 12 | 14 ... 17 | 19 ... 22 | 24 ... 27 | 29 ... 32 | 34 ... 37 | 39 ... 42 | 44 ... 47 | 49 ... 52
54 ... 57 | 59 ... 62

ROWS DATA ELEMENT — COLUMNS DATA ELEMENT — **VALUES OF COLUMN DATA ELEMENTS** (USE "BLNK" FOR BLANK VALUE)

COMPLIANCE DATA SYSTEM
Report Request Form

FIGURE 9-17

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

[0,1] [06] [ ] [FY79 COMPLIANCE ACTIONS]
1 2 4 5 7 9 20 30 40 50 52
Region Level Report Title
53 60 70 80

[1,0] [ ] [ ] [ ]
1 2 4 7 9 11 18
Data Element Cond. Value (Left Justified)

[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
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[1,0] [ ] [ ] [ ]
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[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]
[1,0] [ ] [ ] [ ]

CONDITION CODES (10 CARD)
M - MUST EQUAL
A - ALTERNATE (Used for Multiple Values of a Given Data Element)
U - UNEQUAL
G - EQUAL OR GREATER THAN
L - EQUAL OR LESS THAN
P - PRESENT ANY ENTRY
B - BLANK OR ZEROS

REPORT FORMATS (20 CARD)
QL - QUICK LOOK
Q2 - DOUBLE SPACED QL
SD - SOURCE DATA REPORT
AC - ACTION SUMMARY
QT - QUESTIONNAIRE
MS - MILESTONE
CA - COMPLIANCE-ACTION

See reverse side for a list of all CDS data elements and their abbreviations.

LEVEL CODES (01 CARD)
REQUIRED FOR SD REPORT ONLY. VALID ARE:
A - ALL DATA
C - CRITERIA MATCH ONLY
P - POINT & SOURCE
S - SOURCE ONLY

REPORT FORMATS
[2,0] [CA] [ ] [ ] [ ]
1 2 3 5 7 8 10 11 14 21
PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE
[3,0] [STTE] [SNMB] [ ] [ ] [ ] [ ] [ ] [ ]
1 2 4 7 9 12 14 17 19 22 24 27 29 32 39
Number of subtotalling data elements

SEQUENCE LIMITED TO 40 CHARACTERS

GUICK LOCK REPORT FORMAT

[4,0] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
1 2 4 7 9 12 14 17 19 22 24 27 29 32 34 37 39 42 44 47 49 52
Enter Data Elements to be Included on Report
Limited to 132 Characters with NOHD Option;
Limited to 110 With Standard Heading

[ ] [ ] [ ] [ ] [ ] [ ]
54 57 59 62 64 67 69 72 74 77 80
"2" Stops
With NOHD Only Suppressor

MILESTONE REPORT FORMAT

[5,0] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
1 2 4 7 9 12 14 17 19 22 24 27 29 32 34 37 39 42 44 47 49 52
ROWS DATA COLUMNS DATA VALUES OF COLUMN DATA ELEMENTS (USE "BLANK" FOR BLANK VALUE)

[ ] [ ]
54 57 60 63

FIGURE 9-18

COMPLIANCE DATA SYSTEM
Report Request Form

DATE SUBMITTED _____ TIME _____
RETURN REPORT TO _____
MAIL STOP _____

01	06		TEXAS PSD FACILITY STATUS
1 2	4 5	7	9 ... 52
	Region	Level	Report Title

10	STAB	M	TX
1 2	4 7	9	11 18
	Data Element	Cond.	Value (Left Justified)

10	ATPE	A	J2
10	ATPE	A	J3
10	ATPE	A	J4
10	ATPE	A	J5
10	ATPE	A	J6
10	ATPE	A	J7
10	ATPE	A	J8
10	DTAC	P	
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			
10			

CONDITION CODES (10 CARD)
M - MUST EQUAL
A - ALTERNATE (Used for Multiple Values of a Given Data Element)
U - UNEQUAL
G - EQUAL OR GREATER THAN
L - EQUAL OR LESS THAN
P - PRESENT ANY ENTRY
B - BLANK OR ZEROS

See reverse side for a list of all CDS data elements and their abbreviations.

REPORT FORMATS (20 CARD)
QL - QUICK LOOK
Q2 - DOUBLE SPACED QL
SD - SOURCE DATA REPORT
AC - ACTION SUMMARY
QT - QUESTIONNAIRE
MS - MILESTONE
CA - COMPLIANCE-ACTION

LEVEL CODES (01 CARD)
REQUIRED FOR SD REPORT ONLY. VALID ARE:
A - ALL DATA
C - CRITERIA MATCH ONLY
P - POINT & SOURCE
S - SOURCE ONLY

REPORT FORMATS

20	QL			
1 2	4 5	7 8	10 11	14 21

PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

30	SNME						
1 2	4 7	9 12	14 17	19 22	24 27	29 32	39
							Number of subtotalling data elements

SEQUENCE LIMITED TO 40 CHARACTERS

QUICK LOOK REPORT FORMAT

40	SNME	CYMM	STAB	RDEG	ATPE	DTAC	CYMM				
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52	54 57
											60

Enter Data Elements to be Included on Report
Limited to 132 Characters with NOHD Option; Limited to 110 With Standard Heading

With NOHD Only — '2" Stops Suppression

MILESTONE REPORT FORMAT

50											
1 2	4 7	9 12	14 17	19 22	24 27	29 32	34 37	39 42	44 47	49 52	54 57
	ROWS DATA ELEMENT	COLUMNS DATA ELEMENT									59 62

VALUES OF COLUMN DATA ELEMENTS (USE "BLNK" FOR BLANK VALUE)

9.4 Job Control Language for Using Retrieval Program

The CDS Retrieval Package operates on a Remote Job Entry (RJE) basis at COMNET. Input must be submitted from a high speed terminal (frequent and complicated requests might be stored on a WYLBUR data set). To submit a job request, only two JCL cards are needed in addition to the COMNET job cards and the necessary, Ø1, 1Ø, 2Ø, 3Ø, and 4Ø cards. No action is required to receive the output printout as it will be routed back to the original terminal as soon as it is presented. (See COMNET Users Manual for additional routing information.)

To execute the Retrieval Program, use the JCL as shown in Figure 9-19. In addition to the two JCL cards shown, use a Job Card which allows for a sufficient amount of time and print lines. One minute and 2Ø,ØØØ lines should be adequate for most Quick Look Reports. Requests for multiple reports and Source Data Reports are likely to need more time and more lines. Refer to the COMNET User's Manual for detailed information about the Job Card. Figure 9-20 shows a job card for multiple copies; Figure 9-21 shows a job card for 100,000 lines of output.

AUTHOR	TRC	PROGRAM NAME	RETRIEVAL JOB CONTROL	TASK NUMBER		

```
//EPAiii   JOB (aaaa,Miii),'USER ID',TIME=1,PRTY=2,PASSWORD=pppp
/*ROUTE   PRINT RMTrr                                  Priority is optional.
/*CNTL   CDS  EXC
//
//         EXEC CDSRTVn
//RTV.SYSØØ5 DD *
Ø1                    ALL RETRIEVALS MUST HAVE AN 01 TITLE CARD

1Ø                    NO SELECTION CARDS ARE REQUIRED; UP TO TWENTY
                      SELECTION CARDS MAY BE USED.

2Ø                    ALL RETRIEVALS MUST HAVE ONE 20 CARD FOR
                      REPORT SELECTION.

3Ø                    THE SEQUENCE SELECTION 30 CARD IS OPTIONAL.

4Ø                    THE PRINT FORMAT 40 CARD IS REQUIRED IF A
                      QUICK LOOK OR Q2 REPORT IS SELECTED.
//
/*EOF
          WHERE:
                iii     IS THE USER'S INITIALS
                aaaa    IS THE USER'S ACCOUNT NUMBER
                rr      IS THE USER'S REMOTE; SEE FIGURE 10-6 FOR A LIST OF REMOTE NUMBERS.
                n       IS THE USER'S REGION NUMBER OR STATE CODE;
                        VALID VALUES ARE 1 THRU 10, SC, TN, NE, ETC
                pppp    IS THE USER'S PASSWORD
```

FIGURE 9-19
RETRIEVAL JOB CONTROL

TRC

AUTHOR	TRC	PROGRAM NAME	RETRIEVAL JOB CONTROL	TASK NUMBER	DATE	Page of	CARD NUMBER

JCL for obtaining 3 copies of retrieval output

```
//  EPAiii    JOB (aaaa,Miii,,,,,,3),'USER ID',TIME=1,PRTY=4,PASSWORD=pppp
/*ROUTE   PRINT RMTrr
/*CNTL   CDS  EXC
//        EXEC CDSRTVn
//RTV.SYS005 DD *
  Retrieval Request cards immediately after the above JCL card.

//
/*EOF
```

Where:

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's Remote; see figure 10-6 for a list of remote numbers
n	is the user's region number or state code. Valid values are 1 through 10, SC,NE,TN,etc.
pppp	is the user's password

FIGURE 9-20

RETRIEVAL JOB CONTROL FOR MULTIPLE COPIES

TRC

AUTHOR	PROGRAM NAME	TASK NUMBER	DATE	Page of	CARD NUMBER
TRC	RETRIEVAL JOB CONTROL				

JCL for allowing up to 100,000 lines of printed output. Without this special job card, the WCC defsult value is 20,000 lines.

```
//EPAiii   JOB (aaaaa,Miii,,1ØØ),'USER ID',TIME=1,PRTY=4,PASSWORD=pppp
/*ROUTE   PRINT RMTrr
/*CNTL   CDS,EXC
//
//RTV,SYSØØ5 DD*
```

The priority is optional.

Retrieval Request cards immediately after the above JCL card.

```
//
/*EOF
```

Where:

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's Remote; see figure 10-6 for a list of remote numbers
n	is the user's region number or state code. Valid values are 1 through 10, SC, TN, NE, etc.
pppp	is the user's password

FIGURE 9-21

RETRIEVAL JOB CONTROL

9.5 Retrieval Edits Performed by System

The Retrieval Program edits the request cards, Ø1, 1Ø, 2Ø, 3Ø, 4Ø, and 5Ø to determine if they are convertible into logic which the system can process. Errors on the request card will appear as Error Messages on the Edit Report. These Error Messages are classified as "WARNING" or "FATAL."

Table 9-1 lists the type of edits performed, the correct possibilities, and the action taken by the system if an error is detected.

TABLE 9-1

RETRIEVAL PACKAGE EDITS

Card Type	Item Checked	Correct Possibilities	Action if in Error
01	Level	Blank, S,P,A,C (Default = A)	If SD format requested, it is ignored if blank or other
	Region Number	Required for Standard Milestone	Fatal - Processing stops after EDIT
	Number of 01 Cards	One or none	Only first 01 card accepted
10	Data Element	Listed on Input Form	FATAL - Processing stops after EDIT
	Condition	M,A,U,G,L,P,B	FATAL - Processing stops after EDIT
	Value	(1) Anything (2) Numeric for "numeric" items, i.e., REGN, STTE, CNTY, SRCE, PTNO, ATPE, DTSC, DTAC, STAC (3) Number of Digits less than or equal to number of digits on Input form	(1) Ignored if not blank for condition P or B (2) FATAL - Processing stops after EDIT (3) Fatal if the wrong length is used
	Number of 10 Cards	0 - 20	FATAL - Processing stops after EDIT
20	REPORT FORMAT	(1) QL, SD, AC, QT, Q2, MS CA Up to three reports are available from one retrieval	(1) Processing will continue if at least one valid FORMAT
	Number of 20 Cards	1	FATAL - Processing stops after EDIT
30	REPORT SEQUENCE	List on Input Form	FATAL - Processing stops after EDIT
	DATA ELEMENT SEQUENCE LENGTH	Total 40	FATAL - Processing stops after EDIT
40	QUICK LOOK DATA ELEMENT	List on Input Form	QL Format Request ignored
	QL Length	Total length (including one blank between each item) 132 with NOHD; 110 without NOHD	QL Format Request ignored
	Number of 40 Cards	(1) 1 if QL FORMAT requested (2) 0 if no QL FORMAT	(1) QL FORMAT Request ignored (2) QL FORMAT Assumed (if only one 40 card)
50	VARIABLE MILESTONE DATA ELEMENT	List on Input Form (BLK1, BLK 2 EXCLUDED)	FATAL - Processing stops after EDIT
	Column Values	must be present	FATAL - Processing stops after EDIT
	Relation to other cards	(1) MS not requested on 20	FATAL - Processing stops after EDIT
	Number of 50 Cards	One or none	MS FORMAT Request ignored
ALL	General CARD TYPE	01, 10, 20, 30, 40, 50	FATAL - Processing stops after editing

Table 9-2 contains a list of all possible Error Messages and the errors which are the cause of their appearance on the Edit Report. Figure 9-22 shows a typical Retrieval Edit Report.

```
.....................................................................................
                                RETRIEVAL EDIT REPORT
.....................................................................................
   11/28/79                     COMPLIANCE DATA SYSTEM                          PAGE 001
.....................................................................................

REGION 05     LEVEL       TITLE MAJOR ACTIONS FOR FY79

SELECTION CRITERIA
       DATA ELEMENT                CONDITION            VALUE                          ERRORS
   STATE ABBREVIATION          MUST EQUAL           IL
   ACTION TYPE                 ALTERNATE            02
   ACTION TYPE                 ALTERNATE            03
   ACTION TYPE                 ALTERNATE            04
   ACTION TYPE                 ALTERNATE            05
   ACTION TYPE                 ALTERNATE            08
   ACTION TYPE                 ALTERNATE            51
   ACTION TYPE                 ALTERNATE            52
   ACTION TYPE                 ALTERNATE            63
   ACTION TYPE                 ALTERNATE            77

REPORT SEQUENCE              REPORT FORMAT GL
   SOURCE NAME
  *STATE
  *COUNTY
  *SOURCE NUMBER
  *EMISSION POINT NUMBER
  *ACTION NUMBER

QUICK LOOK DEFAULT DATA ELEMENTS - STATE, COUNTY, SOURCE, EMISSION POINT, ACTION NUMBER
   SOURCE NAME
   CITY NAME
   STATE ABBREVIATION
   SIC CODE
   POINT PROCESS DESCRIPTION
   POINT EMISSION CATEGORY
   POINT COMPLIANCE STATUS
   ACTION TYPE
   DATE ACHIEVED
   NOHD - DEFAULT QL ITEMS ARE SUPPRESSED

NO ERRORS DETECTED - CONTINUING WITH RETRIEVAL

PASSWORD NOT ACCEPTED - NO CONFIDENTIAL DATA WILL BE PRINTED

                      - COMMENTS AND CONFIDENTIAL ACTIONS WILL NOT APPEAR
```

FIGURE 9-22

TABLE 9-2

RETRIEVAL PACKAGE ERROR MESSAGES

ERROR MESSAGE	CAUSE
"FATAL - INVALID RETRIEVAL CARD"	Card type not 01, 10, 20, 30, or 40
"WARNING - DUPLICATE TITLE (01) CARD"	More than one 01 card type entered, the first one is accepted.
"FATAL - OVER 20 SELECTION CRITERIA"	Limit of twenty card type 20 cards exceeded.
"FATAL - INVALID DATA ELEMENT"	4-digit data element abbreviation does not correspond to any on list on input form. This error can occur on card types 10, 30, or 40.
"WARNING - BAD LEVEL, SD FORMAT DELETED"	The level code entered on card type 01 is not S, P, A, or C. If SD format is requested, it will be ignored.
"FATAL - INVALID CONDITION"	The condition code entered on card type 10 was not M, A, U, G, L, P, or B.
"WARNING - VALUE NOT USED FOR COND P OR B"	An entry was made in the VALUE portion of card type 10 with a CONDITION of P or B. These conditions do not utilize any VALUE.
"FATAL - THIS VALUE MUST BE NUMERIC"	An alphabetic digit (other than 0-9) was entered in the VALUE portion of card type 10 for a data element which must be numeric, e.g., the value for DTSC must be a date consisting of 6 digits (0-9).
"WARNING - VALUE TOO LONG (TRUNCATED)"	The number of digits entered in the VALUE portion of card type 10 was larger than the number of digits specified for that data element on the list on the input form.
"WARNING - INVALID REPORT FORMAT WILL CONTINUE IF ANY VALID FORMATS"	A code other than QL, SD, AC, or QT was entered on card type 20
"WARNING - QL FORMAT ASSUMED:	A card type 40 was entered, but QL was not requested on card type 20. QL will be assumed as entered.

TABLE 9-2 (Continued)

RETRIEVAL PACKAGE ERROR MESSAGES

ERROR MESSAGE	CAUSE
"FATAL - REPORT FORMAT (20) CARD REQUIRED"	No card type 20 was entered. This card type is required.
"WARNING - QL (40) MISSING, QL DELETED"	No card type 40 was entered, although QL was entered on card type 20. QL report format is ignored.
"WARNING - QL TOO BIG, QL DELETED"	The total length of the QL line is greater than 110 digits with the default header information or it is greater than 132 digits with NOHD.
"WARNING - LEVEL FOR SD FORMAT ONLY"	A level code was entered on card type 01, but SD report format was not requested. The level code is for SD reports only.
"FATAL-DUPLICATE FORMAT (20) CARD"	More than one card type 20 was entered.
"FATAL - DUPLICATE SEQUENCE (30) CARD"	More than one card type 30 was entered.
"FATAL - SEQUENCE KEY TOO LONG"	The sum of the number of digits of the data elements requested for the user sequence (card type 30) was greater than 40. (38 for AC, 39 for QT)
"FATAL - INVALID MS DATA ELEMENT COMBO"	Only source level data elements may be requested on a Milestone together with repeating pollutant data on a 50 Card.
"FATAL - REPEAT AND POINT OR ACTION ON QL"	The Card 40 may specify only source level data together with repeating pollutant data on the Quick Look.
"PASSWORD NOT ACCEPTED - NO CONFIDENTIAL DATA WILL BE PRINTED"	Either no password was used or an incorrect password was used. No confidential data will be selected, sorted or printed on any output report.
"PASSWORD HAS BEEN ACCEPTED - CONFIDENTIAL REPORT - FOR EPA INTERNAL USE ONLY"	When a correct password is used, each output report page is labeled as confidential.

10.0 SUPPORTIVE TECHNICAL INFORMATION

10.1 Table Processing

All of the programs in CDS perform a number of table-lookups in order to validate an input data value and/or to generate a description which corresponds to the input code. There are four data elements which have separate table-lookup procedures for each of the ten EPA Regions using CDS. Each of the 10 regions may specify the description for the following codes: County Code, Personnel Code, Action Type, and Results Code.

10.1.1 County Code Table

In the Edit, the State and County Codes on every card are validated by the Region's County Code Table. An input transaction is rejected with a fatal error if the State and County Codes on the input do not match one of the entries on this table.

