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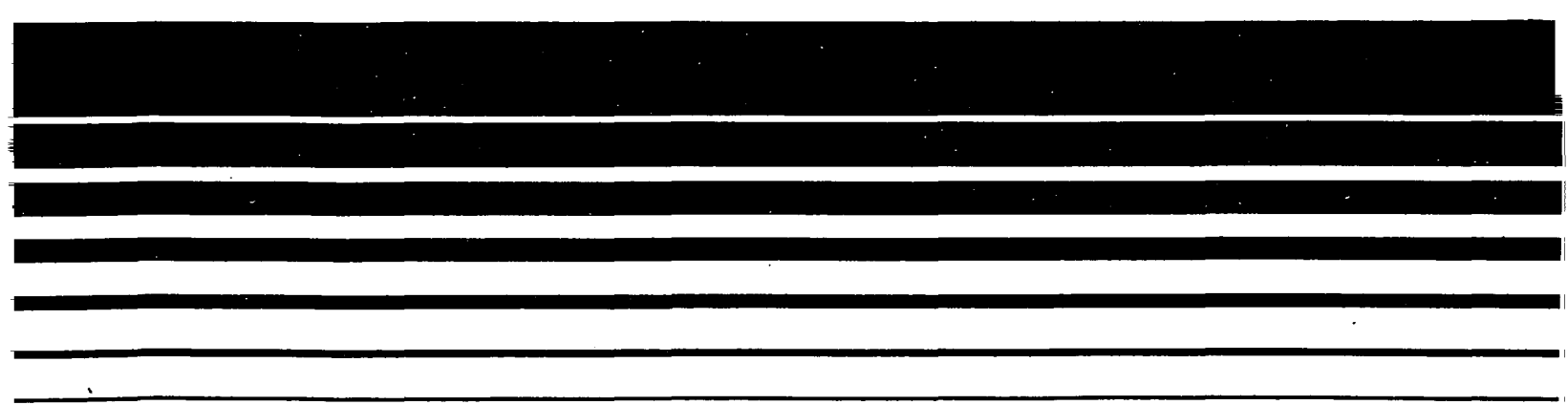
Office of Air Quality
Planning and Standards
Research Triangle Park NC 27711

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Air



Compliance Data System Quality Assurance Manual



Compliance Data System Quality Assurance Manual

by

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Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Stationary Source Compliance Division
Office of Air Quality Planning and Standards
Washington, D.C. 20460**

June 1984

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1.0 INTRODUCTION

1.1 Purpose

The Compliance Data System (CDS) Quality Assurance Manual is designed to aid the data manager in maintaining the most valuable component of the system--data quality. The utility of any data system is directly proportional to the quality of the data contained in the system, and CDS is no exception. During the ten years of operation, the compliance data has slowly but surely improved to the point where today CDS reports are routinely used for top management decision-making, satisfying congressional queries, and providing the public with information through the Freedom of Information Act channels. With this user base, it is clear that the maintenance of high quality data in CDS is of paramount importance.

This manual provides four services to the CDS data manager. First, it serves as a quick-reference user's guide for data entry. It contains instructions and definitions for all CDS data elements. Second, it provides an outline for effective data entry procedures. This outline helps to ensure not only that data is correct before it enters CDS, but that it is checked for accuracy all during the edit and update processes. Third, this manual explains several methods of checking existing data on CDS and provides a step-by-step approach for analyzing and correcting erroneous data. Finally, this manual contains a list of references and sources of information which can help the data manager in the search for accurate, reliable data. The manual contains a complete review of CDS communications documents and user assistance staff available to supply helpful information on all capabilities of CDS. In short, the CDS Quality Assurance Manual is designed to be an easy reference guide to help the CDS data manager maintain data reliability.

1.2 Organization

This manual is divided into nine chapters, with each chapter describing a different procedure or function. Chapter 1 is an introduction, stating the purpose and organization of the manual. Chapter 2 is a system summary, which provides a historical background system functions charts. Chapter 3 describes the data elements in CDS and provides a detailed look at each data type. Chapter 4 covers the typical input schedule and procedures and provides a model for an effective data entry job log. Chapter 5 presents detailed instructions for coding data for specific air programs and critical enforcement tracking projects. Chapter 6 lists various sources where data can be obtained for use in CDS. Chapter 7 provides a post-entry quality assurance procedure and contains pertinent examples of data quality retrievals. Chapter 8 contains programming and testing standards and is designed for the technical systems user. Chapter 9 is a compendium of current EPA Headquarters guidance.

Managers can especially benefit from Chapters 1, 2, and 9. Data entry staff should concentrate on Chapter 3, 4, 5, 6, and 7. Data processing analysts and programmers should find Chapters 3, 4, and 8 most pertinent to their needs. All users are encouraged to read the CDS User's Guide, available from the CDS Coordinator in the Stationary Source Compliance Division of EPA in Washington, DC.

2.0 SYSTEM OVERVIEW

2.1 Background History

CDS was developed in 1972 by the Stationary Source Compliance Division (SSCD) in conjunction with TRC 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 (NESHAP). 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 nine years. Experience with the system has led to modifications and refinements of CDS which are described in detail in this documentation. During the eight years of regular production runs, CDS has grown into a system widely used by all ten regions and nearly half the states.

2.2 System Functions

There is a variety of ways in which CDS helps EPA Headquarters and regional offices, as well as state agencies, in managing enforcement and compliance data. The following paragraphs discuss the six most important functions of CDS.

1. Inventory of Major Sources. CDS serves as an inventory of all major stationary sources of air pollution, as defined by the Alabama Power decision of 1980.

2. Enforcement Program Action Tracking. CDS contains information on a variety of air enforcement programs, such as the PSD, NSPS, and NESHAP programs. It also allows historical event tracking and scheduling of future enforcement milestones, such as compliance schedules.
3. Compliance Analysis. CDS provides statistics used in the analysis of current compliance and the evaluation of enforcement strategies. CDS statistics are used by upper EPA management in their Management Accountability System to measure enforcement program progress.
4. Resource Allocation. CDS is used by Headquarters in their annual allocation of funds for regional office enforcement programs.
5. Reporting Requirements. CDS is used both by state and regional offices as a reporting tool to meet their EPA compliance reporting requirements.

Figure 2-1 shows the functions of CDS as they are utilized by the Headquarters, Regional, and State Regulatory Agencies.

2.3 Data Processing Functions

CDS is a standard three-function system featuring edit, update, and retrieval procedures. Each procedure is a separate operation with separate controls.

The edit function validates data with regard to specific definitions included in the CDS User's Guide Data Dictionary. These definitions indicate only whether the specified codes are valid for the specified data element. For example State Code "XX" is an invalid State Code and would not pass the edit's data checking, but State Code "13" is valid and would be accepted by the edit. Edits may be run anytime, as may edit corrections. All valid transactions passed by the edit are stored in a "holding file" for the update. This "holding file" is referred to as the output MOD file.

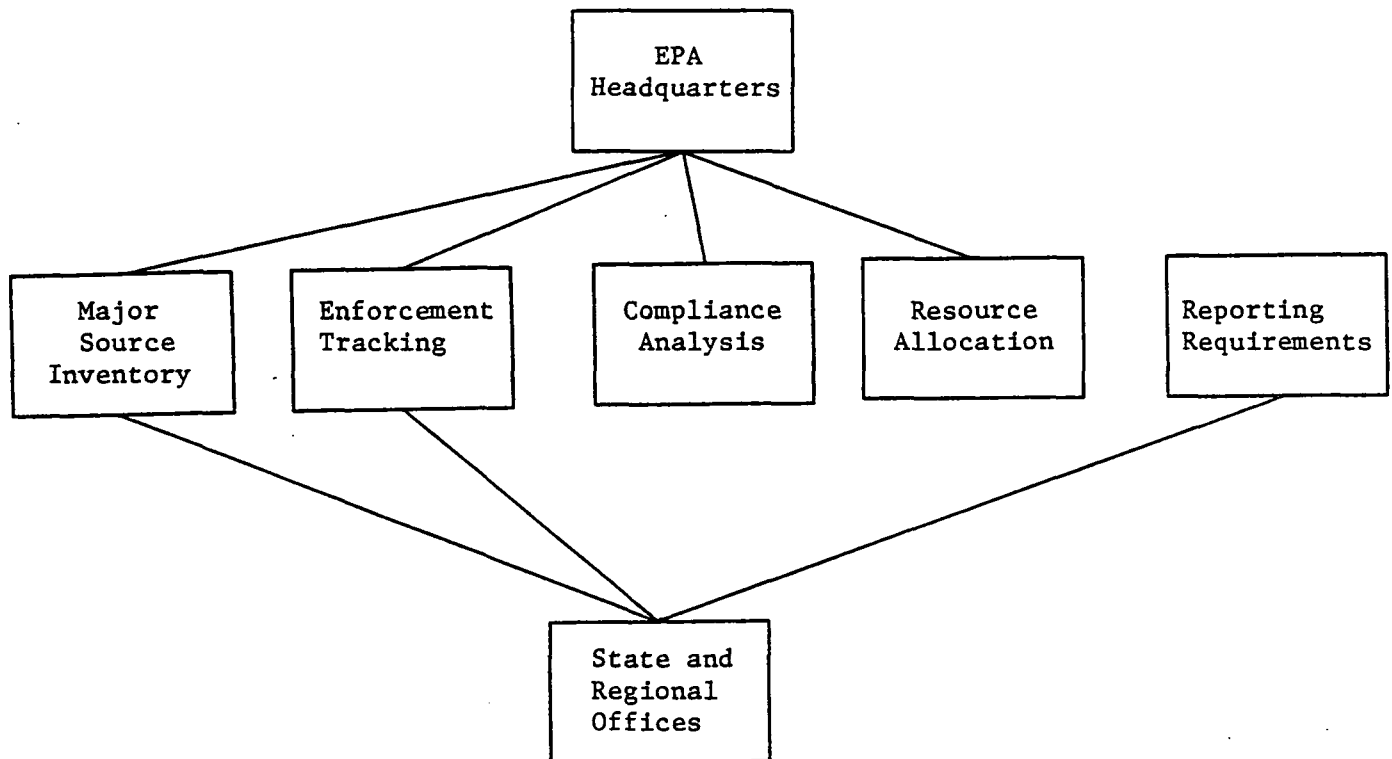


Figure 2-1. CDS System Functions as used by Headquarters, Region, and State Regulatory Agencies.

The update is a weekly procedure which applies valid edit transactions to the master file. The update checks for file integrity and will reject illogical master file applications of edit transactions. For example, if a valid edit "change" transaction record to action number "07" is received by the update, the record will be rejected if there is no action number "07" already on the master file. The update usually is run once per week and accepts all valid edit transactions since the previous update. Updates can be scheduled more frequently as the need arises.

Once information has been stored on the master file by the update, the retrieval procedure may be used to format and print user reports. The retrieval may be run at any time and includes a variety of user selection, sorting, and printing options. Information on the retrieval is contained in the CDS User's Guide, available from the CDS Data Base Coordinator in the Stationary Source Compliance Division in Washington, DC.

The CDS EDP function chart is pictured in Figure 2-2.

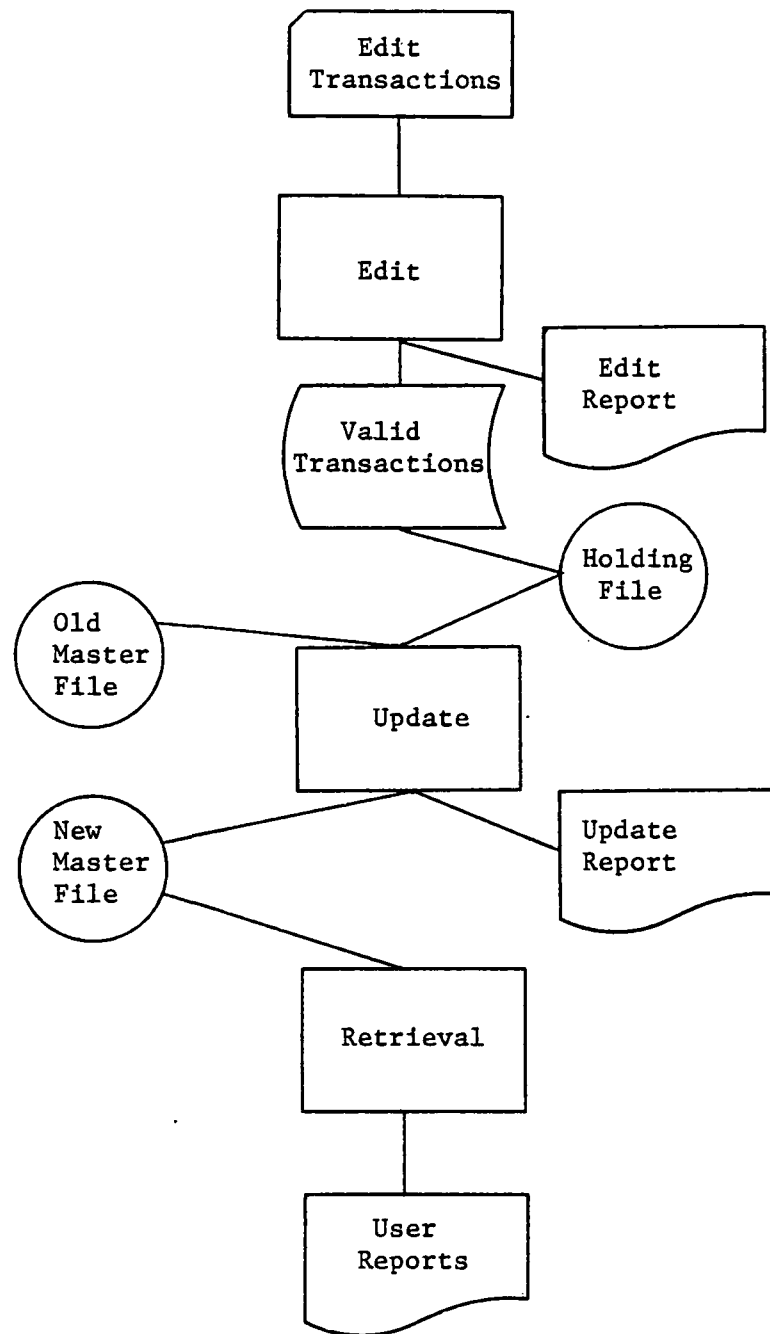


Figure 2-2. CDS EDP Functions.

3.0 INPUT CARD EXPLANATION

This section explains the transactions which can be input to CDS. A detailed description of each item, including the valid values and their meanings, can be found in the Appendix to this manual.

3.1 Data Fields

All input data to the CDS must be prepared in the format of one of the eight card layouts shown in Figures 3-1 and 3-2. These are the only formats that the system will accept.

Each card must have columns 1-19 (Region, State, County, Source, Point, Action Number, Card Code) and column 80 (Update Code) entered correctly. The following sections define data elements that are unique for each card code. (Items marked with an asterisk (*) in the Remarks column are required for new entry.)

MULTIPLE-CARD LAYOUT FORM

EFFECTIVE: June 1, 1984

Company _____

Application **CDS INPUT LAYOUT** by _____

TRC

Date **June 1984**

Job No. _____

Sheet No. _____

-6-

CARD 4, 6, 8																	CARD 7																	CARD 5																	CARD 3																	CARD 2																	CARD 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EFFECTIVE: June 1, 1984

COMPLIANCE DATA SYSTEM CODING SHEET

[illegible]

Figure 3-2: Sample Coding Sheet.

3.1.1 All Card Types

To enter data on any card in CDS, the following data fields must have correct and valid values coded:

_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	80
REGION	STATE	COUNTY						SOURCE	NUMBER				EMISSION	ACTION	CARD				UPDATE
CODE	CODE	CODE											POINT NO.	NUMBER	CODE				CODE

Card Columns	Data Field Name	Data Type	Remarks
1 - 2	Region	Numeric	Refer to Appendix Page A-2 which shows the region locations and the states associated with each region. *Required for new entry.
3 - 4	State Code	Numeric	State codes are found in the SAROAD manual. Refer to Appendix Page A-4 for a list of the state abbreviations associated with each State code. *Required for new entry.
5 - 6	County Code	Numeric	County codes are found in the SAROAD manual. All valid county codes are present on the CDS county code/AQCR table; any new county codes must be added to this table. To obtain a copy of this table, follow directions in Chapter 10 of the CDS User's Guide. *Required for new entry.
9 - 13	Source Number	Numeric	Source number is a facility identifier. Refer to Appendix Page A-6 to correctly assign a new source number to a facility. *Required for new entry.
14 - 16	Emission Point Number	Numeric	For card codes 1, 2, 3, and 4, the emission point number is a constant "000". Unique emission point numbers are assigned to each pollutant emitted from a physical emission point. Refer to Appendix Page A-7 for instructions regarding emission point number assignments. *Required for new entry.

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
17 - 18	Action Number	Numeric	Action numbers must be "00" for cards types 1-6 and greater than zero for card types 7-8, the action data cards. Refer to Appendix Page A-8 for instructions on assigning action numbers on card types 7-8. *Required for new entry.
19	Card Code	Numeric	Valid values are 1, 2, 3, 4, 5, 6, 7, and 8. *Required for new entry.
80	Update Code	Alphabetic	Valid values are "N", "C", or "D". Refer to Appendix Page A-10 for an explanation on the use of these values. *Required for new entry.

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
27 - 46	Source Name	Alphanumeric	Source name is used to identify a facility. Refer to Appendix Page B-3 for instructions on naming a facility and a list of standard and useful abbreviations. *Required for new entry.
47 - 66	Street Address	Alphanumeric	Street Address is the actual location of the facility.
67	**RDE1	Alphanumeric	User supplied.
68	**RDE2	Alphanumeric	User supplied.
69	**RDE3	Alphanumeric	User supplied.
70 - 74	**RDE4	Alphanumeric	User supplied.
75 - 79	**RDE5	Alphanumeric	User supplied.
80	Update Code	Alphabetic	Valid values are "N", "C", or "D".

****Note on Regional Data Element fields (RDE_):** These are user-supplied fields and their purposes may differ among regions. Make sure all CDS users in your region are using the fields for the same purpose; this also includes using uniform values for these fields.

3.1.3 Card Type 2

This card is used to enter additional source related information.

[illegible]

Card Columns	Data Field Name	Data Type	Remarks
20 - 34	City Name	Alphanumeric	Abbreviations, if used, should be consistent. *Required for new entry.
35 - 39	Zip Code	Numeric	If unknown, refer to a U.S. Postal Zip Code Directory.
40 - 54	State Registration	Alphanumeric	If used consistently, this can be used to sort CDS facilities in the same order as the state files are sorted.
55 - 58	NEDS XREF	Alphanumeric	This is a very important element to code when entering a new source code in CDS. 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 the CDS User's Guide. *Note - If a CDS source number has been entered properly, the last four positions of the source number should correspond to the NEDS Cross-Reference. *Required for new entry.

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
59 - 62	SIC Code	Numeric	This is a very important data element to code when entering a new source; it refers to the primary product or service produced at the facility. SIC codes may be obtained from manufacturing directories or the most recent SIC directory, published by: Government Printing Office, Superintendent of Documents, Washington, DC 20402. *Required for new entry.*
64	Governmental Facility Code (FEDF)	Numeric	This code is used to identify facilities owned or operated by a government unit. Valid values are blank, 0-5. Refer to Appendix Page C-7 for an explanation of each value.
65	Air Program Code (APCD)	Alphanumeric	Valid values are 0-9, C. Refer to Appendix Page C-8 for an explanation of each value. *Required for new entry.*
66	Air Program Status (APST)	Alphanumeric	Used mainly for NSR, PSD, and NESHAPS sources; this code represents the status of a facility for a given air program code. Valid values are O, P, C, D, R, S, T, X. Refer to Appendix Page C-9 for an explanation of these values.
67 - 76	RDE6	Alphanumeric	User supplied.
77 - 79	Staff	Alphanumeric	This code is a 3-position code which represents the person or group assigned to monitor the facility. These codes must exist on the personnel table maintained by the national Data Base Coordinator (DBC). Please call the DBC to add, change, or delete a code on this table.
80	Update Code	Alphabetic	Valid value is "C".

3.1.4 Card Type 3

This card is used to add or change pollutant compliance data on CDS master file. Multiple card type 3's may be used to enter only pollutant compliance data for facilities producing more than three different pollutants.

Up to ten different pollutants may be stored on the master file for one facility. The five pollutants subject to SIP regulations - PT, SO₂, HC, CO, and NO_x - are always stored in this order on the master file. There are five more available areas to which you may enter pollutants other than those subject to SIP regulations. Again, the order or sequence in which you enter this information makes no difference.

When adding or changing information to a certain pollutant, you must use the pollutant ID as the key or reference to the information you need to add or change. The position the pollutant has in the master file has no impact on how you enter the data on card type 3. For example, if you need to change information associated with the pollutant "HC" which appears third on the master file, you need not use the third position for entering pollutant information on card type 3 - you may use the first set of boxes on the card.