For each valid Card 1 entered with an Update Code "N", the county name associated with the County Code is generated and passed to the Update. The Update places the County Name on the Masterfile as a retrievable data element.

For a Card 1, the Air Quality Control Region (AQCR) on the input transaction is validated against the AQCR on the County Code Table.

Entries on the County Code Table have the following punchcard layout:

Card Columns	Length	Data Element	Data Type
1-2	2	Region Code	Numeric, Ø1-1Ø
3-4	2	State Code	Numeric, Ø1-55
5-8	4	County Code	Numeric
9-25	17	County Name	Alphanumeric
26-28	3	First AQCR	Numeric
29-31	3	Second AQCR	Numeric
32-34	3	Third AQCR	Numeric
35-80	46	Filler	Must be blank

The County Codes and the County Names have been developed from the SAROAD Coding Manual. Users may wish to add additional county codes, especially for special facilities such as portable asphalt batching plants which are not always located in the same county. To change the County Code Table, users should provide the national Data Bank Coordinator with the necessary information to add, change, or delete an entry on this table.

Figure 10-1 is the County Code Table for a region. Users should document any table changes on this figure.

FIGURE 10-1

COUNTY CODE TABLE

REGN	STTE	CNTY	CNTY NAME	AOCR
04	01	0240	AUTAUGA	002
04	01	0260	BALDWIN	005
04	01	0280	BARBOUR	006
04	01	0360	BIBB	004
04	01	0400	BLOUNT	004
04	01	0520	BULLOCK	002
04	01	0540	BUTLER	002
04	01	0560	CALHOUN	003
04	01	0580	CHAMBERS	003
04	01	0600	CHEROKEE	003
04	01	0660	CHILTON	004
04	01	0680	CHOCTAW	001
04	01	0720	CLARKE	001
04	01	0740	CLAY	003
04	01	0760	CLEBURNE	003
04	01	0780	COFFEE	006
04	01	0800	COLBERT	007
04	01	0820	CONECUH	001

10.1.2 Personnel Code Table

In the Edit, the Personnel Code found on the Card 2 in columns 77-79 and on the Card 7 in columns 67-79 are validated by the Region's Personnel Code Table. Input values which do not match one of the table values cannot be passed to the Masterfile and are blanked out.

In the Update, the Personnel Code Table lookup is performed for every source and action record on the input Masterfile and on the input transaction file. A personnel name and a personnel title are generated for the output Masterfile based on each personnel code.

Entries on the Personnel Code Table have the following punchcard layout:

Card Columns	Length	Data Element	Data Type
1-2	2	Record-Identifier	Always "BB"
3-4	2	Region	Numeric, Ø1-1Ø
5-7	3	Personnel Code	The first position may be alphabetic; the second and third must be numeric.
8	1	Filler	Always "Ø"
9-23	15	Personnel Name	Alphanumeric
24-38	15	Personnel Title	Alphanumeric
39-80	42	Filler	Must be blank

By changing the Personnel Name for a given Personnel Code on this table, all occurrences of the old Personnel Name on the Masterfile will be replaced with the new Personnel Name.

To change the Personnel Code Table, users should provide the national Data Bank Coordinator with the necessary information to add, change, or delete an entry on this table.

Figure 10-2 is the Personnel Code Table for a Region. Users should document any table changes on this figure.

FIGURE 10-2

SAMPLE PERSONNEL TABLE

PERSONNEL CODE	NAME
A01	LEGROS
A02	BLOOM
A03	WYNNE
A04	ZEHNTNER
A05	STONELAKE
A06	BLACKWELL
A07	BUFFINGTON
A08	JOSEPH
A09	GOLD
A10	HANDZEL
A11	LASKOW
A12	GREENE
A13	VACCARO
A14	SMITH P
A15	SERRITELLA
A16	MARTIN
A17	COLLINGS
A18	DONOVAN
A19	BRENNAN
A20	ROGERS
A21	FRYE
A22	AJL
A23	BAKER
A24	CALLEN
A25	EARLY
A26	HEENAHAN
A27	KALKSTEIN
A28	KOEGEL
A29	MELVIN
A30	SISKIND
C01	WALKER
C02	LOWRY
C03	BUI
C04	BURROWS
E01	MARSHALL

10.1.3 Action Table

In the Edit, the Action Type found on the Card 7 in columns 53-54 is validated by the Action Table. Input values which do not match one of the table values will cause the input transaction to be rejected with a fatal error.

In the Update, the Action Table lookup is performed for every new Card 7 transaction and for every Card 7 which changes the Action Type. Both a long and a short Action Description are generated on the Masterfile based on the Action Type.

Entires on the Action Table have the following punchcard layout:

Card Columns	Length	Data Element	Data Type
1-2	2	Record-Identifier	Always "CC"
3-4	2	Region	Numeric, Ø1-1Ø
5-6	2	Action Type	Numeric
7-8	2	Filler	Always "ØØ"
9-23	15	Short Action Description	Alphanumeric
24-73	5Ø	Long Action Description	Alphanumeric
74-8Ø	7	Filler	Must be blank

To change the Action Table, users should provide the national Data Bank Coordinator with the necessary information to add, change, or delete an entry on this table.

Figure 10-3 is the Action Table for a Region. Users are urged to use WYLBUR to list the most current action types for their region. The following WYLBUR commands will produce a printout of the current action types:

WYLBUR COMMAND	EXPLANATION
USE $CN.EPAFCS.A026.ISAM.TABLE CLEAR	Places all 10 regions actions into working storage.
DEL NOT 'CC06' IN ALL	Deletes all entries for all regions except for Region 6. Each region should put their own region number into this command.
CHANGE 1/4 TO ' ' IN ALL NOLIST CHANGE 7/8 TO ' ' IN ALL NOLIST CHANGE 25 TO ' ' IN ALL NOLIST	Formats table for printing. Generates spaces between columns for printing.
LIST OFFLINE REM=3 UNN BOX=REG6	Users should route their printout to their own terminal number.

10.1.4 Results Code Table

In the Edit, the Results Code found on the Card 7 in columns 7Ø-71 is validated by the Results Code Table. If the input transaction entry is valid, a Results Description is generated and passed to the Update, where it is placed on the Masterfile. If the input transaction is not on the Results Code Table, no Results Code is passed to the Update.

Entries on the Results Code Table have the following punchcard layout:

Card Columns	Length	Data Element	Data Type
1-2	2	Record-Identifier	Always "DD"
3-4	2	Region	Numeric, Ø1-1Ø
5-6	2	Results Code	Numeric
7-8	2	Filler	Always "ØØ"
9-23	15	Results Description	Alphanumeric
24-8Ø	57	Filler	Must be blanks

To change the Results Code Table, users should provide the national Data Bank Coordinator with the necessary information to add, change, or delete an entry on this table.

Figure 10-4 is the Results Code Table for a Region. Users should document any table changes on this figure.

FIGURE 10-3

SAMPLE ACTION TABLE

ACTION	SHORT DESCRIPTION	LONG DESCRIPTION
A1	307 CHALLEGES	307 CHALLENGES
A2	SIP NOTICE CMSD	SIP NOTICE OF CM SYSTEM DEMONSTRATION
A3	SIP CMSD DATE	SIP CM SYSTEM DEMONSTRATION DATE
A4	SIP CMSDRPT SUB	SIP CM SYSTEM DEMONSTRATION REPORT SUBMITTAL
A5	SIP EE RPT SUB	SIP EXCESS EMISSIONS REPORT SUBMISSION
A6	SIP CMS INSP	SIPCONTINUOUS MONITORING SYSTEM INSPECTION
A7	SIP DOFEA/STATE	DEFERRAL OF ENFORCEMENT ACTION OF STATE
A8	SIP S/UNDER 306	SOURCE LISTED UNDER SECTION 306
A9	NSPS CONST COMM	NSPS CONSTRUCTION COMMENCEMENT
B1	NSPS NOTICECMSD	NSPS NOTIFICATION OF CM SYSTEM DEMONSTRATION
B2	NSPS 114 LETTER	NSPS S114 LETTER
B3	NSPS INSP-EPA	NSPS INSPECTION BY EPA
B4	NSPS ORDER/EPA	NSPS ORDER BY EPA
B5	NSPS CIV/CRIM	NSPS CIVIL/CRIMINAL ACTION BY EPA
B6	NSPS MOR NOTICE	NSPS MODIFICATION OF RECONSTRUCTION NOTIFICATION
B7	NSPS CMSDRPTSUB	NSPS CM SYSTEM DEMONSTRATION REPORT SUBMITTAL
B8	NSPS N/MALF'N	NOTIFICATION OF MALFUNCTION
B9	NSPS CMSTRESULT	NSPS CONTINUOUS MONITORING SYSTEM TEST RESULTS
C1	NSPS CMS INSP	NSPSCONTINUOUS MONITORING SYSTEM INSPECTION
C2	NSPS DEA STATE	DEFERRAL OF ENFORCEMENT ACTION TO STATE
C3	NSPS S/UNDER306	SOURCE LISTED UNDER SECTION 306
C4	NESHAPS S/CNS'N	NESHAPS START OF CONSTRUCTION
C5	NESHAPS E/CONSR	NESHAPS END OF CONSTRUCTION
C6	NESHAPSFINALCOM	NESHAPS FINAL COMPLIANCE
C7	NESHAPS SUB CP	NESHAPS SUBMISSION OF CONTROL PLAN
C8	NESHAPS PUREQP	NESHAPS PURCHASE OF EQUIPMENT
C9	REGISTRA'N RCVD	NESHAPS REGISTRATION RECEIVED
D1	PERMIT APPN RCD	NESHAPS PERMIT APPLICATION RECEIVED
D2	NESHAPSINSP'N	NESHAPS INSPECTION
D3	NESHAPS S/T SUB	NESHAPS SOURCE TEST SUBMISSION
D4	NESHAPS STARTUP	NESHAPS START-UP
D5	NESHAPSEPAORDER	NESHAPS ORDER BY EPA
D6	NESHAPSCIV/CRIM	NESHAPS CIVIL/CRIMINAL ACTION BY EPA
D7	NESHAPS PMTG'T	NESHAPS PERMIT GRANTED

FIGURE 10-4

SAMPLE RESULTS CODE TABLE

RESULTS	SHORT DESCRIPTION	LONG DESCRIPTION
AB	STTE NOV	STTE NOTICE OF VIOLATION
AC	STTE REC'D APP	STATE RECEIVED APPLICATION
AD	STTE CIV ACT	STATE CIVIL ACTION
AE	STTE CRIM ACT	STATE CRIMINAL ACTION
AF	ST AD INFO REQ	STATE ADD. INFORMATION REQUESTED
AG	APP TO ST COMP	APPLICATATION TO STATE COMPLETE
AH	ST PRE DETERMN	STATE PRELIMINARY DETERMINATION
BA	EPA NOV	EPA NOTICE OF VIOLATION
B1	NOT DT CONS/MO	NOTIFICATION OF DATE CONSTR. OR MODIFICATION IS COMMENCED
B2	NOT PHYS/OPERC	NOTIFICATION OF ANY PHYSICAL OR OPERATIONAL CHANGE
CA	EPA REC'D APPL	EPA RECEIVED APPLICATION
C1	NOT INIT STRTU	NOTIFICATION OF ANTICIPATED INITIAL STARTUP
C2	NOT ACT STUP D	NOTIFICATION OF ACTUAL STARTUP DATE
DA	EPA CIV ACT	EPA CIVIL ACTION
D1	REP INFO REQ	REPORTED INFORMATION REQUIRED BY 61.10
D2	REQ COM WAIVER	REQUESTED COMPLIANCE WAIVER

10.1.5 Other Table Lookup Procedures

For both editting and reporting formatting purposes, there are a large number of table lookups for values which are used consistently by all regions. For example, there are nine possible values for Compliance Status Code. Each value has a corresponding definition which appears on the Source Data Report. These definitions must be used by all users and can be changed only by the national Data Bank Coordinator.

The following data elements have table lookups for converting a code to an English-language description:

Region	Emission Category	Source Compliance
State	Compliance Status	Source Emission Cat.
Federal Facility Code	SIP Code	SIC Code
	Active/Passive Code	Pollutant Code

In addition to having a table lookup procedure for SIC Code during retrievals, the CDS Update Program uses the SIC lookup to place the SIC description on the Process Description of the Emission Point ØØØ for any new source which has no user coded value in the Process Description field and which has a valid SIC Code. Thus, the SIC Description replaces the former message "ENTIRE SOURCE" in the Process Description on Point ØØØ.

Any additional values to these codes or changes in the definitions of these codes must be approved by the national Data Bank Coordinator. Each change involves a number of computer program modifications.

10.1.6 CDS Masterfile Layout

Figure 10-5 shows the format of the CDS Masterfile. This file is resident on tape and is used in each of the Update cycles. This format is also used for each of the disk masterfiles from which retrievals are performed.

COMPLIANCE DATA SYSTEM
MASTER FILE LAYOUT

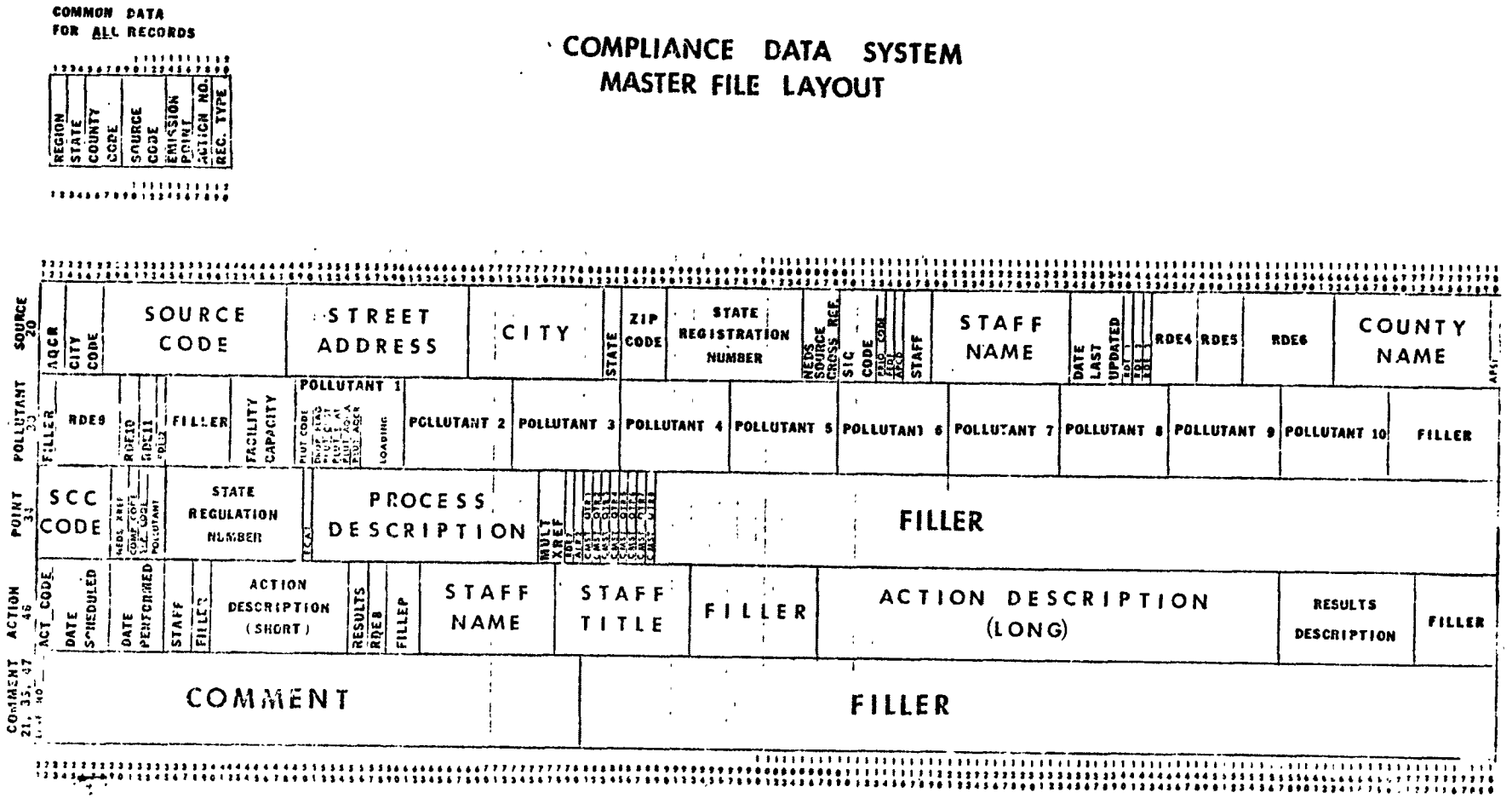

FIGURE 10-5

10.2 Backup and Recovery Procedures

Both the user and the national Data Bank Coordinator have responsibilities to make sure that CDS can survive hardware malfunctions as well as occasional human error in the course of system usage.

10.2.1 User Responsibility for Backup

As part of the normal operation of CDS, users should perform the following tasks to assure proper backup:

- All input punchcards must be kept for a minimum of one month from the date on which they were used as input to CDS. Card batches should be labelled by date so that they can be identified and used as backup.

- WYLBUR data sets which are used as input transactions must be kept for a minimum of one month from the date on which they were used as input to CDS. Users should keep a log of all WYLBUR data sets, marking the creation date, the expiration date, the approximate volume on the data set, and its use or function.

- Edit Reports should not be discarded. The Edit Report provides a record of what transactions were input to the system. Corrections should be checked off as they are performed.

- All Update Reports must be kept on file. Since the Update Reports provide the only audit trail of data placed on the CDS Masterfile, they are very valuable for researching problems. They should be filed in the order of the Masterfile's Output Serial Number which appears on the heading of each page. If users note any discrepancies or inexplicable errors on this report, they should alert the national Data Bank Coordinator or TRC. TRC maintains a complete inventory of all Update Reports for all users.

10.2.2 National Responsibility for Backup

As part of the normal operation of CDS, the national Data Bank Coordinator performs the following tasks to assure backup of the system:

- During the update cycle, the MOD File containing all transactions submitted since the previous update cycle is copied to a magnetic tape. Five cycles of tape are maintained so that backup exists for one month's worth of input transactions.

- Five cycles of the CDS Masterfile are kept at the central computer facility.

- On a quarterly basis, the CDS Masterfile is copied and sent to TRC for archiving.

- Since the ten regional disk Masterfiles are created each week from the CDS Masterfile, the Masterfile provides the only backup of regional files.

- The County Code, Personnel, Action, and Result Code Tables can be recreated from punchcards or from WYLBUR data sets.

- All other CDS data sets and computer programs are maintained at TRC with punchcard backup available at all times.

10.2.3 Recovery Procedures

If any backup procedures are needed to recover from hardware difficulties at the central computer site, the national Data Bank Coordinator will inform each user about the specific backup procedure to be used. In most recovery procedures involving user participation, users will be asked to resubmit input transactions which were destroyed during the hardware difficulties.