When deleting information for a specific pollutant, enter the pollutant ID and code an asterisk in the field of information that you want deleted. If you want to delete all information from a pollutant, enter a "D" in the field labelled "DROP". When using either method for deleting pollutant information, the Update Code in column 80 must be "C" for change.

You can never enter a "D" in the Update column, column 80, when deleting data on card 3; nor will you be able to enter an "N" in column 80 when entering data on this card. Card type 3 is generated by the system when a new

source or a new card type 1 is entered in the master file regardless if any information is being added on card type 3 at this time. Also, a card type 3 cannot be deleted unless a card type 1 delete is entered to remove an entire source from the master file. All information for card type 3 must be entered into the master file with a "C" in column 80.

Facility Capacity, RDE9-RD12, Source Classification Code (CLAS) and Loading Derivation Code (LDRC) are data elements on card type 3 that are not pollutant specific - only one value per source for each of these elements can be stored on the master file at one time.

21	22	23	24	25	26	27	28	29					33
PISA	PLLT	DROP	PCMS	RD14	PCLS	PAQC		LOADING					
POLLUTANT 1													

34	35	36	37	38	39	40	41					45
PLLT	DROP	PCMS	RD14	PCLS	PAQC		LOADING					
POLLUTANT 2												

46	47	48	49	50	51	52	53				57	58				64
PLLT	DROP	PCMS	RD14	PCLS	PAQC		LOADING					FACILITY CAPACITY				
POLLUTANT 3																

65						71	72	73	74	75	76	77	78	79	80
						RDE9		RD10	RD11	RD12	CLAS	LDRC	UPDATE		CODE

Card Columns	Data Field Name	Data Type	Remarks
21	Penalty Issue Addressed Indicator (PISA)	Alphanumeric	See Appendix page D-1 for definition and usage.

Card Columns	Data Field Name	Data Type	Remarks
22 - 23 34 - 35 46 - 47	Pollutant ID Identifier (PLLT)	Alphanumeric	Must be coded for each pollutant produced by a facility. Refer to Appendix Page D-2 for a listing of valid pollutant identifiers.
24,36,48	Pollutant Delete Flag (DROP)	Alphanumeric	Entering a "D" in this field along with the pollutant code will remove all information on the master file for that pollutant for the facility.
25,37,49	Pollutant Compliance Code (PCMS)	Alphanumeric	Must be coded for each applicable pollutant. This compliance status should represent the worst-case compliance status of all emission points producing that particular pollutant. Refer to Appendix Page D-4 for a list of valid codes and their explanations.
26,38,50	RD14	Alphanumeric	User supplied.
27,39,51	Pollutant Classification (PCLS)	Alphanumeric	This assigns a source classification code to an individual pollutant in the repeating pollutant area. Valid values are 1, 2, B, U.
28,40,52	Pollutant Air Quality Control Indicator (PAQC)	Alphanumeric	<p>This code indicates whether or not a source emits a criteria pollutant for which the AQCR is nonattainment. It must be coded as follows:</p> <ol style="list-style-type: none"> 1. Leave a blank or enter an "A" if the facility does not contribute to the nonattainment status of the AQCR for this pollutant. 2. Code "N" if the facility impacts the emission standards for this pollutant in a nonattainment AQCR. 3. Code "1" if the facility impacts the primary emission standards only for the pollutant "SO₂" in a nonattainment AQCR.

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
			4. Code "2" if the facility impacts the secondary emission standards only for pollutants "PT" or "SO ₂ " in a nonattainment AQCR.
			5. Code "U" if the impact of this pollutant on the nonattainment status of the AQCR is unclassified.
29 - 33	Pollutant	Numeric	This represents the actual emissions in tons per year with no decimals or fractions. It is coded starting to the right of the field; leading zeroes may be used.
41 - 45	Loading (LOAD)		
53 - 57			
58 - 64	Facility Capacity	Numeric	This indicates the total output capacity of the products produced at a plant. Refer to Appendix Page D-9 for the units of measure used in this field.
65 - 71	RD9	Alphanumeric	User supplied.
72 - 73	RD10	Alphanumeric	User supplied.
74 - 75	RD11	Alphanumeric	User supplied.
76	RD12	Alphanumeric	User supplied.
77 - 78	Source Classification Code (CLAS)	Alphanumeric	This code is based on the Alabama Power Decision definition of a major source and is used for program planning purposes. Refer to Appendix Page D-14 for a list of valid values and coding considerations. *Required for new entry.
79	Loading Derivation Code (LDRC)	Alphabetic	This must be coded for all class A1 sources. This code indicates the method of emissions estimation used to determine the source classification code for the source. Valid values are A, P, I, and blank; refer to Appendix Page D-15 for an explanation of these values. *Required for new entry.
80	Update Code	Alphabetic	Valid value is "C".

3.1.5 Card Type 4

This is a comment card used to add additional comments about the entire source. This card type is also used for Mailing Label information. Up to ten lines of comments may be entered (Line Nos. 0-9) for an existing source. Mailing Label information if required is entered on separate Line Nos. A and B.

Comment information will be entered as new, an "N" in column 80, unless a change to an existing comment line is necessary. Any line of comment entered must have a valid line number.

20	21	79	80
LINE		SOURCE COMMENTS		UPDATE
NO.				CODE

Card Columns	Data Field Name	Data Type	Remarks
20	Line Number	Numeric	Assign comment line numbers sequentially beginning with 0. Use a Source Data Report or run a Quick Look Report of comments lines to determine if a source has had previous information entered. A line number of "A" or "B" indicates the mailing address of a source if it is different from the street and city on cards 1 and 2; this is used primarily for the creation of mailing labels. *Required for all entries.
21 - 79		Alphanumeric	Code all comment information related to the entire source (free-form).
80	Update Code	Alphabetic	Valid values are "N", "C", or "D".

Comment cards for Mailing Label information will be entered in the following formats:

[illegible][illegible]

Card Columns	Data Field Name	Data Type	Remarks
20	Line Number	Alphabetic	Value 'B' for Mailing Label - Address Information.
21 - 40	Street Name	Alphanumeric	Street Name (address) for Mailing Labels.
41		Blank	No data entered here on line 'B'.
42 - 56	City Name	Alphanumeric	City Name for Mailing Labels.
57		Blank	No data entered here on line 'B'.

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<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
58 - 59	State	Alphabetic	State Abbreviation for Mailing Labels.
60		Blank	No data entered here on line 'B'.
61 - 65	Zip Code	Numeric	Zip code for Mailing Labels.
66 - 79		Blank	No data entered here on line 'B'.
80	Update Code	Alphabetic	Entire source (free-form).

Point 000 contains compliance status and emission category information for the entire source. The system generates the 000 point when a new card 1 is added, so if any information is entered into the master file by card 5 for point 000 after card 1 has been entered, it must have an Update Code of "C" in column 80.

- 4 -

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
1 - 13	Source Identifier	Numeric	Refer to "All Card Types" (Section 3.1.1).
14 - 16	Emission Point Number	Numeric	Valid values are 000-999.
17 - 18	Action Number	Numeric	Constant "00" for card type 5.
19	Card Type Number	Numeric	Constant "5".
20 - 27	SCC Code	Numeric	This code is the NEDS source classification code which provides a detailed analysis of the process creating the emission for a point. Refer to the NEDS coding manual for a list of valid values. All eight positions should be coded on all points other than 000.
28 - 29	Capacity Code (CAPC)	Numeric	This is required for coal-fired boilers other than electrical utilities provided that the boiler has a heat input capacity equal to or greater than 100 MMBtuH.
30	Compliance Status Code (CMST)	Numeric	This code indicates whether a source is in compliance, not in compliance, or whether the compliance status is unknown. The compliance status on point 000 should reflect the worst-case compliance of any process within the source. The compliance status on all other points should reflect the compliance of that particular point. Refer to Appendix Page E-3 for a list of valid values and their explanations. *Required for new entry.
31	State Implementation Plan Code (SIPC)	Numeric	This codes identifies the type of enforcement schedule which has been imposed on a source not in compliance. Refer to Appendix Page E-5 for a list of valid values and their explanations. *Required for new entry.

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
32 - 33	Pollutant Code (PLUT)	Alphanumeric	Necessary for all new emission points. It indicates the type of pollutant which that particular emission point emits. Refer to Appendix Page E-6 for a list of valid pollutant codes. *Required for new entry.
34 - 48	State Regulation	Alphanumeric	This contains the state's emission regulation for a given point. Refer to Appendix Page E-7 for valid values.
49	RD15	Alphanumeric	User supplied.
50 - 74	Process Description	Alphanumeric	This is a brief description of a specific physical emission point. At point 000, this may be used to describe the type of facility. Names and abbreviations should be concise and uniquely describe the emission point.
75 - 77	Multiple Cross-Reference (MULT)	Numeric	When one physical emission point has several CDS emission point numbers, this field is used to tie together the various numbers referring to one physical point. If emission points 010, 011, and 012 refer to three different pollutants being emitted from one process or piece of equipment, points 011 and 012 should cross-reference point 010.
78	RDE7	Alphanumeric	User supplied.

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
79	Procedural Compliance (CMS2)	Alphanumeric	This is used for all NSR, PSD, NSPS, NESHAP, 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. It is also used to indicate the compliance of an operating facility subject to immediately effective emission regulations. Refer to Appendix Page E-12 for a list of valid values and their explanations.
80	Update Code	Alphabetic	Valid values are "N", "C", or "D".

3.1.7 Card Type 6

This is a comment card used to add additional information about an emission point. Up to ten comment lines (0-9) may be entered for a single emission point number. New comments must be entered with an "N" in column 80.

[illegible]

Card Columns	Data Field Name	Data Type	Remarks
1 - 13	Source Identifier	Numeric	Refer to "All Card Types" (Section 3.1.1).
14 - 16	Emission Point Number	Numeric	Enter the specific emission point number to which the comment refers.
17 - 18	Action Number	Numeric	Constant "00".
19	Card Number	Numeric	Constant "6".
20	Line Number	Numeric	Each line of comment information must have a valid line number. Assign comment line numbers sequentially starting with 0. If comment lines have already been entered for a particular emission point, refer to a Source Data Report or a Quick Look Comment Line Report to determine the next valid sequential comment line number. *Required for new entry.
21 - 79	Emission Point Comments	Alphanumeric	Code all comment information relating to the specific emission point number (free-form).
80	Update Code	Alphabetic	Valid values are "N", "C", or "D".

3.1.8 Card Type 7

This card is used to add information regarding actions taken by the local, state, or federal regulatory agencies. Each region has its own table of valid action types and is responsible for informing the National Data Bank Coordinator of any changes to the table. Refer to Headquarters guidance material for instructions on inclusion of specific actions.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
1	13	14 15 16	17 18	19
REGION-STATE-COUNTY-SOURCE NUMBER		EMISSION POINT NO.	ACTION NO.	CARD NO.
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
20	34	46	52	53 54
OPTIONAL ACTION DESCRIPTION USED WITH ATPE 00		PENALTY AMOUNT		ACTION TYPE
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
55	60	61	66	67 68 69
DATE ACHIEVED		DATE SCHEDULED		STAFF CODE
				RESULTS CODE
				RDE8
				UPDATE CODE
				80

Card Columns	Data Field Name	Data Type	Remarks
1 - 13	Region-State-County-Source	Numeric	Refer to "All Card Types" (Section 3.1.1).
14 - 16	Emission Point Number	Numeric	Enter the 'specific emission point number affected for the action. Use 000 for actions which apply to the entire source.
17 - 18	Action Number	Numeric	Action numbers should be assigned sequentially starting with "01" and ending with "98". Action number "99" may be used if the next sequential action number is not known. The system will convert the "99" to the next action number for that emission point.

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
19	Card Number	Numeric	Constant "7".
20 - 34	Optional Action Description	Alphanumeric	This field is used only when an action type "00" is coded. Action type "00" is used when no action type exists on the action table for the action. This description is optional; action type "00" will be accepted without this description field entered.
46 - 52	Penalty Amount	Numeric	This indicates the civil penalty amount imposed on a facility and should only be used with action types Z4 (State civil penalty) and Z6 (Federal civil penalty). Dollar amounts should be right justified and rounded to the nearest \$100. No commas, dollar signs, or periods may be used.
53 - 54	Action Type	Alphanumeric	This is a two position identifier for an action description. Each region has its own action type table which can be obtained by following the procedures described in Chapter 10 of the CDS User's Guide. Please inform the national DBC of any adds, changes, or deletes needed for your action table. *Required for new entry.
55 - 60	Date Achieved	Numeric	This data indicates when an action has been performed or completed. The format is month, day, year, in which month must be between 01-12, day must be between 01-31, and year must be greater than 60.
61 - 66	Date Scheduled	Numeric	This date indicates when an action is to be performed. The format is month, day, and year, in which month must be between 01-12, day must be between 01-31, and year must be greater than 60. *Required for new entry.

<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
67 - 69	Staff Code	Alphanumeric	This is a three position code which refers to the staff member assigned to complete the action. All valid codes must be on the personnel table. Please inform the national DBC of any additions, changes, or deletions to this table. Follow the instructions in Chapter 10 of the CDS User's Guide to obtain a current copy of the personnel table.
70 - 71	Results Code	Numeric	This code indicates whether or not an action has been achieved or whether another action should be referred to. This code must exist on the results code table; any additions, changes, or deletions for your regional table must be made known to the national DBC. Refer to the instructions in Chapter 10 of the CDS User's Guide to obtain a current copy of the results code table.
72 - 73	RDE8	Alphanumeric	User supplied.
80	Update Code	Alphabetic	Valid values are "N", "C", or "D".

3.1.9 Card Type 8

This card is used to enter additional information about actions already in the master file or those actions that are being added with the comments. Ten lines of comments (0-9) may be added for a specific action.

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _			
1	13	14	15	16	17	18	19	20
REGION-STATE-COUNTY-SOURCE NUMBER		EMISSION POINT NO.		ACTION NO.		CARD NO.		LINE NUMBER

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _	
21			79	80
ACTION COMMENTS			UPDATE CODE	

Card Columns	Data Field Name	Data Type	Remarks
1 - 13	Region-State-County-Source	Numeric	Refer to "General Coding" (first section).
14 - 16	Emission Point Number	Numeric	Enter the three position emission point number to which the action comment refers to.
17 - 18	Action Number	Numeric	Enter the exact action number that you want the action comment to refer to. Note: If two or more actions (card type 7) have been entered as New for the same point number with an action number "99" to obtain the next sequential action number, you may not enter a comment line with an action number "99" - the comment may be entered on the wrong action number.
19	Card Number	Numeric	Constant "8".
20	Line Number	Numeric	Assign comment line numbers sequentially starting with 0. Use a Source Data Report or run a Quick Look Report of comments lines to determine if an existing action has had previous information entered. *Required for new entry.

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<u>Card Columns</u>	<u>Data Field Name</u>	<u>Data Type</u>	<u>Remarks</u>
21 - 79	Action Comments	Alphanumeric	Code all comment information relating to the specific action type (free-form).
80	Update Code	Alphabetic	Valid values are "N", "C", or "D".

4.0 SCHEDULE OF DATA INPUT

4.1 Quality Assurance Outline

Eight Steps in Quality Assurance

CDS quality assurance procedures can be thought of as an eight step process. CDS data managers are responsible for all of the eight steps. They are as follows:

4.1.1 Status of Data to be Input

Examine source documents - when possible cross-reference source documents to determine the validity of the documents.

4.1.2 Status of Current Data on File

Run CDS retrievals to determine what data are on the CDS data file. The retrievals should reflect data elements affected by the information being prepared for input.

4.1.3 Code Data

1. Analyze and determine best input medium.
 - Coding sheets.
 - Data Entry Package on Minicomputer or WYLBUR.
 - WYLBUR Entry Package.
2. Code changes; prior to making changes be absolutely sure of results of changes; do not assume anything.
 - New data.
 - Change data.
 - Delete data (a deletion of an entire record will delete any data elements under it in the file hierarchy).

4.1.4 Random Check of Coding Data

1. Verification.

- At this stage, perform verification on approximately 50 percent of all data.
- Verification should be done by another employee.

4.1.5 Input to Edit

1. Submit all transactions to CDS edit.

2. Choose "dummy" or production mode of edit.

- Dummy Edit will edit data and produce a report, but not affect the actual master file.
- Production (or live) edit will edit data, produce a report and create a file of transactions to be applied to the master file in the update cycle.

4.1.6 Validate Edit Results

1. Review Edit Reports.

2. Make corrections immediately.

4.1.7 Enter into Update Cycle

1. Review Update Report.

2. Correct errors immediately.

4.1.8 Validate Update Cycle Results

1. Check before and after retrievals.
2. Check final retrievals against source documents.
 - Verify 10 percent of all data worked on.

4.1.9 Key Considerations

4.1.9.1 Priorities in Quality Control

Ideally, all data in the data base should be correct; however, keep in mind that some data elements are more important than others. These priorities usually involve all major sources and selected minor sources within nonattainment areas. After these priorities are met, an effort should be made to standardize the following data elements: company name, street address, and process description. There is some guidance on abbreviations in the CDS manual. The key to standardizing data elements is consistency. If you abbreviate "company" as "CO" on one source, do not abbreviate it as "COMP." on another source. After these data elements are unified, other data elements should be reviewed as needed for specific enforcement programs. Items in this category might include SIC code, NEDS cross-reference, procedural compliance, SIP code, and Government Facility code.

4.1.9.2 Understanding the Data

When entering the data into a system, you must be careful to follow the rules and conventions for particular data elements. Often it may be necessary to consult a manual. For instance, there is a big difference in CDS if pollutant loads are reported in hundreds, thousands, or millions of tons per year. Further, there are data elements that are left and right justified.

There are fields where a decimal point in the field will be meaningful and fields where it is not. All conventions (e.g., number of implicit errors in a field) are mentioned in the CDS User's Guide and the Appendix to this manual.

When dealing with source documents, make sure that you understand what data are on these documents. For example, EIS printouts contain emission headings titled "allowable" and "estimated." It is necessary to understand the difference between these two sets of numbers and which set is applicable to CDS.

4.2 Methods of Entering Data

All input data to the CDS must be prepared in the format of one of the eight card layouts. These are the only formats the system will accept. There are several ways in which data can be input to CDS. Data may be entered using actual 80-column cards keypunched from coding sheets, modified coding sheets, or formatted retrievals; special terminal techniques using WYLBUR; minicomputer packages; the EMS-to-CDS converter; or interface files from state CDS installations.

4.2.1 Data Submission Using 80-Column Keypunched Cards

Data is either coded on data entry sheets, modified data entry sheets, or retrievals.

These are sent to be keypunched and then submitted through a card reader using the appropriate JCL for running the Edit Program. The JCL for running the Edit Program is shown in Figure 4-1. Allow plenty of time to have the data sent to the keypunch service and returned for submission to the weekly

AUTHOR		TRC		PROGRAM NAME		CDS EDIT		TASK NUMBER																																																			
JCL for using the CDS Edit with card input.																																																											
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		
/	/	i	i	i						J	O	B		(a	a	a	a	C	D	S	Y	P	,	M	i	i	i)	,	'	U	S	E	R		I	D	'																				
/	*	R	O	U	T	E				P	R	I	N	T				R	M	T	r	r																																					
/	/	C	D	S	E	D	I	T		E	X	E	C		C	D	S	I	P	T	n	,	P	A	R	M	=	'	n	n	s	s		'																									
/	/	E	D	I	T	.	C	A	R	D	S	I	N		D	D	*																																										
Place all input transaction immediately after the above JCL card.																																																											
/	/																																																										
/	*	E	O	F																																																							

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

Where:

- iii Is the User's Identification.
- aaaa Is the User's Account Number.
- rr Is the User's Remote Number.
- n Is the User's Region Number or State Code;
Valid Values are 1-10, TN, SC, NE, etc.
- nn Is the User's Region Number; Valid values
are 01-10.
- ss Is the User's State Code, where applicable;
valid values are SC, TN, NE, etc., contractor
Identifier TR or TRC for TRC, GE for GEOMET, etc.

Figure 4-1. CDS Edit Job Control.

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

4.2.2 Data Submission Using Special WYLBUR Techniques

WYLBUR can be used in conjunction with the CDS retrieval to create input punch card formats for the CDS edit. It is not wise to use this method of submission for new facilities or highly changeable data; but when a uniform add, change, or delete must be made to a 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 master file records which must be changed, WYLBUR can be used to create the desired input.

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

1. Formulate the retrieval selection criteria cards which will create a Quick Look Report and 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.
2. 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:

	/*ROUTE	PRINT	RMT255
Card Columns	1	10	16

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

? RUN UNN FETCH

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 note your job number; it will be used to fetch the job into your work space on WYLBUR.

An example of input that can be prepared by use of a retrieval and WYLBUR reformatting is inspections.

If a user wishes to schedule inspections for all sources that have had an inspection the previous year, the user would submit a retrieval selecting the appropriate action type and date range.

10 ATPE M XX Where XX is the action type for
the inspection

10 DTAC G 100181 or suitable date range.

10 DTAC L 093082

The user would request a Quick Look Report with any source level data element on the 40 card to develop a line of data to work with on WYLBUR. Be sure not to use NOHD on this particular retrieval.