10.3 Computer Program Modifications

If any of the computer programs in the CDS system produce erroneous results, it is the user's responsibility to notify the national Data Bank Coordinator of the problem. In addition to describing the problem in detail, users may be asked to rerun the program in error so that the printout can be routed to TRC for a detailed analysis.

Computer program errors can usually be corrected within a short time. Minor problems and modifications can be made in less than one week. Major changes may take several weeks or months, depending on the complexity of the change.

10.4 Microfiche Considerations

Facilities for producing both microfilm and microfiche output are currently available through the Micrographics Department at WCC in Washington, D.C. Users of CDS should consider the use of microfiche to facilitate the storage and handling of lengthy reports such as a regional Source Data Report.

Any user who wishes to utilize this service is required to submit a WCC Request for Micrographics Form. Figures 10-6 through 10-9 include a complete sample of the forms which are used to establish job processing parameters for an individual user indicating a reduction factor compatible with their own microfiche reader, as well as an appropriate title which is eye-readable for identification purposes.

Once a user's completed form has been received by WCC, processing with requested microfiche output may be submitted at any time. The user will request a regular CDS retrieval with a Source Data Report format. However, as further processing of this data is required, the output will be written to a tape data set for subsequent micrographics processing. Microfiche output is processed on the basis of 48 hour turnaround with the completed output mailed directly to the initiator of the request.

Additional job control cards in the retrieval request deck are necessary to direct the retrieval output to a tape rather than to a printer. Sample retrieval JCL showing these additional cards is shown in Figure 10-10.

WCC REQUEST FOR MICROGRAPHICS

FIGURE 10-6

MICROGRAPHICS USER INFORMATION FOR CDS

MICROGRAPHICS CENTER USE ONLY

DATE RECEIVED: _____

CONTROL No.: _____

DATE: 5-30-78

USER INFORMATION

Specified by Individual User

NAME OF APPLICATION: MICROCDS (Not longer than 8 characters)

INDIVIDUAL USER: NAME THE RESEARCH CORPORATION OF New England

ADDRESS 125 Silas Deane Highway
Wethersfield, Connecticut
ATTN: JoAnn Hewett ZIP CODE 06109

PHONE No. (203) 563-1431 ROOM No. _____

USER I.D. EPAEXC ACCOUNT No. A026

TYPE OF APPLICATION

_____ CHANGE TO EXISTING PRODUCTION APPLICATION

X TEST OF NEW APPLICATION

SERVICE REQUESTED

X ORIGINAL MICROFICHE

_____ ORIGINAL ROLL FILM

_____ SOURCE DOCUMENT MICROFILMING

X DUPLICATION OF MICROFICHE

_____ DUPLICATION OF ROLL FILM

SPECIAL INSTRUCTIONS

_____

SAMPLE FORM

WCC MICROFORMS INPUT/OUTPUT SPECIFICATIONS

FIGURE 10-7

CDS MICROFORM INPUT

INPUT

MAGNETIC TAPE CHARACTERISTICS:

IBM IBM OR OTHER *(SPECIFY)*

SL LABELED OR UNLABELED

9 TRACK *(7 OR 9)*

1600 BPI *(556, 800, 1600)*

____ PARITY *(ODD OR EVEN - REQUIRED FOR 7-TRACK TAPES ONLY)*

133 RECORD LENGTH

4123 BLOCK SIZE

EBCDIC CHARACTER SET *(EBCDIC, ASCII OR OTHER)*

132 NUMBER OF PRINT POSITIONS

1 CARRIAGE CONTROL POSITION

2 POSITION NUMBER OF FIRST PRINT CHARACTER

ASA CARRIAGE CONTROL TYPE *(ASA, MACHINE, OTHER)*

64 LINES PER FRAME/PAGE

VERTICAL TABBING:

CHANNEL	1	2	3	4	5	6	7	8	9	A	B	C	
LINE NUMBER													

FORMS OVERLAY:

____ OPEN BOX

____ LINED BOX

____ SPECIAL *(MICROGRAPHICS FORMS OVERLAY SPECIFICATIONS ATTACHED)*

OUTPUT

MICROFORMS REQUIREMENTS:

2 1 NUMBER OF COPIES REQUESTED

FICHE MICROFICHE OR ROLL FILM

COMIC IMAGE *(COMIC OR CINE)*

ROW FORMAT *(ROW OR COLUMN)*

7 FRAMES/ROW

9 FRAMES/COLUMN

24 REDUCTION FACTOR *(24X, 42X, 48X)*

} DEPENDENT ON INDIVIDUAL USER's MICROFICHE READER

SAMPLE FORM

FIGURE 10-8

CDS MICROFORM OUTPUT

OUTPUT (CONTINUED FROM PAGE 2)

MICROFICHE TITLE FORMAT:

SPECIFY HOW TITLE SHOULD APPEAR. CIRCLE AND NUMBER EACH EXTRACT.

```
                1          2     3          4
ØØØNN/NN/NNØØSTATEXXCNTYXXXXSRCEXXXXXØØØ
```

TITLE EXTRACT FIELDS DATA

FIELD	1	2	3	4	5	6
LINE NUMBER	3	5	6	6		
BEGINNING PRINT POSITION	3	10	10	23		
FIELD LENGTH	8	2	4	5		
EXAMPLE FROM YOUR DATA	11/02/77	NY	0140	00037		

PAGE HEADER FORMAT:

	ELEMENT	BEGINNING PRINT POS.	HEADER ELEMENT DESCRIPTION
LINE 1	1		
SKIP ____ LINES AFTER LINE 1	2		
	3		
	4		
LINE 2	1		
SKIP ____ LINES AFTER LINE 2	2		
	3		
	4		
LINE 3	1		
SKIP ____ LINES AFTER LINE 3	2		
	3		
	4		
LINE 4	1		
SKIP ____ LINES AFTER LINE 4	2		
	3		
	4		

SAMPLE FORM

OUTPUT (CONTINUED FROM PAGE 3)

FIGURE 10-9

CDS MICROFORM PAGE BREAKS

INDEXING REQUIREMENTS:

	SUBKEY 1	SUBKEY 2	SUBKEY 3	SUBKEY 4
PRINT LINE POSITION FOR KEY	10	10	3	
KEY LENGTH IN CHARACTERS	2	4	35	
LINE TO BEGIN KEY SEARCH	5	6	4	
LINE TO END KEY SEARCH	5	6	4	
KEY MASK CHARACTER				
PRINT LINE POSITION FOR MASK				
MASK LENGTH IN CHARACTERS				

MASK CHARACTERS : NUMERIC = 9 ; ALPHABETIC = A; ALPHANUMERIC = X; SPECIAL CHARACTER = S

FICHE BREAK REQUIREMENTS:

	CONDITION 1	CONDITION 2	CONDITION 3	CONDITION 4
BREAK ON MATCH OR CHANGE ?	M			
BREAK FIELD ON CURRENT OR NEW PAGE ?	CURRENT			
LINE TO BEGIN SEARCH	5			
LINE TO STOP SEARCH	5			
BEGINNING PRINT POS. OF BREAK FIELD	10			
LENGTH IN CHARACTERS OF BREAK FIELD	2			
BREAK EVERY OCCURRENCE OF MATCH ?	NO			
MATCH FIELD 1	NJ			
MATCH FIELD 2	NY	SPECIFY		
MATCH FIELD 3	PR	[illegible]		
MATCH FIELD 4	VI	[illegible]		
MATCH FIELD 5		[illegible]		
MATCH FIELD 6				

SOURCE DOCUMENT MICROFILMING:

TITLE OF DOCUMENT _____

NUMBER OF PAGES _____ PAGE DIMENSIONS _____

NUMBER OF MICROFILM COPIES DESIRED _____

SPECIFY FILM CARTRIDGE TITLE, IF ANY _____

FORMAT	REDUCTION RATIO	CARTRIDGE TYPE
____ COMIC	____ 24 X	____ 3M
____ CINE	____ 25 X	____ KODAK
	____ 27 X	____ REEL

SAMPLE FORM

FORTRAN CODING FORM

AUTHOR TRC | PROGRAM NAME CDS MICROFICHE JCL | TASK NUMBER | DATE | Page of | CARD NUMBER

C | STMT NO | cont | FORTRAN STATEMENT

```
//EPAiii   JOB (AAAA Miii) 'CDS MICROFICHE' TIME=5 PASSWORD=PPPP
/*CNTL   CDS EXC
//        EXEC CDSRTVm
//RTV.SYS005 DD *
01  02  A       REGION 11 MICROFICHE
20  SD          PASSWORD
30  SNME
//STEP3  PRINTOUT DD DSN=COM.EPAiii.AAAA.MICROCDS DISP=(NEW,CATLG)
//        LABEL=(1,SL,RETPD=15) UNIT=TAPE9
//        DCB=(RECFM=FBA,LRECL=133,BLKSIZE=4123,DEN=3)
/
*EOF
```

iii is the user's initials

aaaa is the user's account number

rr is the user's remote; see figure 10-6 for a list of remote numbers

n is the user's region number or state code. Valid values are 1 through 10 SC,TN NE,etc.

PPPP is the user's password

FIGURE 10-10
MICROFICHE JOB CONTROL

10.5 Minicomputer Edits

Dennis Shur of EPA Region X has developed an on-line data entry and edit program for the regional PDP-11/70 minicomputer. This program should be of great interest to regional CDS users who have access to a PDP-11.

This program performs many of the same functions of the CDS Edit; however, it provides error checking instantaneously as the data is keyed in via the CRT terminal used for data entry. In addition to performing basic validation routines, the program also displays the Facility Name of the source for which various data items are being entered. Thus, certain Update Errors can also be identified during the edit processing.

CDS users wishing more information about this on-line edit should call Denis at (206) 442-1580.

10.6 Archiving

With constant additions and changes to the CDS Masterfile, the amount of data carried in the system eventually becomes very cumbersome. When users determine that there are too many obsolete sources on the Masterfile, they should consider archiving rather than deleting the unwanted sources. This is especially useful for minor sources or sources with no applicable regulations.

After a user has carefully defined the criteria to be used for archiving, he should write a letter to TRC requesting the archiving. TRC will remove the sources from the active CDS Masterfile and will place the sources on a tape file which can be used for retrievals or it can be merged with the Masterfile at a later date.

Archiving is beneficial because it reduces the cost of retrievals and it simplifies retrieval criteria needed to produce management reports.

Archiving must be done on a source by source basis; the archiving of only partial information, such as inspection actions for a source, cannot be done effectively since it is impossible to replace obsolete actions on the Masterfile in the same sequence as they existed prior to archiving. If the user feels that there are too many obsolete actions on the masterfile, he should delete those actions. Since each CDS Masterfile is copied to a permanent storage facility on a quarterly basis, users can safely delete obsolete actions without losing all record of the historic action since actions deleted from the current Masterfile can be retrieved off of the historic masterfile.

10.7 Formal Reporting

On a quarterly basis, each region must submit certain reports to the Program Reporting Division. Several of these reporting requirements can be met by using the procedure which makes CDS data available to the Formal Reporting System. The link between CDS and FRS uses the standard milestone report together with other computer programs to provide data for the Formal Reporting System.

At present, the specific output units/activity indicators linked from CDS to FRS are:

AIR OUTPUT 3

3AG	NSPS sources violating or believed to be violating procedural or emission requirements.
3A3	Number of sources in compliance with procedural or emission requirements for NSPS.

AIR OUTPUT 6

6AA	Number of sources in compliance with standards and scheduled progress.
6AB	Number of sources of unknown compliance status or in violation.
6AC	Number of enforcement actions.

AIR OUTPUT 12

12AA	Number of non-transitory NESHAPS sources in violation or of unknown status.
12A1	Number of non-transitory NESHAPS sources.

At a later date, other outputs may also be subject to the direct link between CDS and FRS.

During the third week following the end of each quarter, each region must submit the job control described in Figure 10-11. This computer job creates a data set containing all of the numbers for the Air Outputs described above.

In order to get a preview of what numbers will be sent from CDS to FRS, regional users are urged to submit this job at the end of each quarter. If changes are desired, input transactions can be prepared for the CDS Masterfile in time for the Formal Reporting. Each time the region runs the CDS/FRS link program, old data is replaced by the latest data from the CDS Masterfile. The Formal Reporting System only uses the most current data from the CDS/FRS link available on the 20th or 21st of the month following the end of the quarter.

Figure 10-12 shows a sample of the Milestone Report produced by the CDS/FRS processing.

TRC

AUTHOR	TRC	PROGRAM NAME	CDS/FORMAL REPORTING SYSTEM	TASK NUMBER	DATE	Page of	CARD NUMBER

```
//EPAiii    JOB (aaaa,Miii),'USER ID',ITME=1,PASSWORD=pppp
/*ROUTE  PRINT RMTrr
/*CNTL  CDS,EXC
//      EXEC CDSFRSnn
//
/*EOF
```

Where:

iii	is the user's initials
aaaa	is the user's account number
rr	is the user's remote; see figure 10-6 for a list of Remote numbers
nn	is a two digit region code or state code. Valid values are 01 through 10; SC,TN,NB,etc
pppp	is the user's password

FIGURE 10-11
JOB CONTROL FOR CDS/ FRS LINK

MILESTONE REPORT

04/09/79

COMPLIANCE DATA SYSTEM
REGION 06 CDB MILESTONE DATA SENT TO FRS

	FRS AIR PROGRAM REQ	REGION 06	ARKANSAS	LOUISIANA	N MEXICO	OKLAHOMA	TEXAS
3AG	NSPS VIOL PROC/EMIS REQ	170	7	17	10	10	126
3A3	NSPS SOURCES IN COMPL	255	3	36	12	22	182
6AA	STP COMPL WITH STANDRDS	2787	130	438	85	275	1859
6AB	STP UNKN COMP/IN VIOL	220	32	73	46	13	56
6AC	ENFORCE ACT ACH FISC YR	10	0	8	0	1	1
12AA	NESHAPS N/TRANS UN/STAT	35	2	18	0	3	12
12A1	NESHAPS NON-TRANS SRCES	197	3	58	4	11	121
	GRAND TOTALS	3674	177	648	157	335	2357

FIGURE 10-12

11.0 STATE ENFORCEMENT SYSTEMS

Part of DSSE's efforts have been in the area of providing states with computerized management information systems which will enable the states to track all enforcement activities and also meet regional reporting requirements for sources subject to SIP regulations as well as other portions of the Clean Air Act which have been delegated to the states.

The following sections describe, in general terms, what options states have available to them for enforcement systems.

11.1 State Enforcement System Options

As part of the grant conditions from the regional enforcement division, each state must provide a great deal of information to the region for the following areas:

- Which facilities are affected by SIP regulations. Which facilities have permits to construct and permits to operate.
- Which facilities impact non-attainment standards, New Source Review, Prevention of Significant Deterioration, NESHAPS, NSPS, etc.
- Which compliance category each source is in as a result of the state's most recent inspection.
- What legal steps have been made to bring a non-compliant source into compliance. What enforcement schedule must each non-compliant source follow.

Once the state has gathered this information through its team of inspectors, this information can be organized by one of the following methods:

1. Maintain a manual system. This is very cost effective for states with relatively small numbers of facilities and with small numbers of violators.
2. Develop an in-house computer system. Only the largest states with unique processing requirements can affort to spend anywhere from $50,000 to $150,000 to develop a smoothly working data system.
3. Use an EPA-developed state computer system such as a state version of the Compliance Data System (CDS). This option is ideal for states which want to track all of the major and minor facilities within their jurisdiction.
4. Use the national Compliance Data System (CDS) to enter data directly on the region's data base and to produce management reports from the region's data base. This option is particularly cost effective if the state has a computer terminal connected to EPA's Washington Computer Center, and if the state needs to track mainly major facilities.

Revised 12/79

The option a state chooses depends on a wide variety of factors such as:

- The level of detail required by internal management needs as well as external reporting requirements.
- The manpower and the skills needed to implement the option. No state should consider a computerized management system unless they have strong support from the state's data processing group.
- The availability of various types of computer hardware. Often states which already process STORET data and other EPA systems are familiar with the hardware constraints which must be resolved before a new computer system can work effectively.
- The rate at which information needs change from year to year. With every new EPA fiscal year, a new set of reporting requirements are negotiated between the region and the state. Often a state data center cannot keep up with a new set of computer programs to meet these requirements.

The Division of Stationary Source Enforcement and the regional enforcement divisons are committed to helping states meet the challenge of attaining compliance for all stationary sources of air pollution. DSSE will support feasibility studies and state enforcement system installations in order to further the efforts of the states to monitor the compliance status and enforcement activity of any state enforcement agency.

Revised 12/79

11.2 State Enforcement System Usage

The following ten tables describe the types of enforcement systems used in each of the fifty (50) states. This listing is on a region by region basis. The tallies of major sources are estimates as of December 1979 and need to be upgraded on a continuing basis.