40 SNME

After submitting the retrieval and allowing a suitable time for the retrieval to have been processed, sign on to WYLBUR and enter the following commands.

FETCH nnnn CLEAR Where nnnn is the job number of
your retrieval

LIST LAST To show total number of report
data lines

DELETE NOT '000 00' IN ALL To remove other than data lines
from your work area (this will
look for the point number and
action number on the report lines
and delete everything else)

NUMBER To resequence file and show total
number of records. Last line
listed on terminal should be same
as total number of Quick Look
Report lines shown in LIST LAST
above.

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CHANGE ' ' To ' ' NOLIST	To remove spaces from data in work area
CHANGE 1 TO 'rr'	Where rr is region number
CHANGE 17/133 TO '997'	This will setup the action number to assign the next sequential action number and will set the card code to 7 for actions
CHANGE 53/54 TO 'aa'	Where aa is the appropriate action type code for the inspection being scheduled
CHANGE 61/66 TO 'MMDDYY'	Where MMDDYY is the date scheduled for the inspections, in the format of month, day, year
CHANGE 80 TO 'N'	This will set the update code to N for new transactions
COPY ALL TO .1 FROM #EDIT	This will copy your edit job control (JCL) to the front of your transactions
RUN UNN	Your data set is now ready to be saved if you wish to save it.

This will submit input transactions to schedule inspections for the entire source (point 000) for all sources that had inspections in the previous date period.

As an aid in converting retrieval output into CDS input transactions, users are urged to create two data sets on their WYLBUR source libraries for the input JCL and the retrieval JCL.

4.2.3 Data Submission Using Minicomputer Packages

This method is an automated means for entering data in CDS by using the Regional Office DEC PDP 11/70 minicomputer. The user enters the data through a CRT terminal which then performs the CDS edit and displays any errors. All edited data is stored in the PDP 11/70 master file and is then sent to NCC to be submitted to the weekly CDS update.

The following explanation covers the most common CDS entry package in use throughout the regions. Small differences in terminal features may be noted from region to region.

Description of Screens

There are ten separate screens in the CDS Data Entry Package. They are:

- 1) KEYFORM - This is the first screen. It prompts the user for the state number, county number, and source ID number.
- 2) CDSMENU1 - This is the second screen which comes up automatically after the keyform is filled. It asks the user for the card type (types 1-8) that is needed. The "card type" reflects the eight separate cards which have always been used for CDS data entry.
- 3) FORM 1 - Card Type 1: Facility (source) level data.
- 4) FORM 2 - Card Type 2: Additional facility data.
- 5) FORM 3 - Card Type 3: Pollutant compliance data for the facility.
- 6) FORM 4 - Card Type 4: Facility comment record.
- 7) FORM 5 - Card Type 5: Emission point data.
- 8) FORM 6 - Card Type 6: Point comment data.
- 9) FORM 7 - Card Type 7: Enforcement actions for emission point.
- 10) FORM 8 - Card Type 8: Action comment record.

There are two Form No. 4 cards used to code in mailing label information which includes contact name, telephone number, address, city, state, and zip code. This information is coded using the letters "A" and "B" for the line numbers. Since this information is not entered very often, a separate screen has not been written to facilitate automatic entry into the proper card columns. It is therefore necessary to use the space bar and keep track of where the cursor is positioned in order to enter the data properly.

Card A contains: Manager's Name -- Col. 21-40
Telephone Number -- Col. 49-62

Card B contains: Street Name -- Col. 21-40
City Name -- Col. 42-56
State Abbreviation -- Col. 58-59

In order to enter mailing label data, the user must do the following:

- 1) Sign onto the CDS Data Entry Package and enter the key items for the facility you want to enter label data for.
- 2) Select Card Type 4.
- 3) Enter accept code which is an asterisk (*).
- 4) Enter the letter "A" to the prompt: "ENTER TEXT LINE NUMBER"; this will automatically put the cursor in column 21.
- 5) Enter Card A data using card description above, making sure to keep track of columns.
- 6) Enter Update Code.
- 7) Card B data is processed the same way. After you enter the letter B to the prompt: "ENTER TEXT LINE NUMBER"; the cursor will be in column 21. Use the above description for Card B to place data in the proper columns. Enter Update Code.
- 8) Send both cards to the PDP 11/70 master file using the PF1 key.

Use of the Package

- 1) Sign on to the PDP 11/70 computer.
- 2) In response to PDS>, type: DEP CDS. This brings you into the CDS Data Entry Package. The keyform will appear after a few seconds to enter the state, county, and source ID codes for the facility you want to enter data for.
- 3) When the keyform is filled in, the screen will automatically change to the CDSMENU1 form. You then enter the card type for the card you want to enter.
- 4) After a card type is entered, the screen automatically switches to the card type you have selected. You can then begin entering your data. If you wish to save data, you must always enter an asterisk (*) to the prompt: "ENTER THE ACCEPT CODE".
- 5) On the "card type" forms (1-8), the key (from the keyform) will always appear at the top of the screen. The form(s) will appear in the middle of the screen; and prompts, notes, and error messages will appear at the bottom of the screen. As you fill in data in response to the prompts, it will appear in the form in the middle of the screen. If you enter an invalid data element, an error will appear.
- 6) Most card type forms have "repeating sections" (cards 3, 4, 5, 6, 7, and 8) - they will automatically repeat the card form you are in until you send the data to the computer. Sending the data from a completed form is accomplished by pressing the PF1 (program function 1) key on the upper right side of the keyboard. If a form is missing a critical data element, it will not be sent. An error message will appear, and you must satisfy editing criteria before you can send the form.
- 7) To get out of the package, use the tab key or press CONTROL Y. When you reenter PSD> type LOGOUT, and you will be signed off the system.

Special Function Keys Definitions

- PF2 Key - This key will erase the copy of the form from the PDP 11/70 master file. When you press the PF2 key, the screen responds with, "DO YOU REALLY WANT TO ERASE THE CURRENT COPY OF THE FORM?" A response of "Y" (for yes) will initiate the erase.
- PF3 Key - Will duplicate current fields from a previous related field, if the field is the same size and will accept the same data.
- LINE FEED - Accept current form and blank all fields but key fields (the first 19 characters on the card). This permits more data with the same key values to be entered without reentering the key fields.
- DELETE - This key will delete the previously entered character in current field (if any).
- RIGHT ARROW - Will advance to the beginning of the next field within a form.
- LEFT ARROW - Will advance to the beginning of the previous field within a form.
- UP ARROW - Advances to the beginning of previous line (up) or advance to beginning of the next line backwards, that has an input field.
- DOWN ARROW - Advances to the beginning of the next line containing an input field.
- CONTROL P - Will proceed (skip) to the next section in the form (used on the card 3 form).
- CONTROL B - Proceed to the beginning of current section or beginning of previous section, if already at beginning of current section.
- CONTROL F - Set to beginning of the current form.
- CONTROL G - Erase current entries on this form. The currently displayed form is blanked and restored to its original condition.
- CONTROL T - Return to the beginning of the next less deeply nested section.

CONTROL Y - Terminate the data entry session and exit from the data entry processor. Answer "Y" (for yes) to the prompt displayed after CNTL Y.

Retrieving, Modifying, or Deleting Data

The data entry processor for CDS can also be used to retrieve, modify, or delete data on the PDP 11/70 master file at any time before it is sent to NCC by the Edit program. If you enter a key for a facility and then select a card type (1-8), you will automatically bring up any records on the PDP 11/70 master file for this same card which may have already been entered for this facility. The key will appear on the screen in the card form you have selected. If you wish to modify this record, simply change the field(s) desired and resend the form by pressing the PF1 key. You can step through any form using the arrow keys. If you wish to delete this record entirely, press the PF2 key, answer "Y" to the prompt: "DO YOU REALLY WANT TO ERASE THE FORM?", and this record will be deleted from the PDP 11/70 master file.

For forms with multiple lines, you can delete any one line by deleting the asterisk (*) in the first column for the line you want deleted and pressing the PF1 key. This sends the form back to the PDP 11/70 master file, but does not send the line without the asterisk. For example, suppose you entered five lines of text yesterday on card 4 for a particular facility, and you now want to delete one of those lines of comments. Sign onto DEP, enter the key fields for this facility, and select card 4. All five lines of text which were entered the previous day on card 4 for this facility will appear on the screen. Delete the asterisk (*) from the card you want deleted and then press

the PF1 key. Four lines of text (those with the asterisk) will be sent back to the PDP 11/70 master file. The line without the asterisk will not be sent and is deleted.

Using the Line Feed Key

If you need to enter more data than a form will accept, you can use the line feed key. For example, if you have seven lines of text and the form only provides for five lines of text, press the line feed key and then enter the remaining two lines of text. The line feed key, like the PF1 key, will send the complete form to the PDP 11/70 master file, but it will also regenerate a fresh copy of the current form for you to continue on. You can then type in the remaining two lines and send them to the PDP 11/70 master file using the PF1 key.

Running a CDS Edit

To run a CDS edit from the CRT terminal, the following instructions should be followed:

- 1) Sign onto the PDP 11/70 minicomputer.
- 2) Type in the following command: RUN CDS001.

The run time will appear on the screen, and the program will start. The number of transactions being sent through the edit will appear next to the words -- "TOTAL RECORDS SORTED"; the program will continue; and the messages: "YOUR JOB HAS BEEN SUBMITTED TO NCC, A TRANSACTION REPORT WILL BE PRINTED"

should appear on the screen. This means that all the transactions that have been entered through the CDS Data Entry Package have been gathered up and sent to NCC. A regular CDS Edit Report will be generated as well as a local transaction report called CDS.CDS.

If any error messages appear on the screen when you are running this CDS edit, notify the system manager, make sure to write them down. If an edit fails, do not try again.

Once this Edit Program (CDS001) has been run, the PDP 11/70 master file is erased which means you cannot retrieve, modify, or delete data with the Data Entry Package since it has already been sent to NCC.¹

4.2.4 EMS-to-CDS Converter

The EMS-to-CDS Converter is a stand-alone program which creates card-image input to the CDS based on data contained on the EMS master file. Once data has been prepared for the Enforcement Management System, it is no longer necessary to recode and repunch the same data for the Compliance Data System. The converter provides an automated link between the two systems.

The converter is run on request as often as necessary to copy data from the EMS master file to the CDS. The basic run parameters of the converter are provided by a control card which indicates the starting and ending dates of data eligibility on the EMS master file.

¹Zemaitis, Tom; "Computing Data System, Data Entry Package and Report Retrieval Package on PDP 11/70 - User Documentation." 7-81.

Input to the program is the EMS master file and converter control card. After the control card has passed the syntax edits, each detail record on the EMS master file is processed. Eligibility is determined by two criteria:

- 1) The presence of an "A" or "C" in the retrieval code (refer to coding form) on the master file source record, and
- 2) The comparison between the data on the master file record and the date on the control card.

The EMS master file contains two data elements which are not found in CDS. The date-added (columns 157-162 of the EMS record) represents the date on which the record was first added to the master file; date-changed (columns 174-179 of the EMS record) represents the most recent date on which the record was changed. If the retrieval code on the source record contains an "A" or "C", and if the date-added on a new record or the date-changed on a change record falls within the control card's reporting period, the record will be formatted for conversion.

When the entire EMS master file has been read, four totals are printed: the EMS master file record count, the output punched card count, and the converter report line count and page count.

The converter output report serves as an audit trail to indicate which EMS records have been passed to CDS. It should be reviewed by the Data Bank Coordinator and later by the corresponding EPA regional office. These reviews are needed to ensure that the state agency is satisfied that the data is ready to pass and that the region is satisfied that the data is ready to be added to CDS.

The Control Card Layout

The converter control card must be present for the converter program to begin processing. This card makes sure that the right version of the EMS master file is being used for the conversion and it also provides the program with the starting and ending dates for conversion eligibility.

This card must be made out as follows:

<u>Card Column</u>	<u>Length</u>	<u>Data Name</u>	<u>Value</u>
1 - 2	2	Control Indicator	"ZZ"
3 - 12	10		Spaces.
13 - 18	6	Current Date	Today's Date; MMDDYY format.
19	1		Space.
20 - 25	6	Starting Date	This is the beginning date for the converter. Records placed on or after this date will be eligible for conversion. The format is MMDDYY.
26	1		Space.
27 - 32	6	Ending Date	Records placed on the EMS master file on or before this date will be eligible for conversion. The format is MMDDYY.
33 - 35	3		Spaces.
36 - 55	20	Control Card ID	"EMS-to-CDS Converter".
56 - 63	8		Spaces.
64 - 73	10		"EMS Serial".
74	1		Space.
75 - 80	6	EMS Serial Number	EMS Master Serial Number.

Action Type Conversion

Because the action codes for EMS and CDS are not compatible, a conversion table in the program must be created. The program must be recompiled whenever there are additions or changes to the action codes, regardless of whether the changes are to the state or regional action codes.

4.2.5 Interface Files from State CDS

States which have their own version of CDS installed on their state computer have an interface program to report to national CDS. The interface program selects sources to be reported to CDS, converts the state actions to EPA actions (similar to the EMS-to-CDS Converter), and produces a computer tape of CDS transactions. This tape is sent to the EPA regional office and entered into CDS using the JCL for running the Edit Program as shown in Figure 4-4 of this manual.

4.3 Edit Processing

4.3.1 Edit Program Usage

Once data for the CDS 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 between update cycles. 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.

When running the CDS edit, users may identify their data by the ORIGIN Code, as indicated in Figure 4-1 by the letters. If data being input is from

a state report, users can identify the state as the ORIGIN of the data by coding the region number and state abbreviation in the "PARM" statement of the Execute card (Figure 4-1). If ORIGIN code is not specified, the data is identified as being entered by the region.

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 2000 cards per week, an ideal schedule would be:

1. Punch cards are delivered to the regional CDS data manager or to the operator of the communications terminal as soon as possible.
2. Input cards together with appropriate JCL cards are submitted to NCC on the day that they are received.
3. The Edit Report is examined on the following day.
4. Edit errors are corrected and resubmitted after being examined.

If the volume of input transactions is over 2000 cards per week, or if 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.

4.3.2 Edit Error Messages

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.

All of the errors identified by the Edit Program are listed in Table 4-1. All error messages preceded by three asterisks indicate a fatal error. Error messages preceded by one asterisk indicate a warning error.

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.

TABLE 4-1

EDIT ERROR MESSAGES

Data Element Name	Message	For Detailed
		Explanation, See CDS User's Guide Page
Region	*** INVALID REGION CODE	A-24
State	*** INVALID STATE CODE	A-52
State	*** STATE NOT IN REGION	A-52
County Code	*** INCORRECT COUNTY CODE FOR STATE	A-9
Source Number	*** SOURCE NUMBER MUST BE NUMERIC	A-48
Card Code	*** INVALID CARD CODE	A-92
Update Code	*** INVALID UPDATE CODE	A-96
Emission Point Number	*** EMISSION POINT MUST BE ZEROS	A-64
Action Number	*** ACTION NUMBER MUST BE ZEROS	A-76
Source Name	*** SOURCE NAME REQUIRED ON NEW ENTRY	A-46
Line Number	*** LINE NUMBER MUST BE NUMERIC	A-94
Update Code	*** UPDATE CODE D INVALID FOR CARD 2 & 3	A-96
Emission Point	*** EMISSION POINT MUST BE NUMERIC	A-64
	*** POINT MUST BE GREATER THAN ZERO	
Compliance Status	*** INVALID COMPLIANCE STATUS CODE	A-59
Action Number	*** ACTION NUM MUST BE GREATER THAN ZERO	A-76
	*** ACTION NUMBER MUST BE NUMERIC	A-76
Action Type	*** INVALID ACTION TYPE	A-77
Update Code	*** NO DATA IN COL 21-79 FOR DELETES	A-96
Action Type	*** ACTION TYPE REQUIRED FOR NEW ENTRY	A-77
Update Code	*** DO NOT DELETE POINT 000	A-96
Update Code	*** UPDATE R ONLY FOR REVISED ACTION	A-96
Action Number	*** ACTION NUM 99 VALID ONLY FOR A NEW	A-76
Source Name	*** SOURCE NAME MUST BEGIN IN COL 27	A-46
	*** INVALID REGION ON CONTROL CARD	A-46
AQCR	* INCORRECT AQCR FOR COUNTY	A-5
City Code	* CITY CODE SHOULD BE NUMERIC	A-7
Zip Code	* ZIP CODE SHOULD BE NUMERIC	A-57
SIC Code	* SIC CODE SHOULD BE NUMERIC	A-37
Government Facility Code	* INVALID FEDERAL FACILITY CODE	A-12
Air Program Code	* INVALID AIR PROGRAM CODE	A-1
Staff Personnel Code-Source	* INVALID STAFF CODE	A-50
SCC Code	* SCC SHOULD BE NUMERIC	A-71
SIP Code	* INVALID SIP CODE	A-72
Pollutant Code	* INVALID POLLUTANT CODE	A-18, 67
Emission Category	* INVALID EMISSION CATEGORY	A-62
Multiple Cross Reference	* MULTIPLE XREF SHOULD BE NUMERIC	A-65
Date Achieved	* INVALID DATE ACHVD - OUTPUT ZEROS	A-78
Date Scheduled	* INVALID DATE SCHED - OUTPUT ZEROS	A-81
	* DATE SCHED SHOULD BE NEW - OP ZEROS	A-81

TABLE 4-1 (Continued)

EDIT ERROR MESSAGES

Data Element Name	Message	For Detailed Explanation, See CDS User's Guide Page
Results Code	* INVALID RESULTS CODE	A-86
Update Code	* ASTERISKS FOR CHANGES	A-96
Action Type	* ACT DESC IGNORED - ATPE NOT OO	A-77
Pollutant Delete Flag	* INVALID POLLUTANT DELETE FLAG	A-22
	* NO DATA TO FOLLOW DELETE FLAG	A-22
Pollutant Compliance	* INVALID POLLUTANT COMPLIANCE	A-19
Air Program Status	* INVALID AIR PROGRAM STATUS	A-3
AQCR Indicator	* INVALID AQCR INDICATOR	A-16
Pollutant Emission Category	* INVALID POLLUTANT EMISSION CATEGORY	A-20
Procedural Compliance	* INVALID CMS2 CODE	A-68
Penalty Amount	* PENALTY AMOUNT ONLY ON Z() ACTIONS	A-84
Penalty Amount	* PENALTY AMOUNT SHOULD BE NUMERIC	A-84
Capacity Code	* CAPACITY SHOULD BE NUMERIC	A-6, 58
Source Compliance Code	* INVALID SOURCE COMPLIANCE CODE	A-41
Source Emission Category	* INVALID SOURCE EMISSION CATEGORY	A-44
Loading Derivation Code	* LOADING DERIVATION SHOULD BE A, P	A-13

For a detailed explanation of the valid values for each data element in the CDS, 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 are not validated by the edit and may contain any alphanumeric characters.

4.3.3 Sample CDS Edit Report

A sample Edit Report is shown in Figure 4-2. 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.

Note that 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 master file together with all the other input data.

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.

EFFECTIVE: June 1, 1984

COMPLIANCE DATA SYSTEM EDIT REPORT									
REGION 4-ATLANTA									
TRANSACTIONS ENTERED ON 02/16/84 BY 11111									
PAGE 001									
.....									
RG	ST	CNTY	SKCL	PNT	AN	TR	CRD	UPDATE	ENTER MESSAGE
0	0	0	0	0	0	0	0	0	0
12	34	56	78	90	12	34	56	78	90
.....									
04	01	0940	00007	000	00	4	1COAL PREPARATION PLANT		D
04	01	0940	00007	000	00	5	0 PT	2COAL PREPARATION PLANT	C
04	01	0940	00007	001	00	5	30501099 0 PT	2COAL PREPARATION PLANT	N
04	01	0600	05001	000	00	1			D
04	01	0600	05001	000	00	5	PT 02		A2
04	01	0600	05001	000	00	4	IMAYHE SHUTDOWN-CURRENT STATUS UNKNOWN		N
04	01	0600	05001	000	00	5	0 PT	0COAL TIPPLE	C
									*** INVALID STATE CODE
00	01	0600	05001	001	00	5	0 PT	2COAL LOADING	N
									*** INVALID REGION CODE
04	44	2220	00003	000	00	1			C
04	44	2220	00003	000	00	2	WHITWELL		C
04	44	2220	00003	000	00	3	PT 03 S2 02		C
04	44	2220	00003	000	00	4	1COAL PREPARATION PLANT		N
04	44	2220	00003	000	00	5	0 PT	3COAL PREPARATION PLANT	C
04	44	2220	00003	001	00	5	30501099 0 PT	3CRUSHER	N
04	44	2220	00003	002	00	5	30501099 0 PT	3CONVEYORS (2)	N
04	44	2220	00003	003	00	5	0 PT	3SIZING	N
04	44	2220	00003	004	00	5	0 PT	3WASHING PLANT	N
04	44	2220	00003	005	00	5	0 PT	3LOADING	N
									*** INVALID UPDATE CODE
04	44	2220	00003	006	00	5	0 S2	2BOILER	N
04	44	1200	04100	000	00	1			C
04	44	1200	04100	000	00	2	DAISY-DALLAS		C
04	44	1200	04100	000	00	3	PT 03		C
04	44	1200	04100	000	00	4	MAIL: 316 N RAILROAD ST DAYTON TN 36327		N
04	44	1200	04100	000	00	4	2CURRENT STATUS UNKNOWN		N
04	44	1200	04100	000	00	5	3 PT	3COAL TIPPLE	C
04	44	1200	04100	001	00	5	30501099 0 PT	3CRUSHER	N
04	44	1200	04100	002	00	5	30501099 0 PT	3CONVEYOR	N
04	44	1200	04100	003	00	5	30501099 0 PT	3SCREENS	N
04	44	1200	00053	000	00	1	007 WIGGINS COALTRKING RT.1		N
04	44	1200	00053	000	00	2	TRACY CITY 37307	00351211	N
04	44	1200	00053	000	00	3	PT 02		C
04	44	1200	00053	000	00	5	0 PT	2COAL TIPPLE	N
04	44	1200	00053	001	00	5	30501099 0 PT	2CRUSHER	N
04	44	0600	05076	000	00	1	007 BEN CREEK GRAINS INC DAYTON SPUR ROAD		N
04	44	0600	05076	000	00	2	CROSVILLE 30550	00761211	N
04	44	0600	05076	000	00	3	PT 03		C
04	44	0600	05076	000	00	5	0 PT	3COAL TIPPLE	N
04	44	0600	05076	001	00	5	0 PT	3UNLOADING	N
04	44	0600	05076	002	00	5	0 PT	3STORAGE (RAW COAL)	N
04	44	0600	05076	003	00	5	30501099 0 PT	3CRUSHER	N
04	44	0600	05076	004	00	5	30501099 0 PT	3STORAGE & CONVEYOR	N
04	44	0600	05076	005	00	5	30501099 0 PT	3RAILROAD LOADING	N
04	44	0600	05076	000	00	1	007 WHITE HICKORY		N

Figure 4-2. Sample Edit Report.

4.3.4 Edit Job Control Language (JCL)

To execute the Edit Program, use the JCL shown in Figure 4-1. 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 4-3.
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 4-4.
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 80 character card image of the rejected input transactions. If the Reject File is placed on a WYLBUR data set for corrections, the corrected file can be resubmitted as input to the edit. Use the JCL shown in Figures 4-5 and 4-6.
4. Submitting Input via Retrieval and WYLBUR. If input data can be formatted with WYLBUR from a Retrieval Quick Look Report, JCL can be added to the data set in order to run the edit. Use the procedures shown in Figure 4-7. This option should be used only if the user is already familiar with basic JCL and WYLBUR concepts.

4.4 Reading and Correcting Update Cycles

4.4.1 Update Processing

The update cycle consists of a series of programs which apply input transactions to the master file. All input transactions which contain no fatal errors are stored on the MOD File by each run of the Edit Program.

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

```

    iii Is the User's Identification.
aaaaa Is the User's Account Number.
    rr  Is the User's Remote Number.
    n   Is the User's Region Number or State Code;
        valid values are 1-10, SC, TN, NE, etc.

```

Figure 4-3. Using the Edit's Dummy Option.

Where:

Figure 4-4. Input from Tape.

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

```

    iii Is the User's Identification.
aaaaa Is the User's Account Number .
    rr  Is the User's Remote Number.
    n   Is the User's Region Number or State Code;
        Valid Values are 1-10, TN, SC, NE, etc.

```

Figure 4-5. Saving the Reject File.

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

```

    iii Is the User's Identification.
aaaaa Is the User's Account Number.
    rr  Is the User's Remote Number.
    n   Is the User's Region Number or State Code;
        Valid Values are 1-10, TN, SC, NE, etc.

```

Figure 4-6. Printing the Reject File.

EFFECTIVE: June 1, 1984

```
COMMAND ? let 1426 clr
COMMAND ? lls
1. 08.13.53 JOB 176A RACIHT: USER=EPAEXC GRP=A026 A=A026CDSYP FB=36
2. 08.13.53 JOB 176A SHASP173 EPAEXC05 STARTED - INIT 12 - CLASS A
3. 08.13.57 JOB 176A MCC0051 * JOB EPAEXC05 ENDED 12/31/81 AT 08:13:57, P=2/P/E
4. 08.13.57 JOB 176A SHASP195 EPAEXC05 ENDED
5. 1 1 //EPAEXC05 JOB (A026CDSYP,H...)
COMMAND ? del not "05" 2/3 in all
COMMAND ? lls
90. 05 14 1540 00715 000
91. 05 14 1540 01039 000
92. 05 14 1540 02124 000
93. 05 14 1600 00003 000
COMMAND ? set length=80
COMMAND ? set terminal width=132
COMMAND ? ch " " to " " in all nol
COMMAND ? lls
90. 0514154000715000
91. 0514154001039000
92. 0514154002124000
93. 0514160000003000
COMMAND ? ch 80 to "c" in all nol
COMMAND ? lls
90. 0514154000715000
91. 0514154001039000
92. 0514154002124000
93. 0514160000003000
COMMAND ? ch 50/68 to "electrical services" in all nol
COMMAND ? lls
90. 0514154000715000 ELECTRICAL SERVICES
91. 0514154001039000 ELECTRICAL SERVICES
92. 0514154002124000 ELECTRICAL SERVICES
93. 0514160000003000 ELECTRICAL SERVICES
COMMAND ? ch 17/19 to "005" in all nol
COMMAND ? lls
90. 0514154000715000005 ELECTRICAL SERVICES
91. 0514154001039000005 ELECTRICAL SERVICES
92. 0514154002124000005 ELECTRICAL SERVICES
93. 0514160000003000005 ELECTRICAL SERVICES
COMMAND ? col .1
0.1 ? //epaexci5 job (a026cdsyp,mexc),"input reg 5"
0.2 ? /*route print r37
0.3 ? /*entl cds5,exc
0.4 ? //edit exec cdsipt5,type="dummy","parm="05tr"
0.5 ? //cardin dd *
0.6 ? ...
COMMAND ? lls
0.1 //epnexc15 job (a026cdsyp,mexc),"input reg 5"
0.2 /*route print r37
0.3 /*entl cds5,exc
0.4 //edit exec cdsipt5,type="dummy","parm="05tr"
0.5 //cardin dd *
90. 0514154000715000005 ELECTRICAL SERVICES
91. 0514154001039000005 ELECTRICAL SERVICES
92. 0514154002124000005 ELECTRICAL SERVICES
93. 0514160000003000005 ELECTRICAL SERVICES
COMMAND ? run uuu
138 IS YOUR JOB NUMBER.
```

Figure 4-7. Sample WYLBUR Session to
Convert Retrieval Output into Input to CDS Edit

During the update cycle, all transactions placed on the MOD File since the last update cycle are applied to the master file by the Update Program. The update cycle is usually scheduled by the national DBC to run on Wednesday nights.

4.4.2 Update Program Description

Prior to the Update Program, all input transactions from the MOD File are sorted into the same sequence as the master file. The output master file from the previous update cycle becomes the input master file to the current cycle. The update applies input transactions to the master file to produce a new version of the master file 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 master file, the update performs the following steps:

1. The records on the input master file are copied to the output master file until an input master file 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 master file record already exists for that record identifier, the input transaction is rejected since the update cannot perform the add logic.
3. If an input master file record does not exist for that record identifier, the transaction is formatted into an output master file record.

To change an existing record on the master file, the update performs the following steps:

1. The records on the input master file are copied to the output master file until the record identifier on the input master file is equal to or greater than the record identifier on the change transaction.
2. If there is an input master file record with the same record identifier as the input transaction, the data on the transaction is applied to the input master file. After all multiple change transactions have been applied to the input master file record, it is then placed on the output master file.
3. If there is no input master file 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 master file record with a Card 3 change transaction to avoid rejects.

To delete an existing record from the master file, the update performs the following steps:

1. The records on the input master file are copied to the output master file until the record identifier on the input master file is equal to or greater than the record identifier on the delete transaction.
2. If there is no input master file record with the same record identifier as the input transaction, the delete transaction is rejected.
3. For a comment delete, the input master file record which matches the record identifier of the input transaction is not copied to the output master file.
4. For an action delete, input master file records with the same Region, State, County, Source, Point, and Action numbers as the delete transaction are not copied to the output master file.
5. For an emission point delete, input master file records with the same Region, State, County, Source, and Point numbers as the delete transaction are not copied to the output master file.

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

The Update will reject input transactions under the following conditions:

- Because of the master file hierarchy, an action cannot be added to the master file without a corresponding emission point, nor can an emission point be added to the master file without a corresponding source record. Comments cannot be added without their corresponding source, point, or action records.
- A delete and a change transaction for the same record identifier cannot be applied to the master file during the same update cycle. The change transaction will be rejected.

In addition to applying adds, change, and deletes to the master file, the update also performs a table lookup on all personnel codes on the master file. No change transactions need to be coded to change personnel names on the CDS master file. Whenever a name associated with a personnel code is changed by the national DBC, 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 of the CDS User's Guide for a full description of the personnel code processing.

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

4.4.3 Update Scheduling

The scheduling and maintenance of the update cycle is the responsibility of the national DBC. Once a week, on Wednesday night, the valid transactions on the MOD File are applied to the CDS master file by the Update Program. The

update is scheduled for approximately 9:00 p.m. EST. 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 regional user requests 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 DBC will inform all CDS users of the change.

On Thursday mornings and 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 4.4.6, and then users should obtain their Update Reports by using the JCL described in Section 4.4.6 or by contacting the CDS operations contractor, TRC.

4.4.4 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 noon on the day following an update, then the user may request his Update Report by submitting the Update Report Job Control described in Figure 4-8. 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 available. A new report replaces the previous week's report on the disk file. TRC keeps copies of weekly Update Reports on its files; however, the user should keep his own file of weekly Update Reports.

Where:

```

iii   Is the User's Identification.
aaaa  Is the User's Account Number.
rr    Is the User's Remote Number.
n     Is the User's Region Number or State Code;
      Valid Values are 1-10, TN, SC, NE, etc.

```

Figure 4-8. CDS Up Report Job Control.

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 master file. 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 4-9. The title, region number, and output serial numbers 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 is rejected. Update error messages are listed in Table 4-2. The origin of 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	A state code is placed in this column if a state entered the data into CDS.
TR, TRC	TRC
GE, GEO	Geomet
iii	Regions may choose to use their staff personnel codes.

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UPDATE REPORT

04/09/82

COMPLIANCE DATA SYSTEM
 KENTUCKY DATA FOR REGION 4 - ATLANTA
 OUTPUT SERIAL 584

PAGE 2

STATE CODE	CHTY CODE	SOURCE CODE	CH PT	ACT NO	CARD CODE	CARD COLUMNS:	UPDT CODE	UPDATE ACTION	ERROR MESSAGE
0	1	2	3	4	5	6	7	8	
34	567R	90123	456	7R	9	0123456789012345678901234567890123456789	0		B = MULTIPLE CHANGE 0316
1R	0200	00040	000	00	3		B	C	CHANGED
1R	0200	00041	000	00	3		B	C	CHANGED
1R	0200	60010	000	00	3		A2	C	CHANGED
1R	0340	00078	000	00	3		B	C	CHANGED
1R	0340	00079	000	00	3		B	C	CHANGED
1R	0340	00081	000	00	3		B	C	CHANGED
1R	0340	60009	000	00	2	2048	B	C	CHANGED
1R	0340	60009	000	00	3		A2	C	CHANGED
1R	0340	60079	000	00	3		B	C	CHANGED
1R	0340	70079	000	00	1	RICHARD M. JOHNSON	B	C	CHANGED
1R	0340	70079	000	00	3		B	C	CHANGED
1R	0340	70081	000	00	3		B	C	CHANGED
1R	0340	70081	000	00	3		B	C	CHANGED
1R	0400	00009	000	00	3		B	C	CHANGED
1R	0400	00009	000	00	3		B	C	CHANGED
1R	0400	00015	000	00	3		A2	C	CHANGED
1R	0620	00001	000	00	2	3251	B	C	CHANGED
1R	0620	00009	000	00	3		B	C	CHANGED
1R	0620	00033	000	00	3		B	C	CHANGED
1R	0620	00033	000	00	3		B	C	CHANGED
1R	0740	00017	000	00	3		A2	C	CHANGED
1R	0740	60001	000	00	3		A2	C	CHANGED
1R	0740	70017	000	00	3		A2	C	CHANGED
1R	1240	00010	000	00	3		B	C	CHANGED
1R	1240	00065	000	00	2	0000	B	C	CHANGED
1R	1240	00124	000	00	3		B	C	CHANGED
1R	1240	60010	000	00	3		B	C	CHANGED
1R	1240	70010	000	00	3		B	C	CHANGED
1R	1240	90112	000	00	3		B	C	CHANGED
1R	1240	90124	000	00	3		B	C	CHANGED
1R	1540	00018	000	00	1	IND. SUPPLY HOUSE	B	C	CHANGED
1R	1540	00018	000	00	2	3295	B	C	CHANGED
1R	1540	00018	000	00	3		B	C	CHANGED
1R	1540	00026	000	00	3		B	C	CHANGED
1R	1540	00028	000	00	3		B	C	CHANGED
1R	1540	60001	000	00	2	5151	B	C	CHANGED
1R	1540	60026	000	00	3		B	C	CHANGED
1R	1540	60028	000	00	3		B	C	CHANGED
1R	1540	70001	000	00	2	5151	B	C	CHANGED
1R	1640	00016	000	00	3		B	C	CHANGED
1R	1640	00030	000	00	3		B	C	CHANGED
1R	1640	00037	000	00	3		B	C	CHANGED
1R	1640	00045	000	00	3		B	C	CHANGED
1R	1640	00063	000	00	3		B	C	CHANGED
1R	1640	00067	000	00	3		B	C	CHANGED
1R	1640	00071	000	00	3		B	C	CHANGED

Figure 4-9. Sample Update Report.

TABLE 4-2

UPDATE ERROR MESSAGES

Update Error Message	Explanation
SOURCE NOT ON FILE	Cards 2 through 8 cannot be added to the master file 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 master file; 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 master file with an Update Code "N" unless there is a corresponding Card 5 on the master file. 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 master file.
ACT NUM NOT ON FILE	An action comment Card 8 cannot be added to the master file unless a corresponding action (Card 7) already exists on the master file.
NEW 2 INVALID	Card 2 can be added to the master file as new only during the same update cycle as the Card 1 is added as new. Once the source exists on the master file, use an Update Code "C" to change the data elements found on the Card 2.
DUPLICATE TRANS	If two or more transaction with the same Region, State, County, Source, Point, and Action numbers have an Update Code "N", the first transaction is added to the master file and the second and subsequent transactions are rejected with this message. A change transaction following is 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 master file record. Verify the State, County, Source, Point, and Action numbers being used on the transaction.

TABLE 4-2 (Continued)

UPDATE ERROR MESSAGES

Update Error Message	Explanation
ALREADY ON MF	A transaction with an Update Code "N" cannot be added to the master file if a master file 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 master file.
98 ACTIONS ON MF	When the next sequential action number is not known on the master file, action number 99 can be coded; the update will convert the 99 to the next highest sequential action number. To prevent the master file from going out of sequence, no action number over 98 will be added to the master file.
&(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 master file. This is not an error message; it is only a warning that multiple changes have been applied to the master file in chronological order.
S2 REJ	If one or more sets of pollutant compliance data cannot be added to the master file because there are already 10 sets of pollutant compliance data on the master file, 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 PLTY	On a change transaction, Penalty amount can be entered only for certain action types such as Z1, Z2, Z3, etc.

4.4.5 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 master file 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 4-2 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.