REGION I - BOSTON

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
CONNECTICUT	241	8	STATE			STATE SYSTEM	AQDHS INSTALLED
MAINE	155	18					AQDHS INSTALLED
MASSACHUSETTS	587	6	EMS	1974	$45,000	EIS BEING INSTALLED	AQDHS BEING INSTALLED
NEW HAMPSHIRE	105	3					AQDHS INSTALLED
RHODE ISLAND	67	4					AQDHS INSTALLED
VERMONT	63	4					
TOTALS	1211	43					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-1

REGION I's ENFORCEMENT SYSTEMS

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
NEW JERSEY	1104	63				STATE	
NEW YORK	1157	87	CDS INSTALLED IN NEW YORK CITY	1977	$67,000	STATE	AQDHS INSTALLED IN NEW YORK CITY
PUERTO RICO	179	20				EIS INSTALLED	AQDHS INSTALLED
VIRGIN ISLANDS	13	0					
TOTALS	2473	170					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-2

REGION II's ENFORCEMENT SYSTEMS

REGION III - PHILADELPHIA

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
DELAWARE	44	2				EIS INSTALLED	
DISTRICT OF COLUMBIA	36	10					
MARYLAND	215	35	STATE CDS	1977	$47,000		
PENNSYLVANIA	1523	105	STATE			STATE	
VIRGINIA	573	22				EIS INSTALLED	AQDHS INSTALLED
WEST VIRIGINIA	248	43					
TOTALS	2633	209					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-3

REGION III's ENFORCEMENT SYSTEMS

REGION IV - ATLANTA

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
ALABAMA	516	5	EMS	1973			AQDHS INSTALLED
FLORIDA	484	24					AQDHS INSTALLED
GEORGIA	333	18	STATE CDS	1978	$32,000	EIS INSTALLED	AQDHS INSTALLED
KENTUCKY	913	32				EIS INSTALLED	
MISSISSIPPI	185	10	EMS		$26,000	EIS INSTALLED	
NORTH CAROLINA	955	42	STATE			EIS INSTALLED	
SOUTH CAROLINA	303	6	NATIONAL CDS		$ 2,000	EIS INSTALLED	AQDHS INSTALLED
TENNESSEE	742	82	EMS AND NATIONAL CDS	EMS/1974 CDS/1978	$30,000 $ 1,000	EIS INSTALLED	AQDHS INSTALLED
TOTALS	4551	219					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-4

REGION IV's ENFORCEMENT SYSTEMS

REGION - CHICAGO

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
ILLINOIS	1757	52					AQDHS INSTALLED
INDIANA	774	51	STATE			STATE	AQDHS INSTALLED
MICHIGAN	417	14	STATE				
MINNESOTA	401	31	STATE CDS	1979	$35,000	EIS INSTALLED	
OHIO	1057	230	NATIONAL CDS	1979	$ 2,000		AQDHS INSTALLED
WISCONSIN	276	5					
TOTALS	4682	383					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-5

REGION V's ENFORCEMENT SYSTEMS

REGION VI - DALLAS

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
ARKANSAS	156	31	STATE CDS	1979	$35,000		
LOUISIANA	514	16	STATE CDS	1977	$32,000		
NEW MEXICO	129	42					AQDHS INSTALLED
OKLAHOMA	268	9					AQDHS INSTALLED
TEXAS	1452	38	EMS STATE	1974 1977	$45,000		
TOTALS	2919	136					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-6

REGION VI's ENFORCEMENT SYSTEMS

REGION VII - KANSAS CITY

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
IOWA	445	29	EMS	1974	$28,000		AQDHS INSTALLED
KANSAS	797	2					
MISSOURI	307	19	STATE CDS	1980	$35,000	EIS INSTALLED	AQDHS INSTALLED
NEBRASKA	383	23	NATIONAL CDS	1978	$ 2,000		
TOTALS	1962	73					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-7

REGION VII's ENFORCEMENT SYSTEMS

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
COLORADO	251	6	EMS	1974	$26,000	EIS INSTALLED	AQDHS INSTALLED
MONTANA	65	2				EIS INSTALLED	
NORTH DAKOTA	61	6				EIS INSTALLED	AQDHS INSTALLED
SOUTH DAKOTA	83	1					
UTAH	102	11					AQDHS BEING INSTALLED
WYOMING	111	2					AQDHS INSTALLED
TOTALS	673	28					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-8

REGION VIII's ENFORCEMENT SYSTEMS

REGION IX - SAN FRANCISCO

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
ARIZONA	369	8				EIS INSTALLED	
CALIFORNIA	1609	26	NATIONAL CDS	1977		EIS INSTALLED	AQDHS INSTALLED
HAWAII	121	8					
NEVADA	98	3	NATIONAL CDS	1978	$2,000		AQDHS INSTALLED
GUAM	11	1					
TOTALS	2208	46					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-9

REGION IX's ENFORCEMENT SYSTEMS

REGION X - SEATTLE

STATE	MAJOR SIP SOURCES	MAJORS OUT OF COMPLIANCE OR UNKNOWN	ENFORCEMENT SYSTEM TYPE*	YEAR SYSTEM INSTALLED	INSTALLATION COST TO EPA	OTHER SYSTEMS	
						EMISSION INVENTORY	AIR QUALITY
ALASKA	42	2				EIS INSTALLED	AQDHS BEING INSTALLED
IDAHO	119	3					
OREGON	301	6	STATE CDS	1978	$32,000		
WASHINGTON	278	23					
TOTALS	740	34					

* EMS = EPA's Enforcement Management System

STATE = System Designed and Implemented by State

CDS STATE = Modified version of EPA's CDS System Running at State Installation

NATIONAL CDS = Direct User of National CDS at EPA's Washington Computer Center

TABLE 11-10

REGION X's ENFORCEMENT SYSTEMS

11.3 Summary of State Enforcement System Options

States have the following four options for tracking all the information needed to manage a successful enforcement program:

1. Manual system
2. In-house state system
3. EPA developed state CDS system
4. National CDS

The first option is ideal for states which have a very small number of sources to be tracked, and none of these sources are on a complex enforcement schedule. A separate automated system is difficult to justify for states with fewer than 200 major sources of air pollution.

The second option is best suited for large states such as California or Texas, which have very special in-house processing requirements and which have strong EDP groups available for the development and maintenance of a complex computer system. This option is also recommended for states which need to develop a comprehensive multi-media data base which tracks emission inventory data, compliance data, and enforcement data for sources of air, water, solid waste, and other hazardous pollutants. The cost for such a system will vary from $50,000 to $150,000, and will take anywhere from one to two years to develop.

The third option is recommended for states which have over 200 major sources of air pollution. These states can take advantage of the assistance provided by the EPA in developing and installing effective state enforcement systems. Although the EPA has a tradition of refusing to purchase computer hardware for states, they are willing to assist states in the installation and training of EPA-developed systems.

During the early and mid 1970's, nine states requested and received EPA assistance in the installation of the Enforcement Management System. Each of the Air Pollution Control divisions of these states had access to a large IBM, Univac, Control Data, or Honeywell computer. Each state had sufficient EDP and enforcement staff for supporting the system. The EPA spent an average of $32,000 for installing EMS in the following states:

- Alabama
- Colorado
- Georgia
- Iowa
- Massachusetts
- Mississippi
- North Carolina
- Tennessee
- Texas

Eight of the nine states are currently using EMS. Texas replaced EMS with its own system; Georgia and Tennessee have switched to the newer CDS system.

Since 1976 the EPA has been recommending a state CDS system or direct entry CDS for states needing an enforcement system. The state CDS system is a much more effective system than EMS for meeting current and anticipated information requirements of state enforcement agencies. Each state installation is a custom-designed version of the national system used by the Division of Stationary Source Enforcement and by each of the ten regional enforcement divisions.

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States which need to track a large number of minor sources, as well as all of their major sources, should consider a state CDS installation. Generally, it is necessary to have a state system for tracking over 200 major sources and over 400 minor sources of air pollution. Prerequisites for a state installation are the following:

- Availability of a suitable medium-sized or large-sized computer with a COBOL compiler. State CDS systems have been installed on IBM System 3, IBM 370, Honeywell, Univac, and Control Data equipment.
- Availability of programming and operational support from the state's EDP staff.
- A manpower commitment on the part of the enforcement division to keep the data in the system current and accurate.

The EPA will analyze and possibly underwrite the installation cost of a state CDS system; this has been averaging $35,000 for a six-month contract with an environmental consulting firm such as TRC. The states underwrite the operating costs of running the system. These costs vary from state to state depending on the number of facilities tracked and the number of management reports requested. For a state with 500 major and 500 minor sources, typical costs might include an annual budget of $2,000 for computer runs, $500 for data storage, and $750 for keypunching.

Currently, the following enforcement agencies are using or are getting the state CDS system:

- Arkansas
- Georgia
- Louisiana
- Maryland
- New York City
- Oregon
- Missouri
- Nebraska
- Kansas

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Each of these states has examined the features and costs associated with a state CDS installation and has determined that this option is the most cost-effective method of meeting their enforcement information needs.

The fourth option of becoming a direct user of the national CDS system is the best data processing solution for states which meet the following criteria:

- Have access to the EPA's Washington Computer Center via a computer terminal.
- Have no need to track large numbers of minor sources.
- Have no need for special processing requirements not already available in CDS.

Since the EPA underwrites the cost of operating and maintaining CDS, states which use the national system have very low costs associated with using the system. Generally, an annual budget of $2,000 for computer runs and $750 for keypunching is very adequate. These states automatically benefit from all programming improvements and new features installed for regional users. The EPA benefits from allowing states to use the national system by having accurate, up-to-date data in CDS for that state and by having very low costs associated with state participation in CDS. Normally a $2,000 training budget is adequate for bringing a state on-line.

The following five states have made a commitment to be direct CDS users:

- Nebraska
- California
- Ohio
- South Carolina
- Tennessee

Revised 12/79

Each of these states has found that they can meet EPA reporting requirements and all internal management reporting requirements at a very low cost by being direct users of the national CDS system.

12.0 DOCUMENTATION UPDATES

Major changes to the CDS System are issued periodically. The EPA's data center publication, SIGNON, usually contains an article describing current enhancements. DSSE issues additional information as appropriate concerning CDS. Please file copies of CDS articles from SIGNON and DSSE material in this chapter of the CDS User Manual.

If you do not already receive the SIGNON magazine, please call the WCC User Support Team at 1-800-424-9067 to have your name placed on the mailing list. Be sure to fill out the Revisions Form at the front of this manual in order to receive DSSE's documentation updates.

13.0 HEADQUARTERS GUIDANCE

All national policy guidance material will be released later in a separate packaged section as soon as it is finished by the Division of Stationary Source Enforcement.

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APPENDIX A

CDS

DATA ELEMENT DICTIONARY

DATA ELEMENT DICTIONARY

Page		Abbr.	Data Type
A-1	Air Program Code	APCD	S
A-2	Air Program Description	APDS	S
A-3	Air Program Status	APST	S
A-4	Air Program Status Description	APSD	S
A-5	Air Quality Control Region	AQCR	S
A-6	Capacity - Facility	FCAP	S
A-7	City Code	CYCD	S
A-8	City Name	CYNM	S
A-9	County Code	CNTY	S
A-10	County Name	CTNM	S
A-11	Data Last Updated	UPDA	S
A-12	Federal Facility	FEDF	S
A-13	NEDS Source Cross-Reference	NEXS	S
A-14	Pollutant Air Qual. Maint. Ar.	PAQM	S
A-15	Pollutant Air Quality Cont. Reg.	PAQC	S
A-16	Pollutant - Basic Summary	BPLT	S
A-17	Pollutant Code - Source	PLLT	S
A-18	Pollutant Compliance Status	PCMS	S
A-19	Pollutant Emission Category	PECT	S
A-20	Pollutant Loading	LOAD	S
A-21	Pollutant Delete Flag		S
A-22	Region	REGN	S
A-24	Regional Data Element 1	RDE1	S
A-25	Regional Data Element 2	RDE2	S
A-26	Regional Data Element 3	RDE3	S
A-27	Regional Data Element 4	RDE4	S
A-28	Regional Data Element 5	RDE5	S
A-29	Regional Data Element 6	RDE6	S
A-30	Regional Data Element 9	RDE9	S
A-31	Regional Data Element 10	RD1Ø	S
A-32	Regional Data Element 11	RD11	S
A-33	Regional Data Element 12	RD12	S
A-34	SIC Code	SICC	S
A-35	SIC Code Description	SICD	S
A-36	Source Compliance Status	SCMS	S
A-37	Source Compliance Stat. Desc.	SCSD	S
A-38	Source Comp. Status - 8 Qtrs.	SCSØ	S
A-39	Source Emission Category	SECT	S
A-40	Source Emission Description	SECD	S
A-41	Source Name	SNME	S
A-42	Source Number	SRCE	S
A-43	Staff Name - Source	STFS	S
A-44	Staff Personnel Code - Source	PERS	S
A-45	Priority Code	PRIO	S
A-46	State	STTE	S
A-47	State Abbreviation	STAB	S

DATA ELEMENT DICTIONARY

(continued)

Page	Data Element	Abbr.	Data Type
A-48	State Registration Number	STRG	S
A-49	Street Address	STRT	S
A-50	Zip Code	ZIPC	S
A-51	Capacity Code	CAPC	P
A-52	Compliance Status Code	CMST	P
A-53	Compliance Status Description	CMDS	P
A-54	Emission Category	ECAT	P
A-55	Emission Category Description	ECDS	P
A-56	Emission Point Number	PTNO	P
A-57	Multiple Cross-Reference	MULT	P
A-58	Old Compliance Status - 8 Qtrs.	OCSØ	P
A-59	Pollutant Code - Point	PLUT	P
A-60	Procedural Compliance	CMS2	P
A-61	Process Description	PRDS	P
A-62	Regional Data Element 7	RDE7	P
A-63	SCC Code	SCC3	P
		SCC6	P
		SCC8	P
A-64	SIP Code	SIPC	P
A-65	SIP Code Description	SIDS	P
A-66	State Regulation	SREG	P
A-67	Action Description	ADES	A
A-68	Action Number	ANUM	A
A-69	Action Type	ATPE	A
A-70	Date Achieved	DTAC	A
A-71	Date Achieved Year/Month	DAYM	A
A-72	Date Scheduled	DTSC	A
A-73	Date Scheduled Year/Month	DSYM	A
A-74	Penalty Amount	PLTY	A
A-75	Regional Data Element 8	RDE8	A
A-76	Results Code	STAC	A
A-77	Results Description	RSTD	A
A-78	Staff Name - Action	STFA	A
A-79	Staff Personnel Code - Action	PERA	A
A-80	Staff Title	TITL	A
A-81	Card Code		
A-82	Comments		
A-83	Line Number		
A-84	Record Type		
A-85	Update Code		

Definition: AIR PROGRAM CODE is a source indicator used to separate NSPS sources, NESHAPS sources, sources subject to federal EPA jurisdiction, and sources subject to state jurisdiction. It can also be used to denote a facility which has been closed down.

Retrieval Abbreviation	APCD	*Valid Values:* Ø = SIP Source 1 = SIP Source under federal jurisdiction 4 = ESECA 5 = other 6 = PSD 7 = NSR 8 = NESHAPS 9 = NSPS c = closed/inactive
Card Type	2	
Card Columns	65	
Data Element Length	1	
Data Type	ALPHANUMERIC	
Justified		*Masterfile Record Type* 2Ø
Required on New Entry	NO	*Masterfile Position* 115
Nationally Controlled	YES	*Masterfile Length* 1

Edit Error Messages:

*INVALID AIR PROGRAM CODE

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

For a SIP source, the State has primary jurisdiction for enforcment activity.

For an Active facility, the Federal EPA has primary jurisdiction for enforcement of this SIP facility.

If a given source is subject to several air program regulations, multiple source numbers should be assigned, one for each program.

To help tie together a facility subject to several programs, use the NEDS source number for the last four positions of each source number and the air program code as the first position of the source number.

If a facility has been closed down, Active/Passive Code "C" must be used to indicate that the facility is closed. This code is to be used only after the end of the Federal fiscal year in which the facility was closed.

Definition: AIR PROGRAM CODE DESCRIPTION is the English language description of the Air Program Code. It is generated by the computer for Quick Look Reports based on the value of APCD.

Retrieval Abbreviation	APDS	*Valid Values:*	
Card Type	N/A		
Card Columns	N/A		
Data Element Length	20		
Data Type	ALPHABETIC		
Justified	LEFT	*Masterfile Record Type*	N/A
Required on New Entry	NO	*Masterfile Position*	N/A
Nationally Controlled	YES	*Masterfile Length*	20
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

APCD	AIR PROGRAM DESCRIPTION
blank	SIP Source
C	Closed/Inactive
Ø	SIP Source
1	SIP Active
2	APCD 2
3	APCD 3
4	ESECA
5	Other
6	PSD
7	NSR
8	NESHAPS
9	NSPS

Card Type
Data Element Sheet

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Definition: AIR PROGRAM STATUS represents the status of a facility for a given air program. This field is mainly used for NSR, PSD, and NESHAPS sources.

Retrieval Abbreviation	APST	*Valid Values:*	
Card Type	2		
Card Columns	66		
Data Element Length	1		
Data Type	Alphanumeric		
Justified		*Masterfile Record Type*	20
Required on New Entry	No	*Masterfile Position*	180
Nationally Controlled	Yes	*Masterfile Length*	1

Edit Error Messages:

* Invalid Air Program Status

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

Valid Values:

blank - Operating

O - Operating

P - Planned (has applied for a construction permit)

C - Under Contruction

D - NESHAPS Demolition

R - NESHAPS Renovation

S - NESHAPS Spraying

Card Type 2
Data Element Sheet

Definition: AIR PROGRAM STATUS DESCRIPTION is the English language description of the Air Program Status, generated for Quick Look Reports.

Retrieval Abbreviation	APSD	*Valid Values:* System-generated from APST. See AIR PROGRAM STATUS for a list of air program status descriptions.	
Card Type	N/A		
Card Columns	N/A		
Data Element Length	10		
Required on New Entry?	N/A		
Confidential Data Element?	NO	*Master file Record Type*	N/A
Passed to National CDS?	NO	*Master File Position*	N/A
Nationally Controlled?	NO	*Master File Length*	N/A
Edit Error Messages:	N/A		
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Definition: AQCR is the Air Quality Control Region, a three digit numeric value.

Retrieval Abbreviation	AQCR	*Valid Values:* Must be valid for the state and the county codes used. Blank is also valid. Please contact the central DBC to add a new AQCR to the County Code/AQCR Table.	
Card Type	1		
Card Columns	2Ø-22		
Data Element Length	3		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	YES	*Masterfile Position*	21-23
Nationally Controlled	YES	*Masterfile Length*	3

Edit Error Messages:

* INCORRECT AQCR FOR COUNTY

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

The County Code/AQCR Table containing all valid AQCR's can be listed by following the directions in Chapter 10.

Definition: FACILITY CAPACITY indicates the total output capacity of the products produced at a facility. This might be expressed in several types of units such as barrels, kilowatt-hours, etc.

Retrieval Abbreviation	FCAP	*Valid Values:*	
Card Type	30		
Card Columns	58-64		
Data Element Length	7		
Data Type	NUMERIC		
Justified	RIGHT	*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	42-48
Nationally Controlled	NO	*Masterfile Length*	7
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

a. For general processes, use tons per year of output product. If a facility produces over 10 million tons per year, code all 9's in this field.

b. For refineries, use barrels of petroleum processed per calendar day.

c. For petroleum storage facilities, use thousands of barrels total capacity.

d. For incinerators (sewage sludge or municipal refuse), use tons per day/incineration rate.

e. For electric utilities, use total megawatt design capacity.

f. For coal-fired boiler sources, use Million British Thermal Units per Hour (MMBTUH) heat input capacity.

Definition: CITY CODE is a four digit numeric city identifier. The City Codes can be found in the SAROAD manual.

Retrieval Abbreviation	CYCD	*Valid Values:* If the field is being used, it should be a four digit numeric code found in the SAROAD manual.	
Card Type	1		
Card Columns	23-26		
Data Element Length	4		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	24-27
Nationally Controlled	NO	*Masterfile Length*	4

Edit Error Messages:

* CITY CODE SHOULD BE NUMERIC

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

City codes are available from the Storage and Retrieval of Aerometric Data (SAROAD), Volume V.

SAROAD Manuals are available on request form the EPA's Office of Air Quality Planning and Standards.

Definition: CITY NAME gives the location of the facility.

Retrieval Abbreviation	CYNM	*Valid Values:* All alphanumeric characters	
Card Type	2		
Card Columns	2Ø-34		
Data Element Length	15		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	68-82
Nationally Controlled	NO	*Masterfile Length*	15
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

If abbreviations are used, they should be used consistently for all input to facilitate sorting and retrievals.

Definition: COUNTY CODE is a four digit numeric county identifier. The County Codes are derived from the SAROAD manual.

Retrieval Abbreviation	CNTY	*Valid Values:* All county codes must be present on the CDS County Code/AQCR Table.	
Card Type	1-8		
Card Columns	5-8		
Data Element Length	4		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	20-47
Required on New Entry	YES	*Masterfile Position*	5-8
Nationally Controlled	YES	*Masterfile Length*	4

Edit Error Messages:

*** INCORRECT COUNTY CODE FOR STATE

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

Please contact the National DBC to update the county code file. County code must be present on all transactions; it cannot be changed or blanked out on the data base.

Definition: COUNTY NAME is generated by the Edit from the COUNTY CODE.

Retrieval Abbreviation	CTNM	*Valid Values:* See Chapter 10 for instructions for listing the county names valid for each region/state/county combination.	
Card Type			
Card Columns			
Data Element Length			
Data Type	ALPHABETIC		
Justified		*Masterfile Record Type*	2Ø
Required on New Entry		*Masterfile Position*	163-179
Nationally Controlled	YES	*Masterfile Length*	17
Edit Error Messages:			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

This field is generated; it cannot be coded. The national DBC maintains a table of COUNTY CODE/COUNTY NAME combinations.

Definition: DATE LAST UPDATED represents the most current date on which an input transaction was added or changed for any part of a facility on the masterfile.

Retrieval Abbreviation	UPDA	*Valid Values:*	
Card Type			
Card Columns			
Data Element Length			
Data Type	NUMERIC		
Justified		*Masterfile Record Type*	2Ø
Required on New Entry		*Masterfile Position*	134-139
Nationally Controlled		*Masterfile Length*	6
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

This date is in year, month, day format on the CDS Masterfile. It should be retrieved in month, day, year format on CDS RETRIEVAL REQUEST FORMS.

Definition: FEDERAL FACILITY CODE identifies facilities owned or operated by a governmental unit. Federal facilities such as army bases fall into a separate jurisdiction than private industry.

Retrieval Abbreviation	FEDF	*Valid Values:*	
Card Type	2		
Card Columns	64		
Data Element Length	1		
Data Type	NUMERIC		
Justified		*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	113
Nationally Controlled	YES	*Masterfile Length*	1

Edit Error Messages:

* INVALID FEDERAL FACILITY CODE

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

Valid Values:

1 - Source owned or operated by the federal government.

2 - Source owned or operated by the state.

3 - Source owned or operated by the county.

4 - Source owned or operated by the municipality.

5 - Source owned or operated by the district.

Blank/Ø - All other facilities not owned or operated by a federal, state, or local government.

Definition: NEDS CROSS REFERENCE is the NEDS facility identifier.

Retrieval Abbreviation	NEXS	*Valid Values:* All alphanumeric values.	
Card Type	2		
Card Columns	55-58		
Data Element Length	4		
Data Type	Alphanumeric		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	YES	*Masterfile Position*	1Ø5-1Ø8
Nationally Controlled	YES	*Masterfile Length*	4
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Whenever a new facility is being added as New, this field must be coded. If the NEDS number is not known, please consult the AEROS contact in your area to get a NEDS facility number. AEROS contacts are listed in Appendix B of this manual.

If the CDS Source Number has been coded properly, the last four positions of Source Number should correspond to the NEDS Cross Reference Number.

Definition: POLLUTANT AIR QUALITY MAINTENANCE INDICATOR indicates whether or not the pollutant impacts AQMA standards or not

Retrieval Abbreviation	PAQM	*Valid Values:*	
Card Type	3	Blank - NO Y - YES	
Card Columns	27; 39; 51		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	REPEATING
Nationally Controlled	YES	*Masterfile Length*	1
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

The default value is blank indicating 'NO'.

Definition: POLLUTANT AIR QUALITY CONTROL INDICATOR shows whether or not a source emits a criteria pollutant for which the AQCR is non-attainment.

Retrieval Abbreviation	PAQC	*Valid Values:*	
Card Type	3		
Card Columns	28; 40; 52		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	3
Required on New Entry	YES	*Masterfile Position*	REPEATING
Nationally Controlled	YES	*Masterfile Length*	1
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

blank - Attainment area for a given pollutant

A - Attainment area for a given pollutant

N - Non-Attainment for primary and secondary standards for a given pollutant

U - Unclassified

Consult the Federal Register for a complete listing of all attainment and non-attainment areas. This list is periodically updated in more recent Federal Registers.

Definition: BASIC POLLUTANT INFORMATION is designed to provide a single Quick Look print line data element showing data for the following Card 3 pollutants: Particulates, SO_2, HC, CO, NO_x.

Retrieval Abbreviation	BPLT	*Valid Values:*	
Card Type	N/A		
Card Columns	N/A		
Data Element Length	61		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	49-108
Nationally Controlled	YES	*Masterfile Length*	60
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Definition: POLLUTANT-ID is used to identify the pollutant for which pollutant compliance data is being entered.

Retrieval Abbreviation	PLLT	*Valid Values:*	
Card Type	3		
Card Columns	22-23; 34-35; 46-47		
Data Element Length	2		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	REPEATING
Nationally Controlled	YES	*Masterfile Length*	2
Edit Error Messages:			
* INVALID POLLUTANT CODE			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

This field must be filled in whenever repeating pollutant data is entered on a Card 3. No data for any of the repeating pollutant compliance data elements can be placed on the Masterfile without a valid Pollutant-ID.

VALID VALUES

AB - Asbestos
AS - Arsenic
BE - Beryllium
BZ - Benzene
CD - Cadmium
CE - Coke Oven Emissions
CO - Carbon Monoxide
FL - Fluorides
HC - Hydrocarbons
HG - Mercury
N2 - NO_2
OD - Odors
OT - Other
PB - Lead
PT - Particulate Matter
S2 - SO_2
TS - Total Reduced Sulfur
VE - Visible Emissions
VC - Vinyl Chloride
ZN - Zinc

Definition: POLLUTANT COMPLIANCE indicates the worst case source compliance for a given pollutant based on all of the emission points producing the indicated pollutants.

Retrieval Abbreviation	PCMS	*Valid Values:*	
Card Type	3		
Card Columns	25; 37; 49		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	REPEATING
Nationally Controlled	YES	*Masterfile Length*	1
Edit Error Messages:			
* INVALID COMPLIANCE STATUS			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

Valid Values:

Ø Unknown
1 In violation - no schedule
2 In compliance by source test
3 In compliance by inspection
4 In compliance by certification
5 In violation, meeting schedule
6 In violation, not meeting schedule
7 In violation, unknown with respect to schedule
8 No applicable state regulation
9 In compliance - closed down

Card Type 3
Data Element Sheet

Definition: POLLUTANT EMISSION CATEGORY represents the total potential uncontrolled emission of a given pollutant for a source.

Retrieval Abbreviation	PECT	*Valid Values:*	
Card Type	3		
Card Columns	26; 38; 50		
Data Element Length	1		
Data Type	NUMERIC		
Justified		*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	Repeating
Nationally Controlled	YES	*Masterfile Length*	1
Edit Error Messages: * INVALID EMISSION CATEGORY *** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

ECAT Value	ECDS Description
Ø	Unknown
1	Less than 1ØØ TPY
2	1ØØ to 1ØØØ TPY
3	Over 1ØØØ TPY
4	Less than 25 TPY

Card Type 3
Data Element Sheet

Definition: POLLUTANT LOADING indicates the loading factor for a given pollutant.

Retrieval Abbreviation	LOAD	*Valid Values:*	
Card Type	3		
Card Columns	29-33 41-45		
Data Element Length	53-57 5		
Data Type	NUMERIC		
Justified	RIGHT	*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	REPEATING
Nationally Controlled	NO	*Masterfile Length*	5
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

If this field is used, it should be a numeric value representing actual emissions in tons per year. No decimals or fractions should be used. Leading spaces are acceptable.

Definition: POLLUTANT DELETE FLAG is used to remove from the Masterfile all data related to a pollutant.

Retrieval Abbreviation	N/A	*Valid Values:* Blank or 'D'	
Card Type	3		
Card Columns	24; 36; 48		
Data Element Length	1		
Data Type	ALPHABETIC		
Justified		*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	REPEATING
Nationally Controlled	YES	*Masterfile Length*	1

Edit Error Messages:

* INVALID POLLUTANT DELETE FLAG

* NO DATA TO FOLLOW DELETE FLAG

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

A 'D' in the Delete Flag signifies that the data entered for a given pollutant should be completely eliminated. The pollutant compliance, emission category, air quality maintenance indicator, air quality control indicator, and loading are blanked out by the Update program when a 'D' is coded next to a pollutant or a Card 3.

Definition: REGION is a two position numeric region identifier.

Retrieval Abbreviation	REGN	*Valid Values:* Ø1 through 1Ø See attachment showing the region locations and the states associated with each region.	
Card Type	1-8		
Card Columns	1-2		
Data Element Length	2		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø-47
Required on New Entry	YES	*Masterfile Position*	1-2
Nationally Controlled	YES	*Masterfile Length*	2

Edit Error Messages:

*** INVALID REGION CODE

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

Region must be present on all input transactions. State code and region are cross-validated; the user may not use a state code which is not valid for his region.

Region cannot be changed or blanked out once it has been put on the data base. If it must be changed, the entire source must be deleted and re-entered with the correct region code.

Region Code. States have been assigned to regions as follows:

REGION	STATES
Ø1-Boston	Connecticut, Maine, Massachusetts New Hampshire, Rhode Island, Vermont.
Ø2-New York	New Jersey, New York, Puerto Rico, Virgin Islands.
Ø3-Philadelphia	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia.
Ø4-Atlanta	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee.
Ø5-Chicago	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin.
Ø6-Dallas	Arkansas, Louisiana, New Mexico, Oklahoma, Texas.
Ø7-Kansas City	Iowa, Kansas, Missouri, Nebraska.
Ø8-Denver	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming.
Ø9-San Francisco	Arizona, California, Hawaii, Nevada, Guam, American Samoa, Trust Territories.
1Ø-Seattle	Alaska, Idaho, Oregon, Washington.

Revised 12/79

Definition: User supplied.

Retrieval Abbreviation	RDE1	*Valid Values:* All alphanumeric characters.	
Card Type	1		
Card Columns	67		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	14Ø
Nationally Controlled	NO	*Masterfile Length*	1
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Typical usages of this field include identifiers for:

Region I	Attainment/Non-Attainment, Archiving
Region II	State delegation for NSPS, NESHAPS
Region III	Attainment/Non-Attainment
Region IV	MSEE Priority Sources
Region V	
Region VI	
Region VII	Attainment/Non-Attainment
Region VIII	Attainment/Asphalt Plants
Region IX	
Region X	Major Sources

Definition: User supplied.

Retrieval Abbreviation	RDE2	*Valid Values:* All alphanumeric characters.	
Card Type	1		
Card Columns	68		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	20
Required on New Entry	NO	*Masterfile Position*	141
Nationally Controlled	NO	*Masterfile Length*	1
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Typical usages of this field include identifiers for:

Region I	Transitory/Non-Transitory
Region II	State Regional Offices
Region III	State/Local Offices
Region IV	State/Local Offices
Region V	SO_2 Priority Status
Region VI	
Region VII	Not subject to PSD but under review
Region VIII	Vapor Recovery
Region IX	
Region X	Indian Reservations

Definition: User supplied.

Retrieval Abbreviation	RDE3	*Valid Values:*	
Card Type	1		
Card Columns	69		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	20
Required on New Entry	NO	*Masterfile Position*	142
Nationally Controlled	NO	*Masterfile Length*	1
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Typical usages of this field include identifiers for:

Region I	Sources to be Archived
Region II	PSD Status
Region III	MSEE Identifier
Region IV	Major SIP Sources
Region V	
Region VI	
Region VII	Continuous Monitoring
Region VIII	Subject to State Audit
Region IX	Mobile Sources
Region X	

Definition: User supplied.

Retrieval Abbreviation	RDE4	*Valid Values:* All alphanumeric characters	
Card Type	1		
Card Columns	7Ø-74		
Data Element Length	5		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	143-147
Nationally Controlled	NO	*Masterfile Length*	5
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

If there is a need to have a second SIC Code for a facility, this field could be used since it appears next to the SIC Code on the Source Data Report. If this data element is used for the SIC Code, only the first four positions may be used; columns 7Ø-73 must be numeric and column 74 must be blank.

Other typical usages of this field include identifiers for:

Region II	Enforcement Docket Number
Region III	Major Bulk Terminal
Region IV	Additional Staff Codes
Region VII	Nebraska Case Numbers
Region VIII	Continuous Monitoring
Region IX	VOC Numbers

Definition: User supplied.

Retrieval Abbreviation	RDE5	*Valid Values:* All alphanumeric characters.	
Card Type	1		
Card Columns	75-79		
Data Element Length	5		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	148-152
Nationally Controlled	NO	*Masterfile Length*	5
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Typical usages of this field include identifiers for:

Region II	Multiple Docket Numbers, Federal facility types
Region IX	State Cross Reference Numbers
Region X	Tertiary SIC Codes, Federal facility types.

Definition: User supplied.

Retrieval Abbreviation	RDE6	*Valid Values:* All alphanumeric values.	
Card Type	2		
Card Columns	67-76		
Data Element Length	1Ø		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	153-162
Nationally Controlled	NO	*Masterfile Length*	1Ø
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Typical usages of this field include identifiers for:

Region V	Additional Pollutants
Region VI	PSD Permit Numbers
Region VII	ESECA OFU Numbers
Region IX	Stage II Non-Compliance
Region X	GSA Federal Facility Number

Definition: USER SUPPLIED

Retrieval Abbreviation	RDE9	*Valid Values:*	
Card Type	3		
Card Columns	65-71		
Data Element Length	7		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	23-29
Nationally Controlled	NO	*Masterfile Length*	7
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Typical usages of this field include identifiers for:

Region II	NPDES Permit Numbers
Region III	PSD Permit Numbers

Definition: USER SUPPLIED

Retrieval Abbreviation	RD10	*Valid Values:*	
Card Type	3		
Card Columns	72-73		
Data Element Length	2		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	30-31
Nationally Controlled	NO	*Masterfile Length*	2
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Definition: User supplied

Retrieval Abbreviation	RD11	*Valid Values:*	
Card Type	3		
Card Columns	74-75		
Data Element Length	2		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	30
Required on New Entry	NO	*Masterfile Position*	32-33
Nationally Controlled	NO	*Masterfile Length*	2
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Definition: User supplied

Retrieval Abbreviation	RD12	*Valid Values:*
Card Type	3	
Card Columns	76	
Data Element Length	1	
Data Type	ALPHANUMERIC	
Justified		*Masterfile Record Type*
Required on New Entry	NO	*Masterfile Position*
Nationally Controlled	NO	*Masterfile Length*
Edit Error Messages:		
**** = Fatal Error*		** = Warning Error*

Coding Considerations:

Region V uses this field to indicate Major Source Enforcement Effort (MSEE) case delegation.

Definition: SIC is the Standard Industrial Class Code. It refers to the primary product produced or service performed by the facility.

Retrieval Abbreviation	SICC	*Valid Values:*	
Card Type	2	All numerics.	
Card Columns	59- 62		
Data Element Length	4		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	YES	*Masterfile Position*	1Ø9-112
Nationally Controlled	YES	*Masterfile Length*	4
Edit Error Messages:			
* SIC SHOULD BE NUMERIC			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

Since many retrievals are based on industry categories, it is important to code this field on a new card code 2. If a secondary SIC code is needed, Regional Data Element 4 may be used. SIC codes may be obtained from manufacturing directories or the most recent SIC directory published by:

Government Printing Office
Superintendant of Documents
Washington, D.C. 20402

Price $8.80
Stock Number 4101-0066

Definition:

The SIC DESCRIPTION is a 30 character definition of each valid SIC Code. It can be printed on a Quick Look or a Milestone for each source with a valid SIC Code.

Retrieval Abbreviation	SICD	*Valid Values:*
Card Type		
Card Columns		
Data Element Length	30	
Data Type	ALPHABETIC	
Justified		*Master File Record Type*
Required on New Entry		*Master File Position*
Nationally Controlled	YES	*Master File Length*
Edit Error Messages:		
*** = *FATAL Error*		* = *WARNING Error*

Coding Considerations:

If no Process Description is coded on a new Emission Point ØØØ record and if the source has a valid SIC Code, the Update Program will place the SIC Decription in the Process Description field on the Point ØØØ.

Definition: SOURCE COMPLIANCE STATUS gives the Regional Offices an indication of whether or not a source is in compliance, not in compliance, or whether its compliance status is unknown.

Retrieval Abbreviation	SCMS	*Valid Values:* Ø through 9	
Card Type			
Card Columns			
Data Element Length	1		
Data Type	NUMERIC		
Justified		*Masterfile Record Type*	30
Required on New Entry		*Masterfile Position*	21
Nationally Controlled	YES	*Masterfile Length*	1

Edit Error Messages:

*** INVALID COMPLIANCE STATUS

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

COMPLIANCE STATUS CODES:

Ø Unknown
1 In violation - no schedule
2 In compliance by source test
3 In compliance by inspection
4 In compliance by certification
5 In violation, meeting schedule
6 In violation, no meeting schedule
7 In violation, unknown with respect to schedule
8 No applicable state regulation
9 In compliance - closed down

(2, 3, 4: With Regulation)

The Source Compliance Status should reflect the worst case compliance of any process within the source. The Compliance Status on all other points should reflect the worst case compliance of that particular point.

Definition: SOURCE COMPLIANCE STATUS DESCRIPTION is an English language description of Compliance Status (SCMS). It is a computer generated field which is determined by SCMS. The description is controlled by the national DBC. It is not present on any master file record. A change to SCMS will result in a change to the description.

Retrieval Abbreviation	SCSD	*Valid Values:* See Below
Card Type	--	
Card Columns	--	
Data Element Length	20	
Data Type	Alphanumeric	
Justified	Left	*Masterfile Record Type*
Required on New Entry	No	*Masterfile Position*
Nationally Controlled	Yes	*Masterfile Length*
Edit Error Messages:		
**** = Fatal Error*		** = Warning Error*

Coding Considerations:

SCMS Value	SCSDdescription
Ø	UNKNOWN COMPL STATUS
1	IN VIOL-NO SCHEDULE
2	IN COMPL-SOURCE TEST
3	IN COMPL-INSPECTION
4	IN COMP-CERTIFICATN
5	IN VIOL-MEETING SCHD
6	IN VIOL-NOT MTG SCHD
7	IN VIOL-UNK WRT SCHD
8	NO APPLIC STATE REG
9	IN COMPL-SHUT DOWN

NOTE: If SCMS is not any of the above values, "Unknown Compliance Status" will appear as the description.