4.4.6 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 NCC 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 $EXCAO26.CDS.SYSOUT  
LIST
```

3. Figure 4-10 shows the contents of the log produced by following the above steps.

4.4.7 Update Report Job Control Language

The user may wish to request 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 4-10. 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 morning 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 master file; therefore, it is important to keep this report on file so that errors can be researched and corrected.

4.4.8 Critical Data Elements Report

To aid the CDS user in the update verification process, CDS produces the Critical Data Element Report during each update cycle. This report is designed to highlight significant changes in a few data elements and contains one line of data for each source that has had a critical transaction applied to it. Data elements included in the report are Source Name, Air Program

PLEASE TYPE YOUR TERMINAL IDENTIFIER
 -NNNN-PPP-
 PLEASE LOG IN: IHMEPA1NCC(CR)
 P ###
 IHM2 IS ON LINE
 ENTER TSD OR OBS
 OBS(CR)

OBS WYLBUR 6.A AT EPA TERMINAL TTY0P5 HH:MM:SS MM/DD/YY

USER ID? CDS
 PASSWORD (CURR(/NEW)) ?PASSWORDGGGGGGGG
 ACCTUID? A026CDSYT
 BIN/BOX? CDSJ

02/26/82: LISTING ALL NCC-IBM MEMOS SEE NEWS ALERT5
 03/12/82: CODE OPTION NOT SUPPORTED UNDER OBS WYLBUR SEE NEWS ALERT6
 03/15/82: WYLBUR DOCUMENTATION UPDATED SEE NEWS ALERT7

CN.EPACDS.A026.QWIK NOT ON CATLG 2 LEVELS OK
 CN.EPACDS.A026.ACTIVE NOT ON CATLG 2 LEVELS OK
 COMMAND ? USE \$EXCA026.CDS.SYSOUT
 COMMAND ? LIST

1. FIRST VALUE 821215
 2. 00000000000000000000 CDS MASTER FILE OUTPUT SERIAL 000620 ON 12/15/82
 3.
 4.
 5. UPDATE REPORT PRINT-LINES FOR REGION 01= 00471 RECORDS INPUT = 00471 ACCEPTED = 00465 REJECTED = 00006
 6.
 7. UPDATE REPORT PRINT-LINES FOR REGION 02= 00253 RECORDS INPUT = 00253 ACCEPTED = 00251 REJECTED = 00002
 8.
 9. UPDATE REPORT PRINT-LINES FOR REGION 03= 00537 RECORDS INPUT = 00537 ACCEPTED = 00531 REJECTED = 00006
 10.
 11. UPDATE REPORT PRINT-LINES FOR REGION 04= 00664 RECORDS INPUT = 00664 ACCEPTED = 00639 REJECTED = 00025
 12.
 13. UPDATE REPORT PRINT-LINES FOR REGION 05= 01005 RECORDS INPUT = 01005 ACCEPTED = 00966 REJECTED = 00039
 14.
 15. UPDATE REPORT PRINT-LINES FOR REGION 06= 00221 RECORDS INPUT = 00221 ACCEPTED = 00215 REJECTED = 00006
 16.
 17. UPDATE REPORT PRINT-LINES FOR REGION 07= 00701 RECORDS INPUT = 00701 ACCEPTED = 00467 REJECTED = 00234
 18.
 19. UPDATE REPORT PRINT-LINES FOR REGION 08= 00000 RECORDS INPUT = 00000 ACCEPTED = 00000 REJECTED = 00000
 20.
 21. UPDATE REPORT PRINT-LINES FOR REGION 09= 00597 RECORDS INPUT = 00597 ACCEPTED = 00591 REJECTED = 00006
 22.
 23. UPDATE REPORT PRINT-LINES FOR REGION 10= 00042 RECORDS INPUT = 00042 ACCEPTED = 00037 REJECTED = 00005
 24.
 25. UPDATE REPORT PRINT-LINES FOR ALL REGNS= 0004491 RECORDS INPUT = 0004491 ACCEPTED = 0004162 REJECTED = 0000329
 26.
 27. UPDATE FINISHED AT 231P
 28.

Figure 4-10. Contents of Update Status Log.

Code, Source Compliance Status, Source Classification, Source Emission Category, Action Type, and Date Scheduled. The origin of each transaction is presented at the end of each line. Figure 4-11 is an example of a Critical Data Element Report.

4.5 Keeping an Entry Log

In order to ensure that all information pertinent to stationary sources of air pollution is entered into CDS, it is recommended that each CDS Coordinator keep a log of that information. A log should contain:

- 1) A description of the information (data tape, printed report, corrections from a previous update, etc.).
- 2) The origin of the information (contractor, state system, date of previous update, inspections, etc.).
- 3) Date received by CDS Coordinator.
- 4) Date prepared for entry into CDS.
- 5) Date submitted for entry into CDS.
- 6) Date edit completed and reviewed.
- 7) Total number of transactions input.
- 8) Number of transactions accepted.
- 9) Number of transactions generated.
- 10) Total number of transactions passed to update.
- 11) Date of quality assurance (check of update report).
- 12) Results of quality assurance (number of errors).

Note: Correction of errors found in quality assurance check should reenter log as new information.

Figure 4-12 shows a sample of an Entry Log Format containing the above information.

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CRITICAL DATA ELEMENT REPORT

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COMPLIANCE DATA SYSTEM

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PENNSYLVANIA DATA FOR REGION 3 - PHILADELPHIA

OUTPUT SERIAL 605

STIE	CNTY	SRCE	APCD	SCMS	CLAS	SECT	SVIO	APTE	DTAC	SUBMITTED BY
CODE	CODE	VHR	OLD SOURCE NAME	NEW SOURCE NAME	O N	O V	O V	O N	C4	DEL CHG
39	0260	00037	FREEMPORT TERMINALS		0	4	UK	A2		GV
39	0360	00010	CRUCIBLE INC		5	9				GV
39	0560	00115	FABUAR KIYUS EXCAVAT	FABIAN LOUIS EXCAVAT	0	4	UK	3		GV
39	1520	00035	TUETGERS-NEASE CHEM	TUETGERS-NEASE CHEM						
39	1660	00051	LUDLOW FLEX PACK	GRAPHIC PACKAGING CO						
39	1660	00079	WYETH LABORATORIES		0	3				GV
39	2360	00010	PE - CHESTER							
39	2940	10169	MOTION CONTROL IND	MOTION CONTROL IND						
39	3220	00060	MARSOLINO CONSTR CO		0	4	UK	A1		GV
39	4240	00045	COLUMBIA GAS TRANS		0	4	UK	A1		GV
39	4240	00045	COLUMBIA GAS TRANS		0	4	UK	A2		GV
39	4700	00110	HIGHWAY MATERIALS #A		9	3				GV
39	4840	60001	INMETCO		1	2				GV
39	5220	00075	DARLETTA A & SONS							
39	5240	00065	ATLANTIC RICHFIELD							
39	5550	00020	GREENVILLE TBSNDV EM		9	3				GV
39	5760	00014	STANDARD STEEL							
39	6360	00045	LEHIGH VALLEY COOP	ATLANTIC PROCESSING						
39	6300	00052	FLAGG STANLEY G & CO							
39	7160	02015	FRANKLIN SMELTING							
39	8360	00050	CARBONE CORP		0	4	UK	A1		GV
39	8360	00031	COLUMBIA GAS TRANS		0	4	UK	A1		GV
39	8360	00032	COMMONWEALTH STONE		0	4	UK	A1		GV

Figure 4-11. Sample Critical Data Element Report.

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	Line Number
	Data Description
	Data Source
	Date Received by CDS Coordinator
	Date Submitted
	Date Edit Completed
	Date Edit Reviewed
	Number of Transactions Input
	Number of Transactions Accepted
	Number of Transactions Generated
	Total Transactions to Update
	Date QA Check of Update Report
	Results (No. of Errors)
	Error Re-entry Line Number

Figure 4-12: Sample Data Entry Log.

5.0 ENTERING DATA - REQUIREMENTS

5.1 Adding New Sources

Card Type 1 with an Update Code "N" is used to add a new facility to the master file. 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 master file, 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 master file.
2. Select a County Code/Source Number combination which will identify the facility by a unique number. The NEDS source numbering convention may be used 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 80. Region, State, County, and Source Number together identify a unique facility in the CDS.
4. Code Source Name, columns 27-46. If additional data elements unique to card type 1 (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.

5.1.1 Multiple Air Programs

When entering data for a facility which is subject to multiple air programs, the source must be entered once for each air program that applies.

For proper identification, follow the CDS Coding Convention for Source Number/Air Program Code source numbering (Sections 5.4.6). For each applicable air program code, be sure to enter the Air Program Code on card type 2 and follow the rules set forth in Section 5.2, Specific Air Programs and Source or Industry Types. Also, check sections in 5.1.2 - Identifying the Critical Sources for CDS Major Sources and Significant Violators.

Following is a list of the air programs reported in CDS:

SIP	State Implementation Plan
ESECA	Energy Supply and Environmental Coordination Act of 1974 superceded by FUA (1978), Power Plant and Industrial Fuel Use Act
PSD	Prevention of Significant Deterioration
NSR	New Source Review
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	New Source Performance Standards

5.1.2 Identifying the Critical Sources for CDS

5.1.2.1 Major Sources

Major sources defined in CDS per the Alabama Power decision as being Class A1 are: any stationary source whose actual emissions or potential controlled emissions while operating at design capacity exceed 100 tons per year for any regulated pollutant. Class A2 sources are: any stationary source whose actual emissions are less than 100 tons per year but whose potential uncontrolled emissions exceed 100 tons per year for any regulated pollutant.

5.1.2.2 Significant Violators

The following paragraphs are extracted from guidance sent to all regional data managers in 1982 concerning the definition of a "significant violator."

"One of the objectives of the Administrator's Accountability System for FY 1982 is that resources be used to address significant air violators and return them to compliance. This is designed to ensure that resources are used in the most environmentally beneficial manner. The purpose of this guidance is to assist regional offices and states in determining what the agency considers to be a significant violator.

In determining whether a violation is significant, the nature of the pollutant should be considered, as well as the magnitude and duration of the violation and the population exposed. While no rigid formula need be followed, the following considerations should be kept in mind.

1. A violation of a hazardous air pollutant standard resulting in emissions above the standard should normally be considered significant unless the magnitude and duration of the violation are minimal and the violation nonrecurring.
2. A source in violation of a State Implementation Plan should be considered significant if the source is of sufficient size and is located so as to impact a nonattainment area. Sources above 250 tons per year emission potential as defined in the Alabama Power case should be considered significant violators unless the magnitude and duration of the violation are minimal and the violation generally nonrecurring. (To the extent that available data do not permit easy identification of sources in excess of 250 tons/year potential, sources with more than 100 tons/year actual emissions can be used as a reasonable surrogate.) Other sources in nonattainment areas should also be included if the amount of excess emissions is considered jointly by the regional office and state as having an important impact on the continued nonattainment of the area.

3. Sources in attainment areas and not impacting nonattainment areas would not normally be considered significant because of the lack of direct health impact. While states, appropriately, should take action to resolve such violations, EPA will not give them high priority consideration.
4. Sources in violation of new source requirements, including NSPS and PSD/NSR permitting requirements, should also be considered to be significant violators unless the magnitude and duration of the violation are minimal.

As provided for in the agency's new accountability system, regional offices should meet with each of their states to jointly prepare an inventory of known significant violators. States should be encouraged to take the lead with respect to as much of the universe as possible. Wherever possible, EPA should use its resources to supplement those of the state rather than to take the lead on cases itself. This technical assistance can be either in the form of direct case assistance (if requested) or through sponsoring of technical workshops and other program building/supporting activities. EPA should assume the lead only where a state cannot or will not take the lead, despite whatever assistance EPA can provide."¹

5.2 Specific Air Programs and Source or Industry Types

5.2.1 SIP Sources

The attainment and maintenance of national ambient air quality standards is primarily the responsibility of each state pollution control agency, and

¹Bennett, Kathleen; "EPA Accountability System - ORNR Policy Guidance," 12-29-81.

each state must have an adequate State Implementation Plan (SIP) for attaining these standards on a timetable acceptable to the U.S. Environmental Protection Agency (EPA).

Each approved SIP requires the state to maintain a complete inventory of all major and selected minor stationary sources of air pollution. This inventory must include the following data:

1. Facilities that have permits to construct and permits to operate.
2. Facilities that are affected by existing SIP regulations or by proposed SIP regulations.
3. Facilities that impact nonattainment standards, New Source Review, Prevention of Significant Deterioration (PSD), National Emissions Standards for Hazardous Air Pollutants (NESHAP), New Source Performance Standards (NSPS), and other enforcement programs.
4. Legal steps which have been made to bring a non-compliant facility into compliance.
5. Enforcement actions which must be taken for facilities on a court-ordered compliance schedule.
6. The compliance category each source fits in as a result of the state's most recent inspection.

To code SIP sources in CDS, after assigning the appropriate Region, State and County codes and building the Source number from the air program code and the NEDS Source number if it is available, follow the rules found below in Section 5.2.2, Data to be Tracked for All Sources, to enter the complete information for the source.

5.2.2 Data to be Tracked for All Sources

The following list represents the recommended minimum data requirements for all SIP sources with potential uncontrolled emissions greater than 100 TPY (i.e., Class A1 and A2), and all NESHAP and new source program-subject facilities which have been entered into CDS. Each data element should be reviewed periodically to ensure completeness and accuracy.

<u>Data Element</u>	<u>Remarks</u>
1. Source Name	Misspellings should be corrected. Abbreviations must be self-explanatory and consistent. Name changes must be accompanied by a comment record indicating the former name. Multi-plant corporations should have the same corporate name followed by a plant name, e.g., USS-Clairton. The naming convention documented in the <u>User's Guide</u> Data Dictionary should be followed.
2. City	If no city name is available, the name of the post box area should be used. City names must be spelled and abbreviated consistently. If a plant is located in a specially named section of a city, the city name should be used whenever possible.
3. Zip Code	A zip code of the actual plant location should be available from a zip code directory.
4. Air Program Code	This code is used only for those portions of a facility which are subject to that air program's requirements. Accidental changes or misinterpretations of Air Program Code can allow a source to disappear from important management reports.

Data Element	Remarks
5. SIC Code	It is often difficult to determine the principal industrial activity or output for a given facility. Every effort must be made to research the principal industrial activity or output for those sources which have blanks in this field.
6. Source Classification	Categories must represent actual or potential controlled emissions on the basis of maximum operating rates per the <u>Alabama Power</u> decision definition.
7. Loading Derivation	Indicates the method of emissions estimation (potential or actual) used to determine the source classification code above (only for Class A1 sources).
8. Source Compliance Status	This must represent worst-case compliance of any point within a source. It must be constantly updated for each change in federally enforceable standards. Order of worst-case to best-case is SCMS 1-6-0-7-5-4-3-2-8-9.
9. Enforcement Actions	Figure 5-1 shows each enforcement action which should be entered into CDS. This table is updated annually in SSCD guidance materials to the regions.
10. Enforcement Dates	Both Date Scheduled and Date Achieved are critical to the accurate tracking of enforcement actions.

The above data elements represent only 10 percent of the total data elements available in CDS. The first seven are relatively static fields. Once they have been entered correctly on the CDS data base, they are not likely to change frequently. The last three are dynamic, likely to change frequently, especially for sources out of compliance with emission limitations. If users make an annual effort to verify the accuracy of the

Action Description	Source of Action	
	EPA	STATE
EPA INSPECTION	X	
EPA SOURCE TEST CONDUCTED	X	
OWNER/OPERATOR-CONDUCTED SOURCE TEST		
NESHAP WAIVER OF COMPLIANCE ISSUED	X	X
EPA PRE-NOV LETTER SENT	X	
EPA NOV ISSUED	X	
NOTICE OF NONCOMPLIANCE (SECTION 120)	X	
EPA 113(A) ORDER ISSUED	X	
113(D) DELAYED COMPL. ORDER APPROVED/ISSUED BY EPA	X	
113(D) (4) INNOV. TECH. ORDER APPROVED/ISSUED BY EPA	X	
113(D) (5) COAL CONV. ORDER APPROVED/ISSUED BY EPA	X	
1ST 119 SMELTER ORDER APPROVED/ISSUED BY EPA	X	
EPA CIVIL ACTION	X	
EPA CRIMINAL ACTION	X	
FEDERAL COURT ORDER ISSUED	X	
EPA CIVIL PENALTY ASSESSED	X	
EPA NONCOMPLIANCE PENALTY ASSESSED	X	
EPA PSD APPLICABILITY DETERMINATION	X	
EPA PSD APPLICATION COMPLETE	X	
EPA PSD PERMIT ISSUED	X	
NEW SOURCE COMMENCE CONSTRUCTION	X	X
NEW SOURCE START-UP	X	X
STATE INSPECTION		X
STATE SOURCE TEST CONDUCTED		X
STATE NOV ISSUED		X
STATE ADMINISTRATIVE ORDER ISSUED		X
STATE CIVIL ACTION		X
STATE CRIMINAL ACTION		X
STATE COURT ORDER ISSUED		X
STATE CIVIL PENALTY ASSESSED		X
STATE NONCOMPLIANCE PENALTY ASSESSED		X
STATE PSD APPLICABILITY DETERMINATION		X
STATE PSD APPLICATION COMPLETE		X
STATE PSD PERMIT ISSUED		X
OFFSET APPLICABILITY DETERMINATION		X
OFFSET PERMIT ISSUED		X

Figure 5-1. Enforcement Actions Required

first seven data elements for each source within their jurisdiction and make a quarterly effort to update the last three data elements, the CDS data base will be more usable to states, regions, and headquarters.

Data elements other than those described above may be critical to the internal management needs of a specific region or a specific state; however, these other data elements need not be included in minimum national data standards which are designed to maintain the usefulness of the data base with a minimal amount of data entry effort.

In addition to the above stated minimum data requirements for CDS, it is recommended that the State Registration Number also be entered whenever possible. The State Registration Number is an alphanumeric identifier used by the state to identify a facility.

The above minimum national standards may be augmented by regional or state requirements in order to meet specific management objectives. By entering the above process level data for selected sources, the usefulness of the CDS system will be maintained with a minimal amount of data entry effort.

5.2.3 Data to be Tracked for Selected Sources

The previous section described the data elements which are required for all CDS sources, regardless of industry or compliance status. A great deal of the system's capabilities have been designed to meet the needs of tracking special industries, special air program requirements, and special compliance situations. As a general rule, the minimum data requirements for selected sources is greater than for all sources. The following list of selected sources is accompanied by the recommended data requirements of these sources

in addition to the previously mentioned data elements. Both the list of selected sources and the data requirements for these sources is subject to guidance updates necessitated by program planning and regulation changes.

<u>Selected Source Category</u>	<u>Regional CDS Data</u>
SIGNIFICANT VIOLATORS as defined in the Bennett memorandum of 12/29/81 titled "EPA Accountability System - OANR Policy Guidance"	<p>For each violating emission point enter: Compliance Status (CMST) Point-specific Enforcement Action Process Description (PRDS) Pollutant Code (PLUT) SIP Code (if on or negotiating a compliance schedule)</p> <p>At the source level in addition to the data elements already mentioned, enter: Pollutant Air Quality Control Indicator (PAQC) Pollutant Compliance (PCMS) Pollutant (PLLT)</p>
Violating Class A1 SIP sources, NESHAP, and NSPS	<p>At the source level enter: Pollutant Air Quality (PAQC) Control Indicator Pollutant Compliance (PCMS) Pollutant (PLLT) SIP Code (if on or negotiating a compliance schedule) Air Program Status (APST)</p>
Selected priority industries regardless of compliance.	<p>All actions defined in the 8/2/83 memo on the CDS National Action Conversion Program. Consult the latest EPA guidance for a current list of priority industries such as power plants, steel mills, smelters, etc.</p>
New sources, e.g., NSPS, PSD, NSR	<p>Emission point data should be entered for the same data elements as for significant violators, if emission points have differing start-up dates. In addition, Air Program Status (APST), State Regulation (SREG), and Procedural Compliance (CMS2) should be entered.</p>

<u>Selected Source Category</u>	<u>Regional CDS Data</u>
Commercial boilers, institutional boilers, and coal-fired boilers for industries other than power plants (SIC 4911)	The SCC Code and the Capacity Code (heat input capacity in MMBtu's) should be entered.
VOC sources, sources emitting volatile organic compounds	VOC sources are of primary importance to the EPA. It is important to have at a minimum a complete inventory of Class A1 requested VOC sources. Source level data should be entered for the same data elements as for violating sources.

5.3 Maintaining Data

5.3.1 Changing Data on the CDS Masterfile

Once a record has been added to the CDS Masterfile by the update cycle, data on the master file 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 if a delete is being applied for the same card type during the same update cycle. The update will process multiple changes for an existing master file 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 master file.

Card columns 1-19, the source identification and card type code, must be coded when preparing a change transaction. However, the data elements Region, State, County, Source, Point Number and Action Number 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 master file, those records in error must be deleted and the corrections reentered with an Update Code "N". When any of the data elements in columns 20-79 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 master file.
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 80.
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 master file will not be changed.
5. Have coding sheets keypunched and submit punchcards to the CDS Edit Program.
6. Use a change transaction (not a delete transaction) to remove one or more data elements from a master file record. Data elements in columns 20 through 70 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 master file 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 master file, the incorrect data must be deleted with an Update Code "D" and the corrected card reentered with an Update Code "N".

Since asterisks are used on change transactions to blank out a data element, asterisks may not 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 master file in the update cycle.

7. An Update Code "C" should be used for adding or changing 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 master file, 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 master file 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 additions are applied by pollutant.

5.3.1.1 Sample Completed Coding Sheet for Change Transactions

Once a facility has been entered as new on the CDS master file, change transactions can be entered for records existing on the master file. Columns 1 through 19 must be the same on the change transaction as they were on the new transaction already on the master file; column 80 must be a "C" for each change transaction.

Figure 5-3 is a sample coding sheet used to change some of the data input as new in Figure 5-2. It is also used to add new records which were not created in Figure 5-2.

REGION ST COUNTY SOURCE NUMBER													COMPLIANCE DATA SYSTEM CODING SHEET																																																			
CARD CODE AQCR CITY CODE													SOURCE NAME													STREET ADDRESS													RDE1 RDE2 RDE3 RDE4 RDE5																									
0418192090001													DIAMOND-KOSMOS													US ROUTE 12																																						
000001078													CITY NAME ZIP													STATE REGISTRATION													NEDS XREF SIC													RDE6												
000002KOSMOSDALE													40272													3241													9																									
000003													PT 73													S2 42													FACILITY CAPACITY													RDE9 RD10 RD11 RD12												
000004													DIVISION OF FLINTKOTE CO																																																			
000004													PORTLAND CEMENT PLANT																																																			
000005													SUBPT KA													PROCESS DESCRIPTION													MULT XREF																									
01000530500699													75 PT3.0													PORTLAND CEMENT																																						
02000510200402													40 PT3.0-17													BOILER BURNING #6 OIL																																						
02100510200402													40 S2													BOILER BURNING #6 OIL																																						
0010061													BAGHOUSE SCRUBBER																																																			
006																																																																
001017																										01													063180																									
001027																										02													063180																									
001037																										03													063180																									
008																																																																

Figure 5-2. Sample of Completed Coding Sheet for a New Facility.

REGION ST COUNTY SOURCE NUMBER													COMPLIANCE DATA SYSTEM CODING SHEET																																																																												
1	2	3	4	5	6	7	8	9	10	11	12	13	CARD CODE													AQCR CITY CODE													SOURCE NAME													STREET ADDRESS													RDE 4					RDE 5					UPDT														
0	4	1	8	1	9	2	0	9	0	0	0	1	000001																																																																												
CITY NAME													ZIP													STATE REGISTRATION													NEDS XREF													SIC													RDE 6					STAFF					UPDT														
000002																																																																																									
POLLUTANT 1													POLLUTANT 2													POLLUTANT 3													FACILITY CAPACITY													RDE 9					RD10					RD11					RD12					CLOS					UPDT												
000003																																																																																									
LINE NO.													SOURCE COMMENTS																																								UPDT																																				
000004													2 PO BOX 753																																																																												
000004																																																																																									
EMISSION POINT NO.													SCC CODE													CAPC													PLUT													STATE REGULATION													PROCESS DESCRIPTION													MULT XREF					RDE 1					UPDT	
000005													5																																							PORTLAND CEMENT PLANT																																					
000005																																																																																									
000005																																																																																									
000005																																																																																									
EMISSION POINT NO.													LINE NO.													EMISSION POINT COMMENTS																																								UPDT																							
010006													1													SINGLE CHAMBER, GAS FIRED																																																															
010006																																																																																									
EMISSION ACTION POINT NO.													OPTIONAL ACTION DESCRIPTION USED WITH ATPE 00													PENALTY AMT													ACTION TYPE													DATE ACHIEVED													DATE SCHEDULED													STAFF					RESULTS					RDE 8	UPDT
010001													7																																							060180																															01						
020001													7																										53041580													041580																		01																			
020001													7																																																																												
EMISSION ACTION POINT NO.													LINE NO.													ACTION COMMENTS																																								UPDT																							
020001													8																																																																												

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Figure 5-3. Sample of Completed Coding Sheet for Change Transaction.

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

Card 5, point 000, contains a "7" in the Compliance Status Code on the master file. The change transaction will replace the Compliance Status Code and the Process Description; all other data on the master file record will be unchanged. On card 5, point 001, only the Compliance Status Code will be changed on the master file.

Since point 020 did not have any comments associated with it, comment 1 for point 020 is entered as new.

Action 01 for point 010 has no Date Achieved or Results Code on the master file; a change transaction will add these two fields to the master file record created during a previous update cycle.

Point 020 did not have any actions on the master file. Thus, an action 01 is added with an Update Code "N".

5.3.2 Deleting Data from the CDS Masterfile

A delete transaction contains a "D" in column 80, the Update Code; it is used to delete one or more records from the master file. A card 1 delete will remove all master file 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, if only some of

the data elements on a particular card type are to be deleted, a "C" must be entered in column 80 and asterisks placed in these fields. A "D" in column 80 will delete the entire masterfile record.

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 80. 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 80. Do not fill in columns 21-79; no data is to be added to these columns. An emission point delete will remove the emission points and all associated emission point comments, actions, and action comments. A card 5 delete for point 000 is invalid.
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 80. Do not fill in column 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. Columns 21-79 must be blank. Card column 20 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 master file by 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 not appear on any output report.

5.3.2.1 Sample Completed Coding Sheet for Delete Transactions

Master file records may be deleted from the master file by placing the same numbers in columns 1 through 19 as the new transaction used to establish that record on the master file. When an Update Code "D" is placed in column 80, no other data may be coded in columns 21 through 79.

Figure 5-4 shows three delete transactions and one change transaction. A delete for emission point 040 will remove that emission point and all associated point comments, actions, and action comments for that point.

A delete for emission point 020, comment line 1, will delete only that one particular comment record from the master file.

A delete for emission point 101, action 02, will delete one action together with any associated action comments.

To remove some data from a master file record without removing the record from the master file, 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 020, action 01, will blank out the Results Code 01 on the master file 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 master file with zeros.

EFFECTIVE: June 1, 1984

REGION, ST, COUNTY, SOURCE NUMBER													COMPLIANCE DATA SYSTEM CODING SHEET																																				
CARD CODE, AQCR, CITY CODE													SOURCE NAME, STREET ADDRESS																																				
CITY NAME, ZIP, STATE REGISTRATION, NEDS XREF, SIC, RDE1, RDE2, RDE3, RDE4, RDE5													CITY NAME, ZIP, STATE REGISTRATION, NEDS XREF, SIC, RDE6, STAFF																																				
POLLUTANT 1, POLLUTANT 2, POLLUTANT 3, FACILITY CAPACITY, RDE9, RDE10, RDE11, RDE12, CLAS, LOG													POLLUTANT 1, POLLUTANT 2, POLLUTANT 3, FACILITY CAPACITY, RDE9, RDE10, RDE11, RDE12, CLAS, LOG																																				
LINE NO., SOURCE COMMENTS													LINE NO., SOURCE COMMENTS																																				
EMISSION POINT NO., SCC CODE, CAPC, PLUT, STATE REGULATION, RDE15, PROCESS DESCRIPTION, MILT XREF, RDE1, RDE2													EMISSION POINT NO., SCC CODE, CAPC, PLUT, STATE REGULATION, RDE15, PROCESS DESCRIPTION, MILT XREF, RDE1, RDE2																																				
EMISSION ACTION POINT NO., ACTION NO., OPTIONAL ACTION DESCRIPTION USED WITH ATPE 00, PENALTY AMT, ACTION TYPE, DATE ACHIEVED, DATE SCHEDULED, STAFF, RESULTS, RDE8													EMISSION ACTION POINT NO., ACTION NO., OPTIONAL ACTION DESCRIPTION USED WITH ATPE 00, PENALTY AMT, ACTION TYPE, DATE ACHIEVED, DATE SCHEDULED, STAFF, RESULTS, RDE8																																				
EMISSION ACTION POINT NO., ACTION NO., LINE NO., ACTION COMMENTS													EMISSION ACTION POINT NO., ACTION NO., LINE NO., ACTION COMMENTS																																				
0418192080001																																																	
000001																																																	
000002																																																	
000003																																																	
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010027																																																	
7																																																	
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Figure 5-4. Sample of Completed Coding Sheet for Delete Transactions.

5.4 CDS Coding Conventions

5.4.1 Emission Point "000"

Emission point "000" is reserved for the entire source. Compliance status of the point 000 must represent worst-case compliance of any point within a source. The compliance status of the point 000 must be constantly updated for each change in federally enforceable standards. If an appropriate process description cannot be found to describe the type of plant on the point 000, the SIC code is placed in the process description. In the absence of the SIC code, "ENTIRE SOURCE" is placed in the point '000' process description. Any additional information entered on point 000 should represent the point from which the worst-case compliance was taken.

The compliance status entered on a point 000 will be automatically recorded as the source compliance status.

5.4.2 Action Number "99"

Action number "99" is used on an action level card 7 input transactions to assign the next available action number for a given point.

Example: Point 010 for a given source has actions on the master file with numbers 01, 02, 03, and 04. A card 7 input transaction with an action number 99 would be added to the master file as action number 05.

5.4.3 Action Type "00" - Optional Action Description

When a specific action type is not listed in the action table for the region, the action type is entered as "00" in columns 53-54 of the card 7.

The description of the action is then entered in the optional action description in columns 20-34 of the card 7.

5.4.4 Multiple Cross Reference

The multiple cross-reference field (card 5, columns 75-77) is used to tie together the various emission point numbers to one physical emission point. The emission point number of the first of the points would be entered into the multiple cross-reference field of each of the points from the same physical emission point. For example, if CDS points 010, 011, 012, and 013 all refer to the same physical stack, the multiple cross-reference field for all those points would be 010.

5.4.5 NEDS Source Cross Reference

Whenever a new facility is being added to CDS, the NEDS cross-reference field should 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 the CDS User's Guide.

5.4.6 Source Number/Air Program Code

NEDS Source Numbering Convention: For source numbering convenience, the last four positions of Source Number should be the NEDS Cross-Reference Number (NEDS plant ID). If this method is used, the first digit of the Source Number should be 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.

6.0 DATA SOURCES

There are various sources from which data can be extracted for input into CDS. Among these are the following:

6.1 SIC Manual

The Standard Industrial Classification Manual is produced by the Office of Management and Budget. The SIC defines industries in accordance with the composition and structure of the economy and covers the entire field of economic activities. It is revised periodically to reflect the changing industrial composition of the economy.

6.2 Other Computer Systems

6.2.1 NEDS

The National Emission Data System (NEDS) is a source/emissions data bank which is updated semiannually from reports from state agencies. Source and emissions data can be taken from NEDS for input into CDS. The NEDS source identification can be carried in the CDS NEDS Cross-Reference Number and should be used in combination with the CDS Air Program Code for developing CDS Source Numbers for new sources.

6.2.2 SAROAD

The Storage and Retrieval of Aerometric Data (SAROAD) provides the codes used in CDS for identifying states and counties with numeric codes. The SAROAD codes used to identify states can be found in the CDS User's Guide Data

Dictionary or in the Data Dictionary Appendix of this manual. The SAROAD county codes are stored in a table on the computer and can be formatted for print. See the CDS User's Guide for instructions.

6.2.3 EIS

The Emissions Inventory System/Point Source (EIS/PS) is a subsystem of the Comprehensive Data Handling System (CDHS). It contains emissions data which can be used to develop input into CDS for pollutants and emission points. This system runs primarily at the state level.

6.3 Inspection Reports

Engineer's or Inspector's Reports can be used to develop input into CDS for actions and for compliance data.

6.4 Letters of Notification

Letters of Notification such as Notice of Violations, Warning Letters, etc. can be used to develop input into CDS for actions.

6.5 Compatible State Systems

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 state 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.

7.0 QUALITY ASSURANCE REVIEW

7.1 Check of Existing Data for Validity

Status Report of Data Quality

After reviewing the source documents and running CDS retrievals, you should have a good idea of what data elements need special attention. A Status Report on the current state of the data should be kept.

In developing the report, the following items should be addressed:

Status of Data Report - Questions

7.1.1 Card 1 Data

1. AQCR
 - Should be present and complete.
2. Source Names
 - Consistency of names and abbreviations used per CDS Guidance.
3. Addresses
 - Alignment.
 - Completeness.
4. Regional Data Elements 1 - 5
 - Uniform usage in each.

7.1.2 Card 2 Data

1. City Name
 - Should be present and complete.
2. Zip Code
 - Should be present and complete.
3. State Registration Number
 - If present, should be uniform within each state.

4. NEDS Cross Reference

- Completeness.
- If present, should be combined with Air Program Code for Source numbering.

5. SIC Code

- Should be present and complete.

6. Air Program Code

- Should be present and complete.
- Should be combined with NEDS Cross Reference for Source numbering.

7. Air Program Status

- Present for all new source program-subject facilities at a minimum.

8. Regional Data Element 6

- Uniform usage if present.

9. Staff Personnel Code Source

- Completeness.

7.1.3 Card 3 Data

1. Pollutant information: Compliance, Pollutant, and Air Quality Control Indicator.

- Should be kept current for all majors and minors in non-attainment areas.

2. Loading Derivation Code

- Should be present for all Class A1 sources.

3. Source Classification Code

- Should be present for all sources.

7.1.4 Card 5 Data

1. SCC Code

- If present, should be complete and correct for boiler sources at minimum.

2. Capacity Code

- Should be present for commercial boilers, institutional boilers, and coal-fired boilers for industries other than power plants (SIC 4911).

3. Compliance Status

- Should be current and correct for violating sources.
- Should agree with Card 3 data.

4. SIP Code

- Should be present and complete for sources with SCMS = 5.

5. Pollutant Code

- Should agree with Card 3 data.

6. State Regulation

- Uniform usage as per guidance for NSPS sources.

7. Process description

- Should be accurate and complete.
- At "000" point, if Process Description contains "ENTIRE SOURCE" and SIC Description is present, replace process description with SIC Description.

8. Multiple Cross Reference

- Proper usage.

9. Regional Data Element 7

- Uniform usage if present.

10. Procedural Compliance

- Present on NSR, PSD, and NSPS sources.

7.1.5 Card 7 Data

1. Penalty Amounts
 - Present for Action Types Z4 and Z6 only.
2. Action Type
 - Action Description should be correct and, at a minimum, consistent with the 8/2/83 memo and CDS National Action Conversion Program.
3. Date Achieved
 - Should be present for all completed actions.
4. Staff Personnel Code Action
 - Completeness.
5. Regional Data Element 8
 - Uniform usage if present.

7.1.6 Other Data

1. Comment Cards (4, 6, and 8)
 - Should be numbered correctly.
 - Comments should make sense.
2. Closed Sources (APST = X)
 - Should be archived if closed for more than eight quarters.

7.2 QA Reports from CDS

Reports can be run to duplicate the formats of the CDS input card types as Figure 7-1 through 7-5 illustrate.

COMPLIANCE DATA SYSTEM

Report Request Form

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

Time _____
Date Submitted _____
Return Report to _____
Mail Stop _____

[0,1] [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] [81,82] [83,84] [85,86] [87,88] [89,90] [91,92] [93,94] [95,96] [97,98] [99,100]

Region Level Report Title

[1,0] [1,1] [1,2] [1,3] [1,4] [1,5] [1,6] [1,7] [1,8] [1,9] [1,10] [1,11] [1,12] [1,13] [1,14] [1,15] [1,16] [1,17] [1,18] [1,19] [1,20] [1,21] [1,22] [1,23] [1,24] [1,25] [1,26] [1,27] [1,28] [1,29] [1,30] [1,31] [1,32] [1,33] [1,34] [1,35] [1,36] [1,37] [1,38] [1,39] [1,40] [1,41] [1,42] [1,43] [1,44] [1,45] [1,46] [1,47] [1,48] [1,49] [1,50] [1,51] [1,52] [1,53] [1,54] [1,55] [1,56] [1,57] [1,58] [1,59] [1,60] [1,61] [1,62] [1,63] [1,64] [1,65] [1,66] [1,67] [1,68] [1,69] [1,70] [1,71] [1,72] [1,73] [1,74] [1,75] [1,76] [1,77] [1,78] [1,79] [1,80] [1,81] [1,82] [1,83] [1,84] [1,85] [1,86] [1,87] [1,88] [1,89] [1,90] [1,91] [1,92] [1,93] [1,94] [1,95] [1,96] [1,97] [1,98] [1,99] [1,100]

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

LEVEL CODES (01 CARD)

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

REPORT FORMATS (20 CARD)

QL-Quick Look
QD-Double Line QL
Q2-Double spaced QL
MS-Standard Milestone
M1-single spaced Milestone
SD-Source Data
AC-Action Summary
QT-Questionnaire
FI-Flex

REPORT FORMATS PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL
DATA ELEMENTS)

[2,0] [2,1] [2,2] [2,3] [2,4] [2,5] [2,6] [2,7] [2,8] [2,9] [2,10] [2,11] [2,12] [2,13] [2,14] [2,15] [2,16] [2,17] [2,18] [2,19] [2,20] [2,21] [2,22] [2,23] [2,24] [2,25] [2,26] [2,27] [2,28] [2,29] [2,30] [2,31] [2,32] [2,33] [2,34] [2,35] [2,36] [2,37] [2,38] [2,39] [2,40] [2,41] [2,42] [2,43] [2,44] [2,45] [2,46] [2,47] [2,48] [2,49] [2,50] [2,51] [2,52] [2,53] [2,54] [2,55] [2,56] [2,57] [2,58] [2,59] [2,60] [2,61] [2,62] [2,63] [2,64] [2,65] [2,66] [2,67] [2,68] [2,69] [2,70] [2,71] [2,72] [2,73] [2,74] [2,75] [2,76] [2,77] [2,78] [2,79] [2,80] [2,81] [2,82] [2,83] [2,84] [2,85] [2,86] [2,87] [2,88] [2,89] [2,90] [2,91] [2,92] [2,93] [2,94] [2,95] [2,96] [2,97] [2,98] [2,99] [2,100]

REPORT SEQUENCE

[3,0] [3,1] [3,2] [3,3] [3,4] [3,5] [3,6] [3,7] [3,8] [3,9] [3,10] [3,11] [3,12] [3,13] [3,14] [3,15] [3,16] [3,17] [3,18] [3,19] [3,20] [3,21] [3,22] [3,23] [3,24] [3,25] [3,26] [3,27] [3,28] [3,29] [3,30] [3,31] [3,32] [3,33] [3,34] [3,35] [3,36] [3,37] [3,38] [3,39] [3,40] [3,41] [3,42] [3,43] [3,44] [3,45] [3,46] [3,47] [3,48] [3,49] [3,50] [3,51] [3,52] [3,53] [3,54] [3,55] [3,56] [3,57] [3,58] [3,59] [3,60] [3,61] [3,62] [3,63] [3,64] [3,65] [3,66] [3,67] [3,68] [3,69] [3,70] [3,71] [3,72] [3,73] [3,74] [3,75] [3,76] [3,77] [3,78] [3,79] [3,80] [3,81] [3,82] [3,83] [3,84] [3,85] [3,86] [3,87] [3,88] [3,89] [3,90] [3,91] [3,92] [3,93] [3,94] [3,95] [3,96] [3,97] [3,98] [3,99] [3,100]

SEQUENCE LIMITED TO 40 CHARACTERS

Number of
subtotalling
data elements
on QL

39

QUICK LOOK REPORT FORMAT

[4,0] [4,1] [4,2] [4,3] [4,4] [4,5] [4,6] [4,7] [4,8] [4,9] [4,10] [4,11] [4,12] [4,13] [4,14] [4,15] [4,16] [4,17] [4,18] [4,19] [4,20] [4,21] [4,22] [4,23] [4,24] [4,25] [4,26] [4,27] [4,28] [4,29] [4,30] [4,31] [4,32] [4,33] [4,34] [4,35] [4,36] [4,37] [4,38] [4,39] [4,40] [4,41] [4,42] [4,43] [4,44] [4,45] [4,46] [4,47] [4,48] [4,49] [4,50] [4,51] [4,52] [4,53] [4,54] [4,55] [4,56] [4,57] [4,58] [4,59] [4,60] [4,61] [4,62] [4,63] [4,64] [4,65] [4,66] [4,67] [4,68] [4,69] [4,70] [4,71] [4,72] [4,73] [4,74] [4,75] [4,76] [4,77] [4,78] [4,79] [4,80] [4,81] [4,82] [4,83] [4,84] [4,85] [4,86] [4,87] [4,88] [4,89] [4,90] [4,91] [4,92] [4,93] [4,94] [4,95] [4,96] [4,97] [4,98] [4,99] [4,100]

Enter Data Elements to be Included on Report
Limited to 112 Characters with NOND Options
Limited to 110 with Standard Heading