Definition: SOURCE COMPLIANCE STATUS represents a historic record of previous quarterly compliance statuses for the past eight quarters. It is generated on a quarterly basis by the Update Program based on information found in the SCMS field.

Retrieval Abbreviation	SCSØ	*Valid Values:*	
Card Type	N/A		
Card Columns	N/A		
Data Element Length	8		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	3Ø
Required on New Entry	N/A	*Masterfile Position*	49-56
Nationally Controlled	YES	*Masterfile Length*	8
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Users cannot input this value. The entire field is also subdivided into the following eight retrievable data elements:

Name	Retrieval Abbreviation
Source Comp Status - 1st Quarter	SCS1
2nd	SCS2
3rd	SCS3
4th	SCS4
5th	SCS5
6th	SCS6
7th	SCS7
8th	SCS8

On October 1976, the Compliance Status found on each emission point record was placed in SCS1. During each subsequent quarter, the current compliance status is stored in SCS1, and all previous quarterly compliance statuses are moved into the next higher SCS field. After eight quarters, the oldest compliance status will be dropped to make room for the next quarterly historic compliance status.

With these eight historic compliance status fields, users can compare current compliance status with previous compliance status sent to the Formal Program Reporting System.

Card Type
Data Element Sheet

Revised 1/80

Definition: SOURCE EMISSION CATEGORY provides the Regional Offices with a method of ranking or grouping sources by broad emission level categories to assist in the evaluation of state enforcement progress.

Retrieval Abbreviation	SECT	*Valid Values:*	
Card Type		Ø = unknown 1 = Less than 1ØØ TPY potential 2 = 1ØØ-1ØØØ TPY potential 3 = over 1ØØØ TPY potential 4 = Less than 25 TPY potential	
Card Columns			
Data Element Length	1		
Data Type	NUMERIC		
Justified		*Masterfile Record Type*	3Ø
Required on New Entry	YES	*Masterfile Position*	21
Nationally Controlled	YES	*Masterfile Length*	1

Edit Error Messages:

* INVALID EMISSION CATEGORY

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

The Source Emission Category must reflect the potential emission of the entire source according to the Regional Air Program Guidance. The SECT code should be filled out after consulting the NEDS emission inventory output and then determining potential emissions for the entire source.

Definition: SOURCE EMISSION CATEGORY DESCRIPTION is the English lanaguage description associated with Emission Category (SECT). It is generated by the computer based on the value of ECAT. The description is controlled by the national DBC. It does not reside on the master file. SECD will automatically change when SECT is updated.

Retrieval Abbreviation	SECD	*Valid Values:*
Card Type		
Card Columns		
Data Element Length	2Ø	
Data Type	ALPHANUMERIC	
Justified	LEFT	*Master File Record Type*
Required on New Entry	NO	*Master File Position*
Nationally Controlled	YES	*Master File Length*
Edit Error Messages:		
*** = *FATAL Error*		* = *WARNING Error*

Coding Considerations:

SECT Value	SECD Description
Ø	Unknown
1	Less then 1ØØ TPY
2	1ØØ to 1ØØØ TPY
3	Over 1ØØØ TPY
4	Less than 25 TPY

Note: If SECD is not one of the above values, "Unknown" will appear as the description.

Definition: SOURCE NAME is a 2Ø position alphanumeric facility identifier.

Retrieval Abbreviation	SNME	*Valid Values:* All alphanumeric characters.	
Card Type	1		
Card Columns	27-46		
Data Element Length	2Ø		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	YES	*Masterfile Position*	28-47
Nationally Controlled	NO	*Masterfile Length*	2Ø

Edit Error Messages:

*** SOURCE NAME REQUIRED ON NEW ENTRY

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

The first position of facility name must be filled in on a new transaction to allow for source name sorting on the retrieval. Use consistent abbreviations for facilities with the same company name, i.e.,

US Steel - Pittsburgh
US Steel - Dayton
US Steel - Mansfield

Abbreviate only when necessary and do not use words like "the" or "city of" as the first word in a facility name. If the name of the facility is different from that of the parent company, enter the name of the facility as the source name and enter the name of the parent company as a source comment (card code 4). Most complete source names, addresses, and SIC codes can be found in manufacturing directories published by state commerce departments. It would be wise for each region to develop a list of standard facility name abbreviations to be used consistently throughout the region. See the attached example developed by Region V.

** No punctuation unless specified on sheet

Region V Coding Convention for Michigan

Full Name	Abbreviation
Asphalt	Asph
Aluminum	Al
Authority	Auth
Air Force Base	AFB
Board of Public Light & Power	Detroit--Detroit BD Publ L&P
Center	Ctr
Commission	Comm
Cannon	Can
Commonwealth Edison	Com Ed
Concrete	Con
Cement	Cem
Consumers Power	Do not Abbrev.
Chemical	Chem (abbreviate only if necessary)
County	Co
Chicago & Northwestern Railroad	Chicago & NW RR
Construction	Const
Company or Inc. at end of name	Eliminate, do not use
Central Illinois Light Company	CILCO
City of Detroit	Detroit City--use name first followed by city, if public or municipal company
Central Wayne	Wayne C
Department	Dept
Detroit Edison--River Rouge Plant	Name: Detroit Edison; Under Address put plant name: River Rouge Plt
Division	Div
Equipment	Equip

Revised 12/79

Full Name	Abbreviation	
Ford Motor Company-Assembly Div	Name	Under Add Put Plant Name
	Ford Motor	Assembly Div
Foundry (i.e. General Foundry)	Spell out--do not abbreviate	
General Motors Corporation -Fisher Body	Name	Under St. Add Put Plant Name
	GMC	Fisher Body
Generating	Genr	
Goodyear Tire & Rubber	Goodyear Tire&Rubber	No blanks between "&"
Great Lakes Steel-ZUG Island	Name	Under St. Add Put Plant Name
	Great Lakes Steel	Zug Island
Groveland Mine Hanna Grand Rapids	Hanna Mining GD Rapids	Groveland Mine
Hospital	Hosp	
Incinerator	Incin	
Industries	Indst	
International	Intnl	
Jones & Laughlin Steel	Jones & Laughlin	spell out, omit Steel
Light & Power	L&P	
Lumber	Lmbr	
Malleable	Malleb	
Manufacturing	Mfg	
Michigan	Mich	
Motor	Mtr	
North East (ern)	NE	
North West (ern)	NW	
Norther Michigan Electrical Co-op	Northern Mich Elec	

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Full Name	Abbreviation
Operation	Op
Packaging Corporation of America	Packaging Corp AM
Paving	Pav
Plant	Plt
Power	Pwr
Project	Prj
Products	Prod
Public	Publ
Railroad	RR
Refractories	Ref
Refining	Refin
Sanitation	Sani
Sewage Treatment Plant (Wastewater)	Stp
State-Street	St
Station	Sta
Southside Foundry	Spell out, do not abbreviate
Southeast-Southwest (ern)	SE-SW
Terminal	Term
Training	Trn
Transportation	Transp
Township	Twp
United States Steel	US Steel no spaces
University	Univ
Warehouse	Whse
Water & Power	W&P
Water Treatment Plant	WTP
Wholesale	Whsl

Revised 12/79

Definition: SOURCE NUMBER is a five digit numeric facility identifier.

Retrieval Abbreviation	SRCE	*Valid Values:* All numeric values	
Card Type	1-8		
Card Columns	9-13		
Data Element Length	5		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø-47
Required on New Entry	YES	*Masterfile Position*	9-13
Nationally Controlled	NO	*Masterfile Length*	5

Edit Error Messages:

*** SOURCE NUMBER MUST BE NUMERIC

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

The NEDS source numbering convention should be used wherever possible when adding a new source. Otherwise, assign the next highest sequential source number within the county. Usually, the last four digits of Source Number are the same as the NEDS Source Identifier. The first digit must correspond to the Air Program Code. Sources subject to several Air Program Codes must be entered with separate source numbers, one for each program such as SIP, NSPS, etc.

Definition: STAFF NAME (SOURCE) is a fifteen position name generated from the Staff Code found on Card 2, positions 77-79.

Retrieval Abbreviation	STFS	*Valid Values:* All names are on the Personnel Table maintained by the national DBC. Please call the DBC to make additions or changes to this table.	
Card Type			
Card Columns			
Data Element Length			
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	2Ø
Required on New Entry		*Masterfile Position*	119-133
Nationally Controlled	YES	*Masterfile Length*	15
Edit Error Messages:			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

During each update cycle, the Staff Name is generated based on the source's Staff Code. By changing the staff name associated with a staff code on the Personnel Table, all input transactions and masterfile records will carry the new staff name.

Revised 12/79

Definition: STAFF PERSONNEL CODE is a three position code representing the person or group assigned to monitor the facility. It consists of one alpha character followed by 2 numeric characters.

Retrieval Abbreviation	PERS	*Valid Values:* Must exist on the Personnel Table maintained by the national DBC. Please call the DBC to add, change or delete entries to this table.	
Card Type	2		
Card Columns	77-79		
Data Element Length	3		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	116-118
Nationally Controlled	YES	*Masterfile Length*	3

Edit Error Messages:

* INVALID STAFF CODE

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

The assigned person's name is generated by the Update Program based on the name found on the Personnel Table.

PRIORITY CODE

Definition:

This field is reserved for Headquarters use only. Priority Code is used to identify facilities falling into numerous priority categories.

Retrieval Abbreviation	PRIO	*Valid Values:*	
Card Type	2		
Card Columns	63		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		*Master File Record Type*	2Ø
Required on New Entry	NO	*Master File Position*	113
Nationally Controlled	YES	*Master File Length*	1
Edit Error Messages:			
**** = FATAL Error*		** = WARNING Error*	

Coding Considerations:

The Edit will reject all input values to this field from Regional or State personnel. Headquarters uses this field as follows:

Value	Description
Ø	Accelerated Envorcement program
M	Municipal Incinerator
N	Nuclear Power Plants
R	Refinery
I	Iron and Steel, non-priority
P	Iron and Steel, Priority
S	Smelter
U	Undetermined Power Plants
C	Coal Fired Power Plant
O	Oil Fired Power Plant
X	Coal & Oil-Fired Power Plant
Y	Coal & Gas-Fired Power Plant
Z	Oil & Gas-Fired Power Plant
G	Gas-Fired Power Plant
A	All Fossil Fuel-Fired Power Plants, ie. C, O, & G

Definition: STATE is a two-position numeric state code. The State codes are derived from the Storage and Retrieval of Aerometric Data Manual (SAROAD) published by OAQPS.

Retrieval Abbreviation	STTE	*Valid Values:* Ø1 through 56 See attachment showing the states associated with each state code.	
Card Type	1-8		
Card Columns	3-4		
Data Element Length	2		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø-47
Required on New Entry	YES	*Masterfile Position*	3-4
Nationally Controlled	YES	*Masterfile Length*	2

Edit Error Messages:

*** INVALID STATE CODE

*** STATE NOT IN REGION

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

State code must be present on all transactions. State must be valid for the region. State cannot be changed or blanked out on the data base. If it must be changed, the entire source must be deleted and re-entered with the correct state code.

State Code. The CDS System uses the following two digit SAROAD state codes:

STATE CODE:

Ø1	Alabama
Ø2	Alaska
Ø3	Arizona
Ø4	Arkansas
Ø5	California
Ø6	Colorado
Ø7	Connecticut
Ø8	Delaware
Ø9	District of Columbia
1Ø	Florida
11	Georgia
12	Hawaii
13	Idaho
14	Illinois
15	Indiana
16	Iowa
17	Kansas
18	Kentucky
19	Louisiana
2Ø	Maine
21	Maryland
22	Massachusetts
23	Michigan
24	Minnesota
25	Mississippi
26	Missouri
27	Montana
28	Nebraska
29	Nevada
3Ø	New Hampshire
31	New Jersey
32	New Mexico
33	New York
34	North Carolina
35	North Dakota
36	Ohio
37	Oklahoma
38	Oregon
39	Pennsylvania
4Ø	Puerto Rico
41	Rhode Island
42	South Carolina
43	South Dakota
44	Tennessee
45	Texas
46	Utah
47	Vermont
48	Virginia
49	Washington
5Ø	West Virginia
51	Wisconsin
52	Wyoming
53	American Samoa
54	Guam
55	Virgin Islands
56	Trust Territories

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Definition: STATE ABBREVIATION is a two position alphabetic state code used by the U. S. Post Office. It is generated for each facility by CDS. It is useful for retrieval processing.

Retrieval Abbreviation	STAB	*Valid Values:*	
Card Type	N/A		
Card Columns	N/A		
Data Element Length	2		
Data Type	Alphanumeric		
Required on New Entry	N/A	*Master file Record Type*	2Ø
Justified		*Master file Position*	83-84
Nationally Controlled	Yes	*Master file Length*	2
Edit Error Messages:			

Coding Considerations:

AL - Alabama
AK - Alaska
AZ - Arizona
AR - Arkansas
CA - California
CO - Colorado
CT - Connecticut
DE - Delaware
DC - District of Columbia
FL - Florida
GA - Georgia
HI - Hawaii
ID - Idaho
IL - Illinois
IN - Indiana
IA - Iowa
KS - Kansas
KY - Kentucky
LA - Louisiana
ME - Maine
MD - Maryland
MA - Massachusetts
MI - Michigan
MN - Minnesota
MS - Mississippi
MO - Missouri
MT - Montana
NE - Nebraska
NV - Nevada
NH - New Hampshire
NJ - New Jersey
NM - New Mexico
NY - New York
NC - North Carolina
ND - North Dakota
OH - Ohio
OK - Oklahoma
OR - Oregon
PA - Pennsylvania
PR - Puerto Rico
RI - Rhode Island
SC - South Carolina
SD - South Dakota
TN - Tennessee
TX - Texas
UT - Utah
VT - Vermont
VA - Virginia
WA - Washington
WV - West Virginia
WI - Wisconsin
WY - Wyoming
AS - American Samoa
GU - Guam
VI - Virgin Islands
TT - Trust Territories

Definition: STATE REGISTRATION NUMBER is an alphanumeric identifier used by the state to identify a facility.

Retrieval Abbreviation	STRG	*Valid Values:* All alphanumeric characters.	
Card Type	2		
Card Columns	4Ø-54		
Data Element Length	15		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	9Ø-1Ø4
Nationally Controlled	NO	*Masterfile Length*	15
Edit Error Messages:			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

When the state identifier is consistantly entered into this field, CDS reports can be sorted in the same way as the state's files are sorted.

Definition: STREET ADDRESS is the actual location of the facility; it is not the headquarters address.

Retrieval Abbreviation	STRT	*Valid Values:* All alphanumeric characters.	
Card Type	1		
Card Columns	47-66		
Data Element Length	2Ø		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	48-67
Nationally Controlled	NO	*Masterfile Length*	2Ø
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

If the mailing address of the facility is different from the street address, the mailing address can be coded on a source comment record (Card 4), Comment Line A and B. There are special input coding sheets designed for mailing address information.

Definition: ZIP CODE is the five digit numeric postal zone.

Retrieval Abbreviation	ZIPC	*Valid Values:* All numeric values.	
Card Type	2		
Card Columns	35-39		
Data Element Length	5		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø
Required on New Entry	NO	*Masterfile Position*	85-89
Nationally Controlled	NO	*Masterfile Length*	5

Edit Error Messages:

* ZIP CODE SHOULD BE NUMERIC

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

Code whenever possible for complete address capability in the system. Consult a state published manufacturer's directory for accurate name and address information.

Definition: CAPACITY CODE is used for coal-fired boilers other than electrical utilities and identifies the boiler heat input capacity in tens of MMBTUH. A boiler with a heat input capability of 150 million BTU per hour would have "15" in Capacity Code.

Retrieval Abbreviation	CAPC	*Valid Values:* 00-99	
Card Type	5		
Card Columns	28-29		
Data Element Length	2		
Data Type	Numeric		
Required on New Entry	No	*Master file Record Type*	34
Justified	Left	*Master file Position*	29-30
Nationally Controlled	Yes	*Master file Length*	2
Edit Error Messages:			

Coding Considerations:

This is required for coal-fired boilers for all industries other than power plants provided that the boiler has a heat input capacity equal to or greater than 100 MMBTUH.

Users should note that this field was once used for tracking the NEDS Point Cross Reference (NEXP).

This field is a confidential data element. Users must supply the appropriate password on the Retrieval Card 2Ø to obtain a printout of this field.

Definition: COMPLIANCE STATUS gives the Regional Office an indication of whether or not a source is in compliance, not in compliance, or whether its compliance status is unknown, at the point level.

Retrieval Abbreviation	CMST	*Valid Values:*	
Card Type	5	Ø through 9	
Card Columns	3Ø		
Data Element Length	1		
Data Type	NUMERIC		
Justified		*Master File Record Type*	34
Required on New Entry	YES	*Master File Position*	31
Nationally Controlled	YES	*Master File Length*	1

Edit Error Messages:

*** INVALID COMPLIANCE STATUS

*** = *FATAL Error* * = *WARNING Error*

Coding Considerations:

Must be coded on the point ØØØ; may be coded on the other emission points. COMPLIANCE STATUS CODE:

Ø	Unknown
1	In violation - no schedule
2	In compliance by source test
3	In compliance by inspection
4	In compliance by certification
5	In violation, meeting schedule
6	In violation, not meeting schedule
7	In violation, unknown with respect to schedule
8	No applicable state regulation
9	In compliance - closed down

The Compliance Status on Point ØØØ (entire source) should reflect the worst compliance of any process within the source. The Compliance Status on all other points should reflect the worst case compliance of that particular point.

At the ØØØ point, this is the same as SCMS.

Definition: COMPLIANCE STATUS DESCRIPTION is an English language description of Compliance Status (CMST). It is a computer generated field which is determined by CMST. The description is controlled by the national DBC. It is not present on any master file record. A change to CMST will result in a change to description.

Retrieval Abbreviation	CMDS	*Valid Values:* See Below
Card Type		
Card Columns		
Data Element Length	2Ø	
Data Type	ALPHANUMERIC	
Justified	LEFT	*Master File Record Type*
Required on New Entry	NO	*Master File Position*
Nationally Controlled	YES	*Master File Length*
Edit Error Messages: *** = FATAL Error		* = WARNING Error

Coding Considerations:

CMST Value	CMDS Description
Ø	UKNOWN COMPL STATUS
1	IN VIOL-NO SCHEDULE
2	IN COMPL-SOURCE TEST
3	IN COMPL-INSPECTION
4	IN XOMPL-CERTIFICATN
5	IN VIOL-MEETING SCHD
6	IN VIOL-NOT MTG SCHD
7	IN VIOL-UNK WRT SCHD
8	NO APPLIC STATE REG
9	IN COMPL-SHUT DOWN

Note: If CMST is not any of the above values, "Compl Status unknown" will appear as the description.

Definition: EMISSION CATEGORY provides the Regional Offices with a method of ranking or grouping sources by broad emission level categories to assist in the evaluation of state enforcement progress.

Retrieval Abbreviation	ECAT	*Valid Values:*	
Card Type	5	Ø = unknown 1 = Less than 1ØØ TPY potential 2 = 1ØØ-1ØØØ TPY potential 3 = over 1ØØØ TPY potential 4 = Less than 25 TPY potential	
Card Columns	49		
Data Element Length	1		
Data Type	NUMERIC		
Justified		*Masterfile Record Type*	34
Required on New Entry	YES	*Masterfile Position*	50
Nationally Controlled	YES	*Masterfile Length*	1
Edit Error Messages: * INVALID EMISSION CATEGORY *** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

Must be coded on point ØØØ; may be coded on the other emission points.

For Point ØØØ, the Emission Category must reflect the potential emission of the entire source according to the Regional Air Program Guidance. The ECAT code should be filled out after consulting the NEDS emission inventory output and then determining potential emissions for the entire source.

At the ØØØ point, this is the same as SECT.

Definition: Emission Category Description is the English language description associated with Emission Category (ECAT). It is generated by the computer based on the value of ECAT. The description is controlled by the national DBC. It does not reside on the master file. ECDS will automatically change when ECAT is updated.

Retrieval Abbreviation	ECDS	*Valid Values:* See Below
Card Type	--	
Card Columns	--	
Data Element Length	20	
Data Type	Alphanumeric	
Justified	Left	*Masterfile Record Type*
Required on New Entry	No	*Masterfile Position*
Nationally Controlled	Yes	*Masterfile Length*
Edit Error Messages:		
**** = Fatal Error*		** = Warning Error*

Coding Considerations:

ECAT Value	ECDS Description
Ø	Unknown
1	Less than 1ØØ TPY
2	1ØØ to 1ØØØ TPY
3	Over 1ØØØ TPY
4	Less than 25 TPY

Note: If ECAT is not one of the above values, "Unknown" will appear as the description.

Definition: EMISSION POINT NUMBER is a three digit numeric emission point identifier. If one physical emission point produces several pollutants, each pollutant is assigned a separate emission point number. Emission point ØØØ refers to the entire source.

Retrieval Abbreviation	PTNO	*Valid Values:* ØØØ through 999	
Card Type	1-8		
Card Columns	14-16		
Data Element Length	3		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø-47
Required on New Entry	YES	*Masterfile Position*	14-16
Nationally Controlled	NO	*Masterfile Length*	

Edit Error Messages:

*** EMISSION POINT MUST BE ZEROS
*** POINT MUST BE GREATER THAN ZERO
*** DO NOT DELETE POINT ØØØ

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

When a card type 1 is entered as a new transaction, an emission point ØØØ is generated by the system; however, it is possible to enter an emission point ØØØ as a new transaction at the same time a card type 1 is entered as new.

Point number must be zero for card types 1, 2, and 4. It must be greater than zero for cards 5, 6, 7, and 8. An emission point cannot be added to the data base as new unless a card type 1 has been entered at the same time or at a previous time.

Point ØØØ cannot be deleted unless the source itself is deleted with a card type 1.

If possible, the first two positions of the CDS emission point should correspond to the NEDS emission point; the third position can be pollutant specific. For example, if a boiler has a NEDS point number Ø2, the CDS point number Ø2Ø could represent the particulate emissions and point Ø21 could represent the SO_2 emissions.

Definition: MULTIPLE CROSSREFERENCE is used to tie together various emission points. When one physical emission point has several emission point numbers (one for each pollutant or regulation) this field should be used to tie together the various point numbers referring to one physical point.

Retrieval Abbreviation	MULT	*Valid Values:* All numerics	
Card Type	5		
Card Columns	75-77		
Data Element Length	3		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	34
Required on New Entry	NO	*Masterfile Position*	76-78
Nationally Controlled	NO	*Masterfile Length*	3

Edit Error Messages:

* MULTIPLE XREF SHOULD BE NUMERIC

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

If emission points Ø1Ø, Ø11, and Ø12 refer to three different pollutants being emitted from one process or piece of equipment, points Ø11 and Ø12 should cross-reference Ø10.

Definition: OLD COMPLIANCE STATUS represents a historic record of previous quarterly compliance statuses for the past eight quarters. It is generated on a quarterly basis by the Update Program based on information found in the CMST field.

Retrieval Abbreviation	OCSØ	*Valid Values:*	
Card Type	N/A		
Card Columns	N/A		
Data Element Length	8		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	34
Required on New Entry	N/A	*Masterfile Position*	81-88
Nationally Controlled	YES	*Masterfile Length*	8
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Users cannot input this value. The entire field is also subdivided into the following eight retrievable data elements:

Name	Retrieval Abbreviation
Old Comp Status - 1st Quarter	OCS1
2nd	OCS2
3rd	OCS3
4th	OCS4
5th	OCS5
6th	OCS6
7th	OCS7
8th	OCS8

On October 1976, the Compliance Status found on each emission point record was placed in OCS1. During each subsequent quarter, the current compliance status is stored in OCS1, and all previous quarterly compliance statuses are moved into the next higher OCS field. After eight quarters, the oldest compliance status will be dropped to make room for the next quarterly historic compliance status.

With these eight historic compliance status fields, users can compare current compliance status with previous compliance status sent to the Formal Program Reporting System.

Card Type
Data Element Sheet

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Definition: POLLUTANT CODE indicates the type of pollutant which that particular emission point emits.

Retrieval Abbreviation	PLUT	*Valid Values:* See below for the table of valid values.	
Card Type	5		
Card Columns	32-33		
Data Element Length	2		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	34
Required on New Entry	YES	*Masterfile Position*	33-34
Nationally Controlled	YES	*Masterfile Length*	2

Edit Error Messages:

* INVALID POLLUTANT CODE

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

Should be input on all new emission points. Use one of the following values:

VALID VALUES

AB - Asbestos
AS - Arsenic
BE - Beryllium
BZ - Benzene
CD - Cadmium
CE - Coke oven Emissions
CO - Carbon Monoxide
FL - Fluorides
HC - Hydrocarbons
HG - Mercury
N2 - NO_2
OD - Odors
OT - Other
PB - Lead
PT - Particulate Matter
S2 - SO_2
TS - Total Reduced Sulfur
VC - Vinyl Chloride
VE - Visible Emissions
ZN - Zinc

Definition: PROCEDURAL COMPLIANCE should be used for all NSR, PSD, NSPS, NESHAPS, and SIP facilities under construction or subject to performance tests continuous monitors, and other procedural requirements under such air programs. This field indicates the compliance status of a facility with respect to all applicable procedural requirements. Use CMST to indicate the compliance of an operating facility subject to immediately effective emission regulations.

Retrieval Abbreviation	CMS2	*Valid Values:*	
Card Type	5		
Card Columns	79		
Data Element Length	1		
Data Type	Alphanumeric		
Justified		*Master File Record Type*	34
Required on New Entry	No	*Master File Position*	80
Nationally Controlled	Yes	*Master File Length*	1
Edit Error Messages:			
**** = FATAL Error*		** = WARNING Error*	

Coding Considerations:

Code	Value
A	Unknown compliance with procedural requirements.
B	In violation of procedural requirements.
C	In compliance with procedural requirements.
8	No applicable regulation or procedural requirement.
Blank	No applicable regulation or procedural requirement.
V	In violation of federally enforceable compliance schedule; future effective regulation.
I	In compliance with federally enforceable compliance schedule: future effective regulation.
N	No federally enforceable compliance schedule but subject to future effective regulation(s).

Definition: PROCESS DESCRIPTION is a brief description of the physical emission point such as a boiler or a cupola. At the ØØØ Emission Point level, this should be used to describe the type of plant such as a generating station or a portland cement plant.

Retrieval Abbreviation	PRDS	*Valid Values:* All alphanumeric characters.	
Card Type	5		
Card Columns	5Ø-74		
Data Element Length	25		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	34
Required on New Entry	YES	*Masterfile Position*	51-75
Nationally Controlled	NO	*Masterfile Length*	25
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Abbreviations should be used consistently and clearly for sorting and retrieval purposes, i.e., BLR-3 for Boiler #3. If several emission points have similar process descriptions, be sure to identify each point with a unique process description, such as a boiler number or a specific location for the process. These descriptions must be clear enough so that an inspector or other agency official can readily identify the apparatus at a facility to which the CDS record applies.

If no value is entered for Point ØØØ, and if the source has a valid SIC Code, the SIC Code description is generated as the Process Description on Point ØØØ when the source is first placed on the CDS Masterfile.

Definition: User supplied.

Retrieval Abbreviation	RDE7	*Valid Values:* All alphanumeric values.	
Card Type	5		
Card Columns	78		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	34
Required on New Entry	NO	*Masterfile Position*	79
Nationally Controlled	NO	*Masterfile Length*	1
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Typical usages of this field include identifiers for:

Region I	State Compliance Status (where it is different from CMST)
Region III	Opacity Monitoring
Region VII	Air Program Status of NSPS points

Definition: SCC CODE is the NEDS Source Classification Code which provides a detailed analysis of the process creating the emission for this point.

Retrieval Abbreviation	SCC3, SCC6, SCC8	*Valid Values:* Consult the NEDS coding manual for a list of valid values. The CDS edit accepts blanks or an 8 position numeric field.	
Card Type	5		
Card Columns	2Ø-27		
Data Element Length	8		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	34
Required on New Entry	NO	*Masterfile Position*	21-28
Nationally Controlled	YES	*Masterfile Length*	8

Edit Error Messages:

* SCC CODE SHOULD BE NUMERIC

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

Although all 8 positions must be coded on all points other than ØØØ, the retrieval can select on either the first 3 positions, the first 6 positions, or all 8 positions. SCC 3 retrieves on the first 3 positions of the SCC Code; SCC6 retrieves on the first 6 positions of SCC Code; and SCC 8 retrievess on the first 8 positions of the SCC Code.

For some industries, DSSE has expanded on the values in the NEDS coding manual; special guidance has been provided for these SCC codes.

SCC8 is at the present a confidential data element. Users must supply the proper password on the Retrieval Card 2Ø to obtain SCC8 on output reports. SCC3 and SCC6 are not password protected on output reports.

Definition: SIP CODE provides the Regional Office with a method of identifying the type of enforcement schedule which has been imposed on a source not in Compliance.

Retrieval Abbreviation	SIPC	*Valid Values:* Blank, Ø through 9.	
Card Type	5		
Card Columns	31		
Data Element Length	1		
Data Type	NUMERIC		
Justified		*Masterfile Record Type*	34
Required on New Entry	NO	*Masterfile Position*	32
Nationally Controlled	YES	*Masterfile Length*	1
Edit Error Messages: * INVALID SIP CODE			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

This field must be coded for all major sources which have a Source Compliance Status of Ø, 1, 5, 6, or 7 (in violation or unknown).

blank	No Schedule
Ø	Schedule Status Unknown
1	Federally enforceable DCO
2	Federally Approved SIP Schedule
3	Federal Court Decree Schedule
4	Federally Enforceable Consent Decree Schedule
5	Undergoing enforcement actions to develop a schedule
6	State/Local Compliance Schedule not Federally Enforceable
7	Non-Federally Enforceable schedule being developed
8	Reserved
9	Subject to offsets

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Definition: Sip Code Description is the English language description of Sip Code (SIPC). It is generated by the computer based on the value of SIPC. This description is controlled by the national DBC. It is not present on the master file. The description will automatically change when SIPC is changed.

Retrieval Abbreviation	SIDS	*Valid Values:*	See Below
Card Type	--		
Card Columns	--		
Data Element Length	20		
Data Type	Alphanumeric		
Justified	Left	*Masterfile Record Type*	
Required on New Entry	No	*Masterfile Position*	
Nationally Controlled	Yes	*Masterfile Length*	
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

This field must be coded for all major sources which have a Source Compliance Status of Ø, 1, 5, 6, or 7 (in violation or unknown).

blank	No Schedule
Ø	Schedule Status Unknown
1	Federal/State DCO
2	Federal SIP Schedule
3	Federal Court Order
4	Federal Consent Decree
5	Federal Schedule Being Developed
6	Non-Federal Schedule
7	Non-Federal Schedule Being Developed
8	Reserved
9	Subject to offsets

Definition: STATE REGULATION contains the state's emission regulation number for a given pollutant. In the case of NSPS or NESHAPS facilities, use the federal or state regulation number found in the Federal Register, CFR 6Ø.XX.

Retrieval Abbreviation	SREG	*Valid Values:*	
Card Type	5	All alphanumeric values.	
Card Columns	34-48		
Data Element Length	15		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	34
Required on New Entry	NO	*Masterfile Position*	35-49
Nationally Controlled	NO	*Masterfile Length*	15
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Definition: ACTION DESCRIPTION is generated on each action record based on ACTION TYPE. Action Description may be coded on the card 7 for Action Type ØØ.

Retrieval Abbreviation	ADES	*Valid Values:* Please call the national DBC to add or change action descriptions on the regional Action Table.	
Card Type	7		
Card Columns	2Ø-34		
Data Element Length	15		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	46
Required on New Entry		*Masterfile Position*	1Ø7-156 4Ø-54
Nationally Controlled	YES	*Masterfile Length*	5Ø 15
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Two action descriptions are generated from Action Type; the first is a 5Ø position long action description available on the Source Date Report, and the second is a 15 position short action description retrievable on a Quick Look Report.

When Action Type ØØ is specified in card columns 53 and 54, the Edit program will pick up a 15 position Action Description from card columns 2Ø through 34 of the Card 7 and place this description on both the short and long Action Description on the CDS Masterfile. Action Type ØØ is designed for infrequently used actions which are not placed on the Action Table controlled by the National DBC. It can be a replacement for the regional Action Type "OTHER - SEE COMMENTS BELOW". Since comments are not retrievable but Action Type and Action Description are retrievable, the Action Type ØØ should be most useful for infrequently used actions which are not on the Action Table.

Definition: ACTION NUMBER is a two digit numeric sequential action identifier.

Retrieval Abbreviation	ANUM	*Valid Values:* ØØ through 99	
Card Type	1-8		
Card Columns	17-18		
Data Element Length	2		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	2Ø-47
Required on New Entry	YES	*Masterfile Position*	17-18
Nationally Controlled	NO	*Masterfile Length*	2

Edit Error Messages:

*** ACTION NUMBER MUST BE ZEROS
*** ACTION NUM MUST BE GREATER THAN ZERO

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

Actions should be assigned sequentially starting with 01. When adding new actions to the data base, code 99; the system will convert the 99 to the next highest sequential action number for that emission point. If several actions and action comments are entered at the same time with action Number 99, comments will not be associated with the proper action. Therefore, users must not enter multiple actions and comments with Action Number 99 simultaneously since these will produce rejects on the Update Report.

An action number cannot be added to the data base unless the emission point for that action is also being added or it already exists on the data base. Each action number must be associated with an emission point.

Action number must be ØØ for card types 1 through 6; it must be greater than zero for card types 7 and 8.

Action numbers should have no special meaning. Action number ranges must not be used to identify certain types of actions.

Definition: ACTION TYPE is a two position alphanumeric action description identifier.

Retrieval Abbreviation	ATPE	*Valid Values:*	
Card Type	7	Must be on Action Table controlled by national DBC.	
Card Columns	53-54	Action Type ØØ indicates an action type which is user defined.	
Data Element Length	2		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	46
Required on New Entry	YES	*Masterfile Position*	21-22
Nationally Controlled	YES	*Masterfile Length*	2

Edit Error Messages:

*** INVALID ACTION TYPE
*** ACTION TYPE REQUIRED ON NEW ENTRY

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

Please call the national DBC to add, change, or delete entries on the Action Table for your region.

If ØØ is coded in the Action Type field, the Edit program will pick up an Action Description from card columns 2Ø through 34 of the Card 7. This capability should eliminate the need for using an Action Type meaning "OTHER - SEE COMMENTS BELOW".

Certain action types are required input to CDS. Please consult the current FY air enforcement program plans and the most recent DSSE guidance material for the most current requirements.

To obtain the most current version of a region's action types, please follow the procedures described in Chapter 10 of this manual.

Since many action types are confidential, users should use a password on the Retrieval Card Type 20 to obtain action level information on Retrievals.

Card Type 7
Data Element Sheet

Definition: DATE ACHIEVED is the date on which an action is performed or completed in month, day, year format.

Retrieval Abbreviation	DTAC	*Valid Values:* Blanks, zeros are acceptable. If numeric other than zero, day must be between Ø1 and 31, month must be between Ø1 and 12, and year must be greater than 6Ø.	
Card Type	7		
Card Columns	55-6Ø		
Data Element Length	6		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	46
Required on New Entry	NO	*Masterfile Position*	29-34
Nationally Controlled	NO	*Masterfile Length*	6

Edit Error Messages:

* INVALID DATE ACHVD - OUTPUT ZEROS

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

If an error is encountered in the date field, the bad month, day or year is zeroed out by the edit program. An asterisk on a change transaction for this field will zero out the field on the masterfile.

Definition: DATE ACHIEVED YEAR/MONTH allows users to select and sort reports by the achieved month of an action. With this date element, users can produce Milestone Reports or Quick Look Subtotals for actions during a given month.

Retrieval Abbreviation	DAYM	*Valid Values:*	
Card Type	N/A		
Card Columns	N/A		
Data Element Length	4		
Data Type	Numeric		
Required on New Entry	N/A	*Master file Record Type*	46
Justified	N/A	*Master file Position*	29-32
Nationally Controlled	No	*Master file Length*	4
Edit Error Messages:			

Coding Considerations:

This data element consists of the year (two digits) and month (two digits) of the Date Scheduled and the Date Achieved. A Milestone Report totaling federal enforcement actions by month for the third quarter will look like this:

ACTION TYPE	REGION TOTAL	DAYM 7804	DAYM 7805	DAYM 7806
114 LETTER SENT	46	12	18	16
EPA INSPECTION	109	42	39	28
EPA VE EVALUATION	190	48	62	80
EPA CIV/CRIM ACTION	26	7	15	4
REGIONAL ADES TOTALS	371	109	134	128

Definition: DATE SCHEDULED is the date on which an action is scheduled to be performed. Use the month, day, year format.

Retrieval Abbreviation	DTSC	*Valid Values:* Blanks or zeros are acceptable. Otherwise, day must be between Ø1 and 31; month must be between Ø1 and 12, and year must be greater than 6Ø.	
Card Type	7		
Card Columns	61-66		
Data Element Length	6		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	46
Required on New Entry	YES	*Masterfile Position*	23-28
Nationally Controlled	NO	*Masterfile Length*	6

Edit Error Messages:

* INVALID DATE SCHED - OUTPUT ZEROS

* DATE SCHED REQUIRED ON NEW ENTRY

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

If an error is encountered in the date field, the bad month or day or year is zeroed out. If this field is left blank on a new transaction and if the Date Achieved is valid, the Date Achieved is moved into this field by the Edit Program.