54 57 59 62 64 67 69 72 74 77 79 81 83 85 87 89 91 93 95 97 99 101 103 105 107 109 111 113 115 117 119 121 123 125 127 129 131 133 135 137 139 141 143 145 147 149 151 153 155 157 159 161 163 165 167 169 171 173 175 177 179 181 183 185 187 189 191 193 195 197 199 201 203 205 207 209 211 213 215 217 219 221 223 225 227 229 231 233 235 237 239 241 243 245 247 249 251 253 255 257 259 261 263 265 267 269 271 273 275 277 279 281 283 285 287 289 291 293 295 297 299 301 303 305 307 309 311 313 315 317 319 321 323 325 327 329 331 333 335 337 339 341 343 345 347 349 351 353 355 357 359 361 363 365 367 369 371 373 375 377 379 381 383 385 387 389 391 393 395 397 399 401 403 405 407 409 411 413 415 417 419 421 423 425 427 429 431 433 435 437 439 441 443 445 447 449 451 453 455 457 459 461 463 465 467 469 471 473 475 477 479 481 483 485 487 489 491 493 495 497 499 501 503 505 507 509 511 513 515 517 519 521 523 525 527 529 531 533 535 537 539 541 543 545 547 549 551 553 555 557 559 561 563 565 567 569 571 573 575 577 579 581 583 585 587 589 591 593 595 597 599 601 603 605 607 609 611 613 615 617 619 621 623 625 627 629 631 633 635 637 639 641 643 645 647 649 651 653 655 657 659 661 663 665 667 669 671 673 675 677 679 681 683 685 687 689 691 693 695 697 699 701 703 705 707 709 711 713 715 717 719 721 723 725 727 729 731 733 735 737 739 741 743 745 747 749 751 753 755 757 759 761 763 765 767 769 771 773 775 777 779 781 783 785 787 789 791 793 795 797 799 801 803 805 807 809 811 813 815 817 819 821 823 825 827 829 831 833 835 837 839 841 843 845 847 849 851 853 855 857 859 861 863 865 867 869 871 873 875 877 879 881 883 885 887 889 891 893 895 897 899 901 903 905 907 909 911 913 915 917 919 921 923 925 927 929 931 933 935 937 939 941 943 945 947 949 951 953 955 957 959 961 963 965 967 969 971 973 975 977 979 981 983 985 987 989 991 993 995 997 999 1001 1003 1005 1007 1009 1011 1013 1015 1017 1019 1021 1023 1025 1027 1029 1031 1033 1035 1037 1039 1041 1043 1045 1047 1049 1051 1053 1055 1057 1059 1061 1063 1065 1067 1069 1071 1073 1075 1077 1079 1081 1083 1085 1087 1089 1091 1093 1095 1097 1099 1101 1103 1105 1107 1109 1111 1113 1115 1117 1119 1121 1123 1125 1127 1129 1131 1133 1135 1137 1139 1141 1143 1145 1147 1149 1151 1153 1155 1157 1159 1161 1163 1165 1167 1169 1171 1173 1175 1177 1179 1181 1183 1185 1187 1189 1191 1193 1195 1197 1199 1201 1203 1205 1207 1209 1211 1213 1215 1217 1219 1221 1223 1225 1227 1229 1231 1233 1235 1237 1239 1241 1243 1245 1247 1249 1251 1253 1255 1257 1259 1261 1263 1265 1267 1269 1271 1273 1275 1277 1279 1281 1283 1285 1287 1289 1291 1293 1295 1297 1299 1301 1303 1305 1307 1309 1311 1313 1315 1317 1319 1321 1323 1325 1327 1329 1331 1333 1335 1337 1339 1341 1343 1345 1347 1349 1351 1353 1355 1357 1359 1361 1363 1365 1367 1369 1371 1373 1375 1377 1379 1381 1383 1385 1387 1389 1391 1393 1395 1397 1399 1401 1403 1405 1407 1409 1411 1413 1415 1417 1419 1421 1423 1425 1427 1429 1431 1433 1435 1437 1439 1441 1443 1445 1447 1449 1451 1453 1455 1457 1459 1461 1463 1465 1467 1469 1471 1473 1475 1477 1479 1481 1483 1485 1487 1489 1491 1493 1495 1497 1499 1501 1503 1505 1507 1509 1511 1513 1515 1517 1519 1521 1523 1525 1527 1529 1531 1533 1535 1537 1539 1541 1543 1545 1547 1549 1551 1553 1555 1557 1559 1561 1563 1565 1567 1569 1571 1573 1575 1577 1579 1581 1583 1585 1587 1589 1591 1593 1595 1597 1599 1601 1603 1605 1607 1609 1611 1613 1615 1617 1619 1621 1623 1625 1627 1629 1631 1633 1635 1637 1639 1641 1643 1645 1647 1649 1651 1653 1655 1657 1659 1661 1663 1665 1667 1669 1671 1673 1675 1677 1679 1681 1683 1685 1687 1689 1691 1693 1695 1697 1699 1701 1703 1705 1707 1709 1711 1713 1715 1717 1719 1721 1723 1725 1727 1729 1731 1733 1735 1737 1739 1741 1743 1745 1747 1749 1751 1753 1755 1757 1759 1761 1763 1765 1767 1769 1771 1773 1775 1777 1779 1781 1783 1785 1787 1789 1791 1793 1795 1797 1799 1801 1803 1805 1807 1809 1811 1813 1815 1817 1819 1821 1823 1825 1827 1829 1831 1833 1835 1837 1839 1841 1843 1845 1847 1849 1851 1853 1855 1857 1859 1861 1863 1865 1867 1869 1871 1873 1875 1877 1879 1881 1883 1885 1887 1889 1891 1893 1895 1897 1899 1901 1903 1905 1907 1909 1911 1913 1915 1917 1919 1921 1923 1925 1927 1929 1931 1933 1935 1937 1939 1941 1943 1945 1947 1949 1951 1953 1955 1957 1959 1961 1963 1965 1967 1969 1971 1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 2021 2023 2025 2027 2029 2031 2033 2035 2037 2039 2041 2043 2045 2047 2049 2051 2053 2055 2057 2059 2061 2063 2065 2067 2069 2071 2073 2075 2077 2079 2081 2083 2085 2087 2089 2091 2093 2095 2097 2099 2101 2103 2105 2107 2109 2111 2113 2115 2117 2119 2121 2123 2125 2127 2129 2131 2133 2135 2137 2139 2141 2143 2145 2147 2149 2151 2153 2155 2157 2159 2161 2163 2165 2167 2169 2171 2173 2175 2177 2179 2181 2183 2185 2187 2189 2191 2193 2195 2197 2199 2201 2203 2205 2207 2209 2211 2213 2215 2217 2219 2221 2223 2225 2227 2229 2231 2233 2235 2237 2239 2241 2243 2245 2247 2249 2251 2253 2255 2257 2259 2261 2263 2265 2267 2269 2271 2273 2275 2277 2279 2281 2283 2285 2287 2289 2291 2293 2295 2297 2299 2301 2303 2305 2307 2309 2311 2313 2315 2317 2319 2321 2323 2325 2327 2329 2331 2333 2335 2337 2339 2341 2343 2345 2347 2349 2351 2353 2355 2357 2359 2361 2363 2365 2367 2369 2371 2373 2375 2377 2379 2381 2383 2385 2387 2389 2391 2393 2395 2397 2399 2401 2403 2405 2407 2409 2411 2413 2415 2417 2419 2421 2423 2425 2427 2429 2431 2433 2435 2437 2439 2441 2443 2445 2447 2449 2451 2453 2455 2457 2459 2461 2463 2465 2467 2469 2471 2473 2475 2477 2479 2481 2483 2485 2487 2489 2491 2493 2495 2497 2499 2501 2503 2505 2507 2509 2511 2513 2515 2517 2519 2521 2523 2525 2527 2529 2531 2533 2535 2537 2539 2541 2543 2545 2547 2549 2551 2553 2555 2557 2559 2561 2563 2565 2567 2569 2571 2573 2575 2577 2579 2581 2583 2585 2587 2589 2591 2593 2595 2597 2599 2601 2603 2605 2607 2609 2611 2613 2615 2617 2619 2621 2623 2625 2627 2629 2631 2633 2635 2637 2639 2641 2643 2645 2647 2649 2651 2653 2655 2657 2659 2661 2663 2665 2667 2669 2671 2673 2675 2677 2679 2681 2683 2685 2687 2689 2691 2693 2695 2697 2699 2701 2703 2705 2707 2709 2711 2713 2715 2717 2719 2721 2723 2725 2727 2729 2731 2733 2735 2737 2739 2741 2743 2745 2747 2749 2751 2753 2755 2757 2759 2761 2763 2765 2767 2769 2771 2773 2775 2777 2779 2781 2783 2785 2787 2789 2791 2793 2795 2797 2799 2801 2803 2805 2807 2809 2811 2813 2815 2817 2819 2821 2823 2825 2827 2829 2831 2833 2835 2837 2839 2841 2843 2845 2847 2849 2851 2853 2855 2857 2859 2861 2863 2865 2867 2869 2871 2873 2875 2877 2879 2881 2883 2885 2887 2889 2891 2893 2895 2897 2899 2901 2903 2905 2907 2909 2911 2913 2915 2917 2919 2921 2923 2925 2927 2929 2931 2933 2935 2937 2939 2941 2943 2945 2947 2949 2951 2953 2955 2957 2959 2961 2963 2965 2967 2969 2971 2973 2975 2977 2979 2981 2983 2985 2987 2989 2991 2993 2995 2997 2999 3001 3003 3005 3007 3009 3011 3013 3015 3017 3019 3021 3023 3025 3027 3029 3031 3033 3035 3037 3039 3041 3043 3045 3047 3049 3051 3053 3055 3057 3059 3061 3063 3065 3067 3069 3071 3073 3075 3077 3079 3081 3083 3085 3087 3089 3091 3093 3095 3097 3099 3101 3103 3105 3107 3109 3111 3113 3115 3117 3119 3121 3123 3125 3127 3129 3131 3133 3135 3137 3139 3141 3143 3145 3147 3149 3151 3153 3155 3157 3159 3161 3163 3165 3167 3169 3171 3173 3175 3177 3179 3181 3183 3185 3187 3189 3191 3193 3195 3197 3199 3201 3203 3205 3207 3209 3211 3213 3215 3217 3219 3221 3223 3225 3227 3229 3231 3233 3235 3237 3239 3241 3243 3245 3247 3249 3251 3253 3255 3257 3259 3261 3263 3265 3267 3269 3271 3273 3275 3277 3279 3281 3283 3285 3287 3289 3291 3293 3295 3297 3299 3301 3303 3305 3307 3309 3311 3313 3315 3317 3319 3321 3323 3325 3327 3329 3331 3333 3335 3337 3339 3341 3343 3345 3347 3349 3351 3353 3355 3357 3359 3361 3363 3365 3367 3369 3371 3373 3375 3377 3379 3381 3383 3385 3387 3389 3391 3393 3395 3397 3399 3401 3403 3405 3407 3409 3411 3413 3415 3417 3419 3421 3423 3425 3427 3429 3431 3433 3435 3437 3439 3441 3443 3445 3447 3449 3451 3453 3455 3457 3459 3461 3463 3465 3467 3469 3471 3473 3475 3477 3479 3481 3483 3485 3487 3489 3491 3493 3495 3497 3499 3501 3503 3505 3507 3509 3511 3513 3515 3517 3519 3521 3523 3525 3527 3529 3531 3533 3535 3537 3539 3541 3543 3545 3547 3549 3551 3553 3555 3557 3559 3561 3563 3565 3567 3569 3571 3573 3575 3577 3579 3581 3583 3585 3587 3589 3591 3593 3595 3597 3599 3601 3603 3605 3607 3609 3611 3613 3615 3617 3619 3621 3623 3625 3627 3629 3631 3633 3635 3637 3639 3641 3643 3645 3647 3649 3651 3653 3655 3657 3659 3661 3663 3665 3667 3669 3671 3673 3675 3677 3679 3681 3683 3685 3687 3689 3691 3693 3695 3697 3699 3701 3703 3705 3707 3709 3711 3713 3715 3717 3719 3721 3723 3725 3727 3729 3731 3733 3735 3737 3739 3741 3743 3745 3747 3749 3751 3753 3755 3757 3759 3761 3763 3765 3767 3769

EFFECTIVE: June 1, 1984

COMPLIANCE DATA SYSTEM

Report Request Form

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

Time _____
Date Submitted _____
Return Report to _____
Mail Stop _____

01 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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

(Limit - 100 "10" Cards)

REPORT FORMATS PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

SEQUENCE LIMITED TO 40 CHARACTERS

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

LEVEL CODES (01 CARD)

REQUIRED FOR SD REPORT ONLY. VALID ARE:
S - SOURCE ONLY
P - POINT A SOURCE
A - ALL DATA (default)
C - CRITERIA MATCH ONLY

REPORT FORMATS (20 CARD)

QL-Quick Look
QD-Double Line QL
Q2-Double spaced QL
MS-Standard Milestone
M1-single spaced Milestone
SD-Source Data
AC-Action Summary
QT-Questionnaire
FL-Flex

QUICK LOOK REPORT FORMAT

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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Enter Data Elements to be included on Report
Limited to 132 Characters with NONID Options
Limited to 110 with Standard Heading

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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

MILESTONE REPORT FORMAT

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 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

COMMENT CODES (40 CARD)

C - ALL COMMENTS
S - SOURCE COMMENTS ONLY
P - POINT COMMENTS ONLY
A - ACTION COMMENTS ONLY

-107-

Figure 7-2. Report Request Form - QA Test 2.

EFFECTIVE: June 1, 1984

COMPLIANCE DATA SYSTEM Report Request Form

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

Time _____
Date Submitted _____
Return Report to _____
Mail Stop _____

01 QUALITY ASSURANCE TEST 13 CARD 31 DATA
1 2 4 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99 101

Region Level Report Title
Data Element Cond. Value (Left Justified)
1 2 4 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75 77 79 81 83 85 87 89 91 93 95 97 99 101
(Limit - 100 "10" Cards)

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
D - BLANK OR ZEROS

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

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

REPORT SEQUENCE
1 2 4 7 9 12 14 17 19 22 24 27 29 32
SEQUENCE LIMITED TO 40 CHARACTERS

Number of
subtotalling
data elements
on QL
39

REPORT FORMATS (20 CARD)
QL-Quick Look
QD-Double Line QL
Q2-Double spaced QL
MS-Standard Milestone
M1-single spaced Milestone
SD-Source Data
AC-Action Summary
QT-Questionnaire
FL-Flex

QUICK LOOK REPORT FORMAT

01 PLIT PCMS RD1,4 PAQC LOAD ECAP RDE9 RD1,0 RD1,1 RD1,2
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 NOND Options
Limited to 110 with Standard Heading
CLAS LDBC 54 57 59 62 64 67 69 72 74 77 79 81 83 85 87 89 91 93 95 97 99 101
CODE 1100 2

MILESTONE REPORT FORMAT

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

COMMENT CODES (40 CARD)
C - ALL COMMENTS
S - SOURCE COMMENTS ONLY
P - POINT COMMENTS ONLY
A - ACTION COMMENTS ONLY

Figure 7-3 Report Request Form - QA Test 3.

EFFECTIVE: June 1, 1984

COMPLIANCE DATA SYSTEM Report Request Form

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

Time _____
Date Submitted _____
Return Report to: _____
Mail Stop _____

QUALITY ASSURANCE TEST 4 CARD 5 AND 6 DATA
1 2 4 5 7 9 20 30 40 50 52 53 60 70 80

Region Level Report Title

Data Element Cond. Value (Left Justified)

(Limit - 100 "10" Cards)

REPORT FORMATS PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)

REPORT SEQUENCE

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
D - BLANK OR ZEROS

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

REPORT FORMATS (20 CARD)
QL-Quick Look
QD-Double Line QL
Q2-Double spaced QL
MS-Standard Milestone
M1-single spaced Milestone
SD-Source Data
AC-Action Summary
QT-Questionnaire
FL-Flex

QUICK LOOK REPORT FORMAT

14.01 SGC.81 CAPC1 CMS11 S1P.C1 PLUT1 SBEG1 ECAT1 PRD.S1 MUL.T1 RDE.71

Enter Data Elements to be Included on Report
Limited to 132 Characters with NOD Options
Limited to 110 with Standard Heading

1 CMS.21 54 57 59 62 64 67 69 72 74 77 79 81 82

MILESTONE REPORT FORMAT

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

COMMENT CODES (40 CARD)
C - ALL COMMENTS
S - SOURCE COMMENTS ONLY
P - POINT COMMENTS ONLY
A - ACTION COMMENTS ONLY

Figure 7-4. Report Request Form - QA Test 4.

EFFECTIVE: June 1, 1984

COMPLIANCE DATA SYSTEM

Report Request Form

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

Time _____
Date Submitted _____
Return Report to _____
Mail Stop _____

01 QUALITY ASSURANCE TEST 5 CARD 7 AND 8 DATA
1 2 4 5 7 9 20 30 40 50 52
Region Level Report Title

1101 1 2 4 5 7 9 11
Data Element Cond. Value (Left Justified)

1101 1 2 4 5 7 9 11
1101 1 2 4 5 7 9 11
1101 1 2 4 5 7 9 11
1101 1 2 4 5 7 9 11
1101 1 2 4 5 7 9 11
1101 1 2 4 5 7 9 11
1101 1 2 4 5 7 9 11
1101 1 2 4 5 7 9 11
1101 1 2 4 5 7 9 11
(Limit - 100 "10" Cards)

REPORT FORMATS PASSWORD (REQUIRED TO ACCESS CONFIDENTIAL DATA ELEMENTS)
1201 QL 1 2 4 5 7 8 10 11 14 21

REPORT SEQUENCE
1301 1 2 4 7 9 12 14 17 19 22 24 27 29 32
SEQUENCE LIMITED TO 40 CHARACTERS

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

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

REPORT FORMATS (20 CARD)
QL-Quick Look
QD-Double Line QL
Q2-Double spaced QL
MS-Standard Milestone
M1-single spaced Milestone
SD-Source Data
AC-Action Summary
QT-Questionnaire
FL-Flex

QUICK LOOK REPORT FORMAT

401 ADES IPLTY IATPE DTAC DTSC IPERA ISTFA ISTAC BSTD RDEB
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 RND Option
Limited to 110 with Standard Heading

54 57 59 62 64 67 69 72 74 77 79 81 83 85 87 89 92 94 97 99 102 104 107 109 112 114 117 119 122 124 127 129 132 134 137 139 142 144 147 149 152 154 157 159 162 164 167 169 172 174 177 179 181 183 185 187 189 192 194 197 199 202 204 207 209 212 214 217 219 222 224 227 229 232 234 237 239 242 244 247 249 252 254 257 259 262 264 267 269 272 274 277 279 281 283 285 287 289 292 294 297 299 302 304 307 309 312 314 317 319 322 324 327 329 332 334 337 339 342 344 347 349 352 354 357 359 362 364 367 369 372 374 377 379 381 383 385 387 389 392 394 397 399 402 404 407 409 412 414 417 419 422 424 427 429 432 434 437 439 442 444 447 449 452 454 457 459 462 464 467 469 472 474 477 479 481 483 485 487 489 492 494 497 499 502 504 507 509 512 514 517 519 522 524 527 529 532 534 537 539 542 544 547 549 552 554 557 559 562 564 567 569 572 574 577 579 581 583 585 587 589 592 594 597 599 602 604 607 609 612 614 617 619 622 624 627 629 632 634 637 639 642 644 647 649 652 654 657 659 662 664 667 669 672 674 677 679 681 683 685 687 689 692 694 697 699 702 704 707 709 712 714 717 719 722 724 727 729 732 734 737 739 742 744 747 749 752 754 757 759 762 764 767 769 772 774 777 779 781 783 785 787 789 792 794 797 799 802 804 807 809 812 814 817 819 822 824 827 829 832 834 837 839 842 844 847 849 852 854 857 859 862 864 867 869 872 874 877 879 881 883 885 887 889 892 894 897 899 902 904 907 909 912 914 917 919 922 924 927 929 932 934 937 939 942 944 947 949 952 954 957 959 962 964 967 969 972 974 977 979 981 983 985 987 989 992 994 997 999 1002 1004 1007 1009 1012 1014 1017 1019 1022 1024 1027 1029 1032 1034 1037 1039 1042 1044 1047 1049 1052 1054 1057 1059 1062 1064 1067 1069 1072 1074 1077 1079 1081 1083 1085 1087 1089 1092 1094 1097 1099 1102 1104 1107 1109 1112 1114 1117 1119 1122 1124 1127 1129 1132 1134 1137 1139 1142 1144 1147 1149 1152 1154 1157 1159 1162 1164 1167 1169 1172 1174 1177 1179 1181 1183 1185 1187 1189 1192 1194 1197 1199 1202 1204 1207 1209 1212 1214 1217 1219 1222 1224 1227 1229 1232 1234 1237 1239 1242 1244 1247 1249 1252 1254 1257 1259 1262 1264 1267 1269 1272 1274 1277 1279 1281 1283 1285 1287 1289 1292 1294 1297 1299 1302 1304 1307 1309 1312 1314 1317 1319 1322 1324 1327 1329 1332 1334 1337 1339 1342 1344 1347 1349 1352 1354 1357 1359 1362 1364 1367 1369 1372 1374 1377 1379 1381 1383 1385 1387 1389 1392 1394 1397 1399 1402 1404 1407 1409 1412 1414 1417 1419 1422 1424 1427 1429 1432 1434 1437 1439 1442 1444 1447 1449 1452 1454 1457 1459 1462 1464 1467 1469 1472 1474 1477 1479 1481 1483 1485 1487 1489 1492 1494 1497 1499 1502 1504 1507 1509 1512 1514 1517 1519 1522 1524 1527 1529 1532 1534 1537 1539 1542 1544 1547 1549 1552 1554 1557 1559 1562 1564 1567 1569 1572 1574 1577 1579 1581 1583 1585 1587 1589 1592 1594 1597 1599 1602 1604 1607 1609 1612 1614 1617 1619 1622 1624 1627 1629 1632 1634 1637 1639 1642 1644 1647 1649 1652 1654 1657 1659 1662 1664 1667 1669 1672 1674 1677 1679 1681 1683 1685 1687 1689 1692 1694 1697 1699 1702 1704 1707 1709 1712 1714 1717 1719 1722 1724 1727 1729 1732 1734 1737 1739 1742 1744 1747 1749 1752 1754 1757 1759 1762 1764 1767 1769 1772 1774 1777 1779 1781 1783 1785 1787 1789 1792 1794 1797 1799 1802 1804 1807 1809 1812 1814 1817 1819 1822 1824 1827 1829 1832 1834 1837 1839 1842 1844 1847 1849 1852 1854 1857 1859 1862 1864 1867 1869 1872 1874 1877 1879 1881 1883 1885 1887 1889 1892 1894 1897 1899 1902 1904 1907 1909 1912 1914 1917 1919 1922 1924 1927 1929 1932 1934 1937 1939 1942 1944 1947 1949 1952 1954 1957 1959 1962 1964 1967 1969 1972 1974 1977 1979 1981 1983 1985 1987 1989 1992 1994 1997 1999 2002 2004 2007 2009 2012 2014 2017 2019 2022 2024 2027 2029 2032 2034 2037 2039 2042 2044 2047 2049 2052 2054 2057 2059 2062 2064 2067 2069 2072 2074 2077 2079 2081 2083 2085 2087 2089 2092 2094 2097 2099 2102 2104 2107 2109 2112 2114 2117 2119 2122 2124 2127 2129 2132 2134 2137 2139 2142 2144 2147 2149 2152 2154 2157 2159 2162 2164 2167 2169 2172 2174 2177 2179 2181 2183 2185 2187 2189 2192 2194 2197 2199 2202 2204 2207 2209 2212 2214 2217 2219 2222 2224 2227 2229 2232 2234 2237 2239 2242 2244 2247 2249 2252 2254 2257 2259 2262 2264 2267 2269 2272 2274 2277 2279 2281 2283 2285 2287 2289 2292 2294 2297 2299 2302 2304 2307 2309 2312 2314 2317 2319 2322 2324 2327 2329 2332 2334 2337 2339 2342 2344 2347 2349 2352 2354 2357 2359 2362 2364 2367 2369 2372 2374 2377 2379 2381 2383 2385 2387 2389 2392 2394 2397 2399 2402 2404 2407 2409 2412 2414 2417 2419 2422 2424 2427 2429 2432 2434 2437 2439 2442 2444 2447 2449 2452 2454 2457 2459 2462 2464 2467 2469 2472 2474 2477 2479 2481 2483 2485 2487 2489 2492 2494 2497 2499 2502 2504 2507 2509 2512 2514 2517 2519 2522 2524 2527 2529 2532 2534 2537 2539 2542 2544 2547 2549 2552 2554 2557 2559 2562 2564 2567 2569 2572 2574 2577 2579 2581 2583 2585 2587 2589 2592 2594 2597 2599 2602 2604 2607 2609 2612 2614 2617 2619 2622 2624 2627 2629 2632 2634 2637 2639 2642 2644 2647 2649 2652 2654 2657 2659 2662 2664 2667 2669 2672 2674 2677 2679 2681 2683 2685 2687 2689 2692 2694 2697 2699 2702 2704 2707 2709 2712 2714 2717 2719 2722 2724 2727 2729 2732 2734 2737 2739 2742 2744 2747 2749 2752 2754 2757 2759 2762 2764 2767 2769 2772 2774 2777 2779 2781 2783 2785 2787 2789 2792 2794 2797 2799 2802 2804 2807 2809 2812 2814 2817 2819 2822 2824 2827 2829 2832 2834 2837 2839 2842 2844 2847 2849 2852 2854 2857 2859 2862 2864 2867 2869 2872 2874 2877 2879 2881 2883 2885 2887 2889 2892 2894 2897 2899 2902 2904 2907 2909 2912 2914 2917 2919 2922 2924 2927 2929 2932 2934 2937 2939 2942 2944 2947 2949 2952 2954 2957 2959 2962 2964 2967 2969 2972 2974 2977 2979 2981 2983 2985 2987 2989 2992 2994 2997 2999 3002 3004 3007 3009 3012 3014 3017 3019 3022 3024 3027 3029 3032 3034 3037 3039 3042 3044 3047 3049 3052 3054 3057 3059 3062 3064 3067 3069 3072 3074 3077 3079 3081 3083 3085 3087 3089 3092 3094 3097 3099 3102 3104 3107 3109 3112 3114 3117 3119 3122 3124 3127 3129 3132 3134 3137 3139 3142 3144 3147 3149 3152 3154 3157 3159 3162 3164 3167 3169 3172 3174 3177 3179 3181 3183 3185 3187 3189 3192 3194 3197 3199 3202 3204 3207 3209 3212 3214 3217 3219 3222 3224 3227 3229 3232 3234 3237 3239 3242 3244 3247 3249 3252 3254 3257 3259 3262 3264 3267 3269 3272 3274 3277 3279 3281 3283 3285 3287 3289 3292 3294 3297 3299 3302 3304 3307 3309 3312 3314 3317 3319 3322 3324 3327 3329 3332 3334 3337 3339 3342 3344 3347 3349 3352 3354 3357 3359 3362 3364 3367 3369 3372 3374 3377 3379 3381 3383 3385 3387 3389 3392 3394 3397 3399 3402 3404 3407 3409 3412 3414 3417 3419 3422 3424 3427 3429 3432 3434 3437 3439 3442 3444 3447 3449 3452 3454 3457 3459 3462 3464 3467 3469 3472 3474 3477 3479 3481 3483 3485 3487 3489 3492 3494 3497 3499 3502 3504 3507 3509 3512 3514 3517 3519 3522 3524 3527 3529 3532 3534 3537 3539 3542 3544 3547 3549 3552 3554 3557 3559 3562 3564 3567 3569 3572 3574 3577 3579 3581 3583 3585 3587 3589 3592 3594 3597 3599 3602 3604 3607 3609 3612 3614 3617 3619 3622 3624 3627 3629 3632 3634 3637 3639 3642 3644 3647 3649 3652 3654 3657 3659 3662 3664 3667 3669 3672 3674 3677 3679 3681 3683 3685 3687 3689 3692 3694 3697 3699 3702 3704 3707 3709 3712 3714 3717 3719 3722 3724 3727 3729 3732 3734 3737 3739 3742 3744 3747 3749 3752 3754 3757 3759 3762 3764 3767 3769 3772 3774 3777 3779 3781 3783 3785 3787 3789 3792 3794 3797 3799 3802 3804 3807 3809 3812 3814 3817 3819 3822 3824 3827 3829 3832 3834 3837 3839 3842 3844 3847 3849 3852 3854 3857 3859 3862 3864 3867 3869 3872 3874 3877 3879 3881 3883 3885 3887 3889 3892 3894 3897 3899 3902 3904 3907 3909 3912 3914 3917 3919 3922 3924 3927 3929 3932 3934 3937 3939 3942 3944 3947 3949 3952 3954 3957 3959 3962 3964 3967 3969 3972 3974 3977 3979 3981 3983 3985 3987 3989 3992 3994 3997 3999 4002 4004 4007 4009 4012 4014 4017 4019 4022 4024 4027 4029 4032 4034 4037 4039 4042 4044 4047 4049 4052 4054 4057 4059 4062 4064 4067 4069 4072 4074 4077 4079 4081 4083 4085 4087 4089 4092 4094 4097 4099 4102 4104 4107 4109 4112 4114 4117 4119 4122 4124 4127 4129 4132 4134 4137 4139 4142 4144 4147 4149 4152 4154 4157 4159 4162 4164 4167 4169 4172 4174 4177 4179 4181 4183 4185 4187 4189 4192 4194 4197 4199 4202 4204 4207 4209 4212 4214 4217 4219 4222 4224 4227 4229 4232 4234 4237 4239 4242 4244 4247 4249 4252 4254 4257 4259 4262 4264 4267 4269 4272 4274 4277 4279 4281 4283 4285 4287 4289 4292 4294 4297 4299 4302 4304 4307 4309 4312 4314 4317 4319 4322 4324 4327 4329 4332 4334 4337 4339 4342 4344 4347 4349 4352 4354 4357 4359 4362 4364 4367 4369 4372 4374 4377 4379 4381 4383 4385 4387 4389 4392 4394 4397 4399 4402 4404 4407 4409 4412 4414 4417 4419 4422 4424 4427 4429 4432 4434 4437 4439 4442 4444 4447 4449 4452 4454 4457 4459 4462 4464 4467 4469 4472 4474 4477 4479 4481 4483 4485 4487 4489 4492 4494 4497 4499 4502 4504 4507 4509 4512 4514 4517 4519 4522 4524 4527 4529 4532 4534 4537 4539 4542 4544 4547 4549 4552 4554 4557 4559 4562 4564 4567 4569 4572 4574 4577 4579 4581 4583 4585 4587 4589 4592 4594 4597 4599 4602 4604 4607 4609 4612 4614 4617 4619 4622 4624 4627 4629 4632 4634 4637 4639 4642 4644 4647 4649 4652 4654 4657 4659 4662 4664 4667 4669 4672 4674 4677 4679 4681 4683 4685 4687 4689 4692 4694 4697 4699 4702 4704 4707 4709 4712 4714 4717 4719 4722 4724 4727 4729 4732 4734 4737 4739 4742 4744 4747 4749 4752 4754 4757 4759 4762 4764 4767 4769 4772 4774 4777 4779 4781 4783 4785 4787 4789 4792 4794 4797 4799 4802 4804 4807 4809 4812 4814 4817 4819 4822 4824 4827 4829 4832 4834 4837 4839 4842 4844 4847 4849 4852 4854 4857 4859 4862 4864 4867 4869 4872 4874 4877 4879 4881 4883 4885 4887 4889 4892 4894 4897 4899 4902 4904 4907 4909 4912 4914 4917 4919 4922 4924 4927 4929 4932 4934 4937 4939 4942 4944 4947 4949 4952 4954 4957 4959 4962 4964 4967 4969 4972 4974 4977 4979 4981 4983 4985 4987 4989 4992 4994 4997 4999 5002 5004 5007 5009 5012 5014 5017 5019 5022 5024 5027 5029 5032 5034 5037 5039 5042 5044 5047 5049 5052 5054 5057 5059 5062 5064 5067 5069 5072 5074 5077 5079 5081 5083 5085 5087 5089 5092 5094 5097 5099 5102 5104 5107 5109 5112 5114 5117 5119 5122 5124 5127 5129 5132 5134 5137 5139 5142 5144 5147 5149 5152 5154 5157 5159 5162 5164 5167 5169 5172 5174 5177 5179 5181 5183 5185 5187 5189 5192 5194 5197 5199 5202 5204 5207 5209 5212 5214 5217 5219 5222 5224 5227 5229 5232 5234 5237 5239 5242 5244 5247 5249 5252 5254 5257 5259 5262 5264 5267 5269 5272 5274 5277 5279 5281 5283 5285 5287 5289 5292 5294 5297 5299 5302 5304 5307 5309 5312 5314 5317 5319 5322 5324 5327 5329 5332 5334 5337 5339 5342 5344 5347 5349 5352 5354 5357 5359 5362 5364 5367 5369 5372 5374 5377 5379 5381 5383 5385 5387 5389 5392 5394 5397 5399 5402 5404 5407 5409 5412 5414 5417 5419 5422 5424 5427 5429 5432 5434 5437 5439 5442 5444 5447 5449 5452 5454 5457 5459 5462 5464 5467 5469 5472 5474 5477 5479 5481 5483 5485 5487 5489 5492 5494 5497 5499 5502 5504 5507 5509 5512 5514 5517 5519 5522 5524 5527 5529 5532 5534 5537 5539 5542 5544 5547 5549 5552 5554 5557 5559 5562 5564 5567 5569 5572 5574 5577 5579 5581 5583 5585 5587 5589 5592 5594 5597 5599 5602 5604 5607 5609 5612 5614 5617 5619 5622 5624 5627

8.0 TECHNICAL STANDARDS

In order to maintain CDS and provide enhancements to the current system of computer programs, it is necessary that analysts and programmers providing operation and maintenance support to the EPA be able to easily understand the computer programs that make up the Compliance Data System. The following sections outline specific Programming and Testing Standards which should be adhered to when effecting a change to the CDS computer programs.

8.1 Programming Standards

8.1.1 General COBOL Guidelines

- Use ANSI Standard COBOL as much as possible. This will greatly facilitate transporting the program between computer facilities as well as improve understanding on the part of programmers from other installations.
- Division headers should appear at the top of the page and should be separated from the body of the division by one or more blank lines.
- There should be at least one blank line between a section header and the body of a section.
- Use of columns 1-6 and 73-80 should be consistent throughout all programs and subroutines of a system.

8.1.2 Identification Division Guidelines

- This division should include the PROGRAM-ID, AUTHOR, INSTALLATION, and DATE-COMPILED paragraphs.
- This division should contain a REMARKS paragraph describing the purpose and functions of the program and the sections in the procedure division.
- Once a program has been placed into production, every modification should include comments that contain the following:

- An index of the current modification.
- A description of and the rationale for the changes made.
- The date and person making the change.
- The AUTHOR paragraph should list the names of all persons who have made changes to the program.

8.1.3 Environment Division Guidelines

- Internal file names, the ASSIGN TO, and external file names within SELECT statements should be aligned in columns.
- Each clause subordinate to a SELECT/ASSIGN TO statement should appear on a separate line underneath the ASSIGN TO, as follows:

SELECT MASTER-IN	ASSIGN TO MASS-STORAGE OLD-MASTER
SELECT MASTER-OUT	ASSIGN TO MASS-STORAGE NEW-MASTER
SELECT SUMM-RPT	ASSIGN TO PRINTER SUMMARY
SELECT XREFFILE	ASSIGN TO MASS-STORAGE XREFFILE
	ORGANIZATION IS INDEXED
	ACCESS IS RANDOM
	ACTUAL KEY IS XREF-ID

8.1.4 Data Division Guidelines

- Clauses within an FD should appear on separate lines under the FD file name and FD's should appear in the same order as the corresponding SELECT statements.