Definition: DATE SCHEDULED YEAR/MONTH allows users to select and sort reports by the scheduled month of an action. With this data element, users can produce Milestone Reports or Quick Look Subtotals for actions during a given month.

Retrieval Abbreviation	DSYN	*Valid Values:*	
Card Type	N/A		
Card Columns	N/A		
Data Element Length	4		
Data Type	Numeric		
Required on New Entry	N/A	*Master file Record Type*	46
Justified	N/A	*Master file Position*	23-26
Nationally Controlled	No	*Master file Length*	4
Edit Error Messages:			

Coding Considerations:

This data element consists of the year (two digits) and month (two digits) of the Date Scheduled. A Milestone Report totaling federal enforcement actions by month for the third quarter will look like this:

ACTION TYPE	REGION TOTAL	DAYM 7804	DAYM 7805	DAYM 7806
114 LETTER SENT	46	12	18	16
EPA INSPECTION	109	42	39	28
EPA VE EVALUATION	190	48	62	80
EPA CIV/CRIM ACTION	26	7	15	4
REGIONAL ADES TOTALS	371	109	134	128

Definition: PENALTY AMOUNT indicates the civil penalty imposed on a facility.

Retrieval Abbreviation	PLTY	*Valid Values:* All numeric values	
Card Type	7		
Card Columns	46-52		
Data Element Length	7		
Data Type	Numeric		
Required on New Entry	No	*Master file Record Type*	46
Justified	Right	*Master file Position*	93-99
Nationally Controlled	No	*Master file Length*	7
Edit Error Messages:			

Coding Considerations:

This field should be used in conjunction with the following action types:

Z4 State civil penalty.

Z6 Federal civil penalty.

Dollar amounts must be right justified; they should be rounded to the nearest $100. No commas, dollar signs, or periods must be used.

Please refer to future DSSE quidance documentation for additional details, which will be an addendum to this manual.

Definition: User supplied.

Retrieval Abbreviation	RDE 8	*Valid Values:*	
Card Type	7		
Card Columns	72 - 73		
Data Element Length	2		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	46
Required on New Entry	NO	*Masterfile Position*	57 - 58
Nationally Controlled	NO	*Masterfile Length*	2
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Typical usages of this field include identifiers for:

Region V	SO_2 Compliance Status
Region VII	Opacity Readings

Definition: RESULTS CODE indicates the results of an action such as action achieved, action not achieved, or action rescheduled.

Retrieval Abbreviation	STAC	*Valid Values:*	
Card Type	7	May be a blank; if not a blank, it must be a two digit numeric field. Must exist on the RESULTS-CODE Table controlled by the national DBC.	
Card Columns	7Ø-71		
Data Element Length	2		
Data Type	NUMERIC		
Justified	LEFT	*Masterfile Record Type*	46
Required on New Entry	NO	*Masterfile Position*	55-56
Nationally Controlled	YES	*Masterfile Length*	2
Edit Error Messages:			
* INVALID RESULTS CODE			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

The results code does not indicate the success of an action, but rather it indicates whether or not the action was carried out, or whether another action should be referred to.

Please call the national DBC to add, change, or delete entries on the Results-Code Table for your region. See Chapter 10 for instructions on how to obtain the most current Results Code Table for your region.

Definition: Results Code Description is an English language description of the results code (STAC). It is computer generated based on the region and the STAC. It is not input by the user. It is stored on the master file and is updated when STAC is changed.

Retrieval Abbreviation	RSTD	*Valid Values:* The Results Code (STAC) must exist on the RESULTS CODE TABLE controlled by the national DBC.	
Card Type	--		
Card Columns	--		
Data Element Length	15		
Data Type	Alphanumeric		
Justified	Left	*Masterfile Record Type*	46
Required on New Entry	No	*Masterfile Position*	157
Nationally Controlled	Yes	*Masterfile Length*	15
Edit Error Messages:			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

See Chapter 10 for instructions for listing the most current Results Code Table.

Definition: STAFF NAME (ACTION) is a fifteen position name generated from the Staff Code found on Card 7, positions 67-69.

Retrieval Abbreviation	STFA	*Valid Values:*	
Card Type		All names are on the Personnel Table maintained by the national DBC. Please call the DBC to make additions or changes to this table.	
Card Columns			
Data Element Length			
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	46
Required on New Entry		*Masterfile Position*	63-77
Nationally Controlled	YES	*Masterfile Length*	15
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

During each update cycle, the Staff Name is generated based on the Action Staff Code. By changing the staff name associated with a staff code on the Personnel Table, all input transactions and masterfile records will carry the new staff name.

See Chapter 10 for instructions for listing the most current Staff Table.

Definition: ACTION STAFF CODE is a three position code referring to the staff member assigned to complete the action.

Retrieval Abbreviation	PERA	*Valid Values:*	
Card Type	7	Must exist on the Personnel Table controlled by the national DBC. The first position must be alpha; the next two numeric. When requesting changes to this table, be sure to give the DBC full title information as well.	
Card Columns	67-69		
Data Element Length	3		
Data Type	ALPHANUMERIC		
Justified	LEFT	*Masterfile Record Type*	46
Required on New Entry	NO	*Masterfile Position*	35-37
Nationally Controlled	YES	*Masterfile Length*	3

Edit Error Messages:

* INVALID STAFF CODE

**** = Fatal Error* ** = Warning Error*

Coding Considerations:

Please call the national DBC to make additions, changes, or deletions to the Personnel Table.

Definition: STAFF TITLE is a fifteen position title generated from the Staff Code found on Card 7, positions 67-69.

Retrieval Abbreviation	TITL	*Valid Values:* All titles are on the Personnel Table maintained by the national DBC. Whenever making any changes to this table, be sure to give the DBC full title information.	
Card Type			
Card Columns			
Data Element Length			
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	46
Required on New Entry		*Masterfile Position*	78-92
Nationally Controlled		*Masterfile Length*	15
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

During each update cycle, the Staff Title is generated based on the Action Staff Code. By changing the title associated with a staff code on the Personnel Table, all input transactions and masterfile records will carry the new title.

Definition: CARD CODE is a one digit numeric field which identifies the type of fixed format information found on the CDS input punch card.

Retrieval Abbreviation		*Valid Values:* 1 = source record 2 = source record 3 = pollutant record 4 = source comment 5 = emission point record 6 = emission point comment 7 = action record 8 = action comment
Card Type	1-8	
Card Columns	19	
Data Element Length	1	
Data Type	NUMERIC	
Justified		*Masterfile Record Type*
Required on New Entry	YES	*Masterfile Position*
Nationally Controlled	YES	*Masterfile Length*
Edit Error Messages: *** INVALID CARD CODE *** = *Fatal Error*		* = *Warning Error*

Coding Considerations:

Definition: COMMENTS can be used to place on the CDS masterfile data which does not fit into any fixed card format.

Retrieval Abbreviation		*Valid Values:* All alphanumeric values.	
Card Type	4, 6, 8		
Card Columns	21-79		
Data Element Length	59		
Data Type	ALPHANUMERIC		
Justified		*Masterfile Record Type*	21, 35, 47
Required on New Entry	NO	*Masterfile Position*	22-8Ø
Nationally Controlled	NO	*Masterfile Length*	59
Edit Error Messages:			
**** = Fatal Error*		** = Warning Error*	

Coding Considerations:

Comments are not retrievable on a Quick Look Report; therefore, it is better to use a fixed-format data element on Cards 1, 2, 5, or 7 whenever possible.

Use Card 4 for a source comment;
Card 6 for a point comment;
Card 8 for an action comment.

Do not use comment records to carry action information on compliance status information; other card types are available for these purposes.

Definition: LINE NUMBER is used by the computer to distinguish one comment line from another.

Retrieval Abbreviation		*Valid Values:*	
Card Type	4, 6, 8	Ø through 9, A and B	
Card Columns	2Ø		
Data Element Length	1		
Data Type	NUMERIC		
Justified		*Masterfile Record Type*	21, 35, 47
Required on New Entry	YES	*Masterfile Position*	21
Nationally Controlled	YES	*Masterfile Length*	1
Edit Error Messages:			
*** LINE NUMBER MUST BE NUMERIC			
*** = *Fatal Error*		* = *Warning Error*	

Coding Considerations:

Assign line numbers sequentially. Before assigning a line number, refer to the source data report to be sure the number you code is not already on the data base for that particular emission point. Although Line Number is carried on the masterfile, it is not a retrievable data element.

Line Number A and B on Card Code 4 have been set aside for mailing label information. There are special coding sheets available for entering mailing labels.

Definition: RECORD TYPE is a two position numeric masterfile record identifier.

Retrieval Abbreviation	*Valid Values:*
Card Type	2Ø = Source 21 = Source comment 34 = Emission Point 35 = Point comment 46 = Action 47 = Action comment
Card Columns	
Data Element Length	
Data Type NUMERIC	
Justified	*Masterfile Record Type* 2Ø-47
Required on New Entry	*Masterfile Position* 19-2Ø
Nationally Controlled	*Masterfile Length* 2
Edit Error Messages: *** = *Fatal Error*	* = *Warning Error*

Coding Considerations:

Each Card Type has a corresponding masterfile Record Type.

Definition: UPDATE CODE tells the update program to add, change, or delete a transaction. This data element is not carried on the masterfile but serves to tell the update program what to do with other data on the input transaction.

Retrieval Abbreviation	N/A	*Valid Values:*
Card Type	1-8	N - New
Card Columns	8Ø	C = Change
Data Element Length	1	D = Delete
Data Type	ALPHA	
Justified		*Masterfile Record Type*
Required on New Entry	YES	*Masterfile Position*
Nationally Controlled	YES	*Masterfile Length*

Edit Error Messages:
*** UPDATE CODE D INVALID FOR CARD TYPE 2 & 3
*** INVALID UPDATE CODE
*** DO NOT DELETE POINT ØØØ
*** NO DATA IN COL 21-79 FOR DELETES

*** = *Fatal Error* * = *Warning Error*

Coding Considerations:

The CDS-EDIT only validates the existence of the update code; it is the Update report which points out incorrect or illogical update codes.

Each card type, except card type 2, has a corresponding record type on the CDS data base. If a card type 1, 4, 5, 6, 7, or 8 has not already created a masterfile record type, it must be added as New. Each point, action, or comment record must be associated with a corresponding source record. Each point comment must be associated with a point. Each action must be associated with a point. Each action comment must be associated with an action.

Key data elements (region, state, county, source, point, and action numbers) cannot be changed. Other data elements can be changed by using the update code 'C'. Only those record types which have been successfully added as new prior to this update cycle can be changed. Only those data elements which are actually being changed need to be added on a change transaction. By coding an asterisk anywhere in a data field, that data field will be changed to spaces (date values will be zeroed out.)

CODING CONSIDERATIONS (Continued)

The update code 'D' deletes one or more records on the CDS data base. A card type 1 delete will delete all masterfile records for a given source.

A card type 5 delete will delete a point together with all associated comments, actions, and action comments. Point ØØØ cannot be deleted unless a card type 1 is used for the delete function.

A card type 7 delete will delete an action together with all associated action comments.

A card type 4, 6, or 8 delete must have a valid line number. One delete card is needed to delete each comment line number.

No data may be punched in columns 21 through 79 for deletes to protect the data base against a mispunched delete update code.

A Card 2 or 3 delete is invalid.

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APPENDIX B

CONTACT LIST

OF

CDS USERS

Contact List of CDS Users

National CDS Data Bank Coordinator Franklin Smith 202-755-0103 FTS 755-0103	U.S. Environmental Protection Agency Division of Stationary Source Enforcement EN-341 401 M Street S.W. Washington, D.C. 20460
Region I - Boston Frank Ciavattier Nancy Sidlik 617-223-5610 FTS 223-5610	Enforcement Division U.S. Environmental Protection Agency J.F.K. Federal Building Boston, Massachusetts 02203
Region II - New York Ken Eng Jerry DeGaetano 212-264-4726 FTS 264-4726	Planning and Management Division U.S. Environmental Protection Agency 26 Federal Plaza New York, New York 10007
Region III - Philadelphia Abe Ferdas 215-597-9401 Connie Carr 215-597-9387 FTS 597-9387	Enforcement Division U.S. Environmental Protection Agency Curtis Building 6th and Walnut Philadelphia, Pennsylvania 19106
Region IV - Atlanta Vince Hellwig 404-881-4253 FTS 285-5291	Enforcement Division U.S. Environmental Protection Agency 345 Courtland St. Atlanta, Georgia 30308
Region V - Chicago Eric Cohen 312-353-2090 FTS 353-8213	Enforcement Division U.S. Environmental Protection Agency 230 South Dearborn Street Chicago, Illinois 60604
Region VI - Dallas Bob Hannesschlager Mary Kay Marusak 214-749-2755 FTS 749-2755	Enforcement Division U.S. Environmental Protection Agency 1201 Elm St. Dallas, Texas 75270

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816-374-5955

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Region VIII - Denver
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Marian Lundholm
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San Francisco, California 94111

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Cecil Drotts FTS 399-1387
206-442-1387

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U.S. Environmental Protection Agency
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Seattle, Washington 98101

TRC - The Research Corporation
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203-563-1431

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Wethersfield, Connecticut 06109

Scott Shanks
Greg Fisher
Colleen Sullivan
Christine Neligon
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Arkansas Robert Gage 501-371-1136	Arkansas Dept. of Polluction Control and Ecology 8001 National Drive Little Rock, Arkansas 72209
California Gerald H. White 916-322-2895	Air Resources Board 1102 Q Street P.O. Box 2815 Sacramento, California 95812
Georgia Jim Mullins 404-656-7410	Department of National Resources 4291 Memorial Drive, Suite M Decatur, Georgia 30032
Louisiana Atley Brasher 504-568-5129	Office of Health Services Air Quality Section P.O. Box 60603 New Orleans, Louisiana 70160
Maryland Doug Proctor 301-383-3245	Maryland BAQNC 201 West Preston Street Baltimore, Maryland 21201

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Minnesota John Morrill 612-296-7738	Minnesota Pollution Control Agency 1935 West County Road B-2 Roseville, Minnesota 55113
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Nebraska Dick Varner 402-471-2186	Division of Air Pollution Department of Environmental Control P.O. Box 94653, State House Station Lincoln, Nebraska 68509
New Mexico David Duran 505-827-5271 Ext. 356	Air Quality Section P.O. Box 968 Santa Fe, New Mexico 87503
New York Dick Joseph 212-482-6217	New York City Environmental Control Board 120 Wall Street New York, New York 10005
Ohio Tomas E. Crepeau 614-466-6040	Ohio Environmental Protection Agency Box 1049 361 East Broad Street Columbus, Ohio 43216
Oregon Ed Woods 503-229-6480	Oregon Dept. of Environmental Quality P.O. Box 1760 Portland, Oregon 97209
South Carolina Bob Betterton 803-758-5406	South Carolina Dept. of Health 2600 Bull Street Columbia, South Carolina 29201
Tennessee Stan Lodl 615-741-3931	Division of Air Pollution Control 301 Seventh Avenue Nashvill, Tennessee 37219

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AEROS CONTACTS

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I	Mr. John Courcier (A&HM) EPA, Region I John F. Kennedy Bldg. Boston, MA 02203 (FTS) 223-4448	Mr. Norman J. Beloin (S&A) EPA, Region I 60 Westview Street Lexington, MA 02173 (617) 861-6700	Mr. William Serovy (Mgmt) EPA, Region I John F. Kennedy Bldg. Room 2207-B Boston, MA 02203 (FTS) 223-5885
II	Mr. Mike Davis (F&T) EPA, Region II 26 Federal Plaza New York, NY 10007 (FTS) 264-9578	Mr. Ed Finfer (Air Branch) EPA, Region II 26 Federal Plaza New York, NY 10007 (FTS) 264-9800	
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III	Dr. Sandor Kovacs (A&HM) EPA, Region III (3AH11) 6th and Walnut Streets Philadelphia, PA 19106 (FTS) 597-8133		
IV	Mr. Barry Gilbert (A&HM) EPA, Region IV 345 Courtland Street, N.E. Atlanta, GA 30308 (FTS) 257-2864	Mr. William Snider (A&HM) EPA, Region IV 345 Courtland Street, N.E. Atlanta, GA 30308 (FTS) 257-2864	Mr. Barry Gilbert (A&HM) EPA, Region IV 345 Courtland Street, N.E. Atlanta, GA 30308 (FTS) 257-2864
V	Mr. Steve Goranson (S&A) EPA, Region V 230 S. Dearborn, 25th Fl. Chicago, IL 60604 (FTS) 353-2303	Mr. Steve Goranson (S&A) EPA, Region V 230 S. Dearborn, 26th Fl. Chicago, IL 60604 (FTS) 353-2303	Mr. Barry Bolka (S&A) EPA, Region V 230 S. Dearborn, 26th Fl. Chicago, IL 60604 (FTS) 353-2303
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VII	Mr. Seymour Shuster (A&HM) EPA, Region VII 1735 Baltimore Avenue Kansas City, MO 64108 (FTS) 758-3791		
VIII	Mr. Dave Lewis (S&A) EPA, Region VIII 1860 Lincoln Street Denver, CO 80295 (FTS) 327-2226		
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TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO. EPA 340/1-78-003	2.	3. RECIPIENT'S ACCESSION NO.
4. TITLE AND SUBTITLE Compliance Data System User's Guide		5. REPORT DATE December 1979
		6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Mr. Geza Serenyi		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS The Research Corporation of New England, 125 Silas Deane Highway, Wethersfield, CT 06109		10. PROGRAM ELEMENT NO.
		11. CONTRACT/GRANT NO. 68-01-4145
12. SPONSORING AGENCY NAME AND ADDRESS Division of Stationary Source Enforcement, Office of Enforcement, U.S. Environmental Protection Agency, Washington, D.C. 20460		13. TYPE OF REPORT AND PERIOD COVERED
		14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES
A user's guide describing the general operation of and specific procedures to be utilized by operators of the Compliance Data System.

16. ABSTRACT
This Compliance Data System (CDS) User's Guide is designed to be the primary source of user documentation regarding CDS. It replaces all documentation dated prior to March 1978, which should be discarded.

The guide is organized to be used effectively by several groups of potential readers: Managers and others wishing a basic description of CDS should read Sections 2 and 3, Management Overview and System Applications. Current Users who generally understand CDS will wish to skip to specific sections of interest, particularly Sections 7 and 9, Edit Processing and Retrieval Processing, which reflect recent changes. New Users may wish to read the text in its entirety, at least through Section 9 to obtain a working knowledge of CDS. Those Preparing Input Data should read Section 6, Data Input Preparation.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Pollution Facilities (Sources)	Compliance Status Enforcement Actions Surveillance Actions	13 B

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