```
FD  MASTER-IN

    LABEL RECORDS ARE STANDARD

    RECORDING MODE IS F

    BLOCK CONTAINS 153 RECORDS

    RECORD CONTAINS 473 CHARACTERS
```


- Each 01 level item should be preceded by one or more blank lines.
- Item names, PICTURE, USAGE, and VALUE clauses for items at the same level should all be aligned in columns.
- If an item has both USAGE and VALUE clauses, align the VALUE clause beneath the USAGE. If a VALUE literal will not fit on one line, it should be placed on a separate line beneath the item name.
- Each level in a data structure definition should be indented four spaces from the previous level. This greatly facilitates the understanding of the structure.
- String lengths within PICTURE clauses should always be specified in parentheses - even if the length is a single character. This reduces the probability of error and eases the checking of group lengths.
- The use of 88 level items is highly encouraged. This simplifies the understanding of Procedure Division code.
- The use of 77 level items should be avoided.
- Constants should appear at the beginning of WORKING-STORAGE along with their associated VALUES. Variables should not be initialized with VALUE clauses - they should be initialized by the program.

```

      01  PROG-VERSION      PIC X(4)          VALUE 'V3.2'.
*
      01  RECS-IN           PIC 9(10)         USAGE COMP.
*
      01  RECS-OUT          PIC 9(10)         USAGE COMP.
*
      01  HOLD-REC.
          02  HOLD-REC-ID      PIC 9(4).
          02  HOLD-REC-TYPE    PIC X(1).
          02  HOLD-REC-DATE.
              03  HOLD-REC-YY      PIC 9(2).
              03  HOLD-REC-MMDD    PIC 9(4).
          02  HOLD-REC-QUANT    PIC 9(5)V9(1).

```

8.1.5 Procedure Division Guidelines

- Multiple objects of a single statement should be lined up in columns with one object per line.

```

OPEN INPUT  MASTER-IN
              PARM-FILE
              XREF-ADDR-FILE.
MOVE 0 TO REC-CNT
              LINES-OUT
              TAB-PTR.

```

- Operators and operands in continued statements or groups of similar statements should be aligned in columns.

```

MOVE OLD-ID      TO PRT-LINE-ID.
MOVE ID-TOTAL    TO PRT-LINE-TOTAL.
MOVE ZEROES      TO ID-TOTAL.

```

```

COMPUTE YEARLY-TOTAL = QTR1-TOTAL + QTR2-TOTAL
                      + QTR3-TOTAL + QTR4-TOTAL.

```

- IF statements should not be nested deeper than three levels. Deeper nesting is usually very difficult to understand. If deeper nesting is required by the problem at hand, then the lower level nesting should be performed elsewhere.
- Each ELSE should be aligned with its corresponding IF.
- Each condition of compound IF's should appear on a separate line. Parentheses should be used to simplify understanding of the relationships between the conditions.
- Subjects of IF's and ELSE's should be aligned in columns after the object conditions.

```

IF      (EMP-TENURE > 40)
AND     (EMP-AGE    < 60)
                                ADD 1 TO TYPE1-CNT
                                PERFORM PROCESS-TYPEA
ELSE
                                PERFORM CHECK-TYPES-B-F.

```

- STOP RUN should appear only in the driver SECTION.
- The VARYING FROM, BY, and UNTIL clauses on a PERFORM should appear on separate lines aligned under the PERFORM section name. The VARYING index should not, of course, be altered by the PERFORMed section.

```

PERFORM LOAD-REC-BUFF
      VARYING BUFF-PTR FROM 1 BY 1
      UNTIL BUFF-PTR >> BUFF-SIZE
      OR REC-ID-CHANGE
      OR END-OF-MASTER.

```

- All I/O operations should be isolated into separate SECTIONS. This makes the details of such operations more transparent to the program and simplifies the reading and modification of the program.
- All arithmetic computations involving more than one operation should be performed with the COMPUTE verb. The only exception is that the DIVIDE verb may be used if a remainder is required. In this case, DIVIDE BY should be used and not DIVIDE INTO.
- Parentheses should be used to simplify the understanding of complex arithmetic statements or wherever confusion may arise as to the order of evaluation of a statement.

COMPUTE ROOT = (DISC - B) / (A + A).

COMPUTE ADJUSTED-INT = BASE-INT * (NUM-PDS - 1)
+ BASE-VAL / (NUM-PDS + 1).

8.2 Testing Standards

CDS is a frequently used, highly visible system. Every effort must be made to discover the existence of errors in the system when changes are made to CDS.

- Any change in the system is to meet the stated requirements.
- A change in one part of the system is not to cause errors in any other part of the system. All other parts of the system are to operate the same after a change as they operated before that change.
- The assumption that "no one will ever make that error" is not valid and is not to be made.

Test Plan Standards can be found in Section 6.2.2 of the ADP System Documentation Standards prepared by MIDSD.

8.2.1 Test Plan (Overview)

The ultimate objective of any testing process during implementation is to attain a certain level of confidence that the subject of the test is performing according to specifications. This objective is reached by designing a set of test procedures that will demonstrate the existence of errors. Note that a test does not try to find all errors in a program or system (that being much like trying to catch the last fish in a lake without knowing how many fish there are or how good our bait is); rather, it tries to find those errors which are most likely to occur or which would be most costly should they occur.

In light of the above comments, this section should describe the overall testing strategy for this system as well as which kinds of errors are most important to detect for this system.

8.2.2 Types of Failures

A system may fail (i.e., not satisfy user requirements) in the following ways:

- The System Design (Functional Description, Draft User Guide, Data Dictionary) does not accurately reflect requirements.
- The Detailed Design is not a faithful elaboration of the System Design (frequently referred to as a specification error).
- The program within the system fails to meet its specifications. This failure can occur in two ways: (1) wrong operations are performed on program path; and (2) the path taken is the wrong one for some data.
- The performance (response time, turn around time, etc.) of the system may not be as specified.
- The system design may not be implementable in the chosen environment.

This section should indicate those types of failures considered applicable and the following subsections should discuss the steps taken to detect these errors.

8.2.2.1 System Design Failures

The conformance of the system design to the requirements will have been certified by a design review prior to the beginning of detail design. This section should discuss the findings of this design review in terms of the robustness and simplicity of this system.

8.2.2.2 Detailed Design Failures

The detailed design can best be shown to be a faithful representation of the system design by a technical review team made up primarily of data processing personnel. This section will describe procedures for performing that review and will dictate the makeup of the team.

8.2.2.3 Program Failures

Of the two kinds of program failures mentioned above, the first kind is best detected through the use of "coverage" tests which ensure that each statement of the program has been executed and the results observed (either explicitly or implicitly). Failures of the second kind are best detected through a formal review of the subject code by disinterested programmers (also ensuring adherence to coding guidelines).

This section should, therefore, describe all applicable test cases (including how to run them, their expected results, and procedures to follow should they fail) and describe the findings of the code review.

8.2.2.4 System Failures

This section will describe procedures for conducting the system test. It will consist of three parts: (1) a review of the user documentation to ensure that it faithfully represents the system design and the detailed design; (2) a rerun of all program tests on the completed system or version; and (3) a set of randomly selected tests to determine if there has been a gross misunderstanding of the problem. All test cases will be developed from user documentation and will be documented prior to running with the expected results. There must be a system test for every delivered version.

8.2.2.5 Performance Failures

This section will describe procedures for doing a volume test to determine timings and to estimate operational costs.

9.0 CURRENT HEADQUARTERS GUIDANCE

The following is a collection of currently applicable Headquarters Guidance for CDS users.

DATE: May 24, 1982

SUBJECT: Guidance on State Reporting of Air Compliance Data to CDS

FROM: Director
Division of Stationary Source Enforcement

TO: Directors, Air & Waste Management Divisions, Regions I-IV, VI-VIII, X
Directors, Air Management Divisions Regions V and IX

The following guidance presents current EPA policy on the reporting of stationary source air compliance data by states for entry into the agency's Compliance Data System (CDS).

To provide background, all EPA Regional Offices receive source-specific compliance information from their states on a routine basis. The frequency of reporting varies from quarterly, the minimum frequency acceptable, to almost daily for those states that have direct access to CDS and have chosen to use the system as a management tool. The compliance information is provided to EPA either manually or by an automated mechanism, usually a tape, disk, or direct access. The information to be reported and its frequency typically is established through the Section 105 grant mechanism.

Since EPA relies heavily on state-reported data in determining the compliance and enforcement action, information is critical. Therefore, it is our policy to require all EPA regions to establish a mutually agreed to State information and reporting protocol. Such reporting should be no less frequent than quarterly.

In an effort to improve information flow while at the same time reducing manual data handling, we encourage automated data linkups between EPA and the states. Such linkups minimize duplicative data handling and thereby reduce resource expenditures and the potential for error. We have made available contractor support as well as the expertise of our Division of Stationary Source Enforcement (DSSE) in facilitating this end. For more information on this aspect of the program, please contact Howard Wright of DSSE at 382-2833.

Please note that there is no requirement that states use CDS or any automated system. While it is encouraged where it can be mutually beneficial, the manner of recording data is left to the state.

EFFECTIVE: June 1, 1984

As more and more data are electronically transmitted to EPA, quality assurance practices on source-specific state submissions become an increasingly necessary activity for EPA. In this regard, the Division of Stationary Source Enforcement has provided several tools to the regions which enhance quality assurance capabilities and thus the subsequent reliability of data submitted to CDS. These tools should continue to be used.

We are continuing to review the level of information presently required to be submitted, particularly in the context of the development of the agency's 1983 Information Collection Budget. Once that exercise is completed, we will be providing any supplementary guidance which may be necessary.

If you have any questions or comments on this subject, please feel free to contact me at 382-2807 or John Rashic at 382-2826.

DATE: March 10, 1982

SUBJECT: John B. Rasnic, Chief Compliance Monitoring Branch DSSE

TO: Addressees

It is essential for federal enforcement against significant violators, workload allocation, budgeting, and program evaluation to be able to identify violating stationary sources by the pollutant(s) for which these facilities are in violation. We will rely on the Compliance Data System (CDS) as the mechanism through which such information will be obtained. However, it is apparent that, in some cases, reliable information of this nature is not currently available in CDS. This memorandum is intended to provide guidance for correcting this situation.

The universe of violating sources that must have pollutant-specific compliance status maintained are "significant violators" as defined in the Kathleen M. Bennett memorandum "EPA Accountability System - OANR Policy Guidance" dated December 29, 1981. See Attachment 1 for the appropriate information extracted from this memorandum.

For such "significant violators," in addition to enforcement actions and 000-point compliance status, the following pollutant-related, source level information must be maintained:

- | | |
|---|------|
| • Pollutant | PLLT |
| • Pollutant Compliance | PCMS |
| • Pollutant Air Quality Control Indicator | PAQC |

Information for other than "significant violators" and/or additional Card 3 data should be maintained per past guidance.

If you have any questions or comments, please call me at 8-382-2826 or Howard Wright at 8-382-2833.

ATTACHMENT 1

Extracted from: Kathleen M. Bennett Memorandum "EPA Accountability System-OANR Policy Guidance," 12-29-81.

Definition of Significant Violator

One of the objectives of the Administrator's Accountability System for FY 1982 is that resources be used to address significant air violators and return them to compliance. This is designed to ensure that resources are used in the most environmentally beneficial manner. The purpose of this guidance is to assist regional offices and states in determining what the agency considers to be a significant violator.

In determining whether a violation is significant, the nature of the pollutant should be considered, as well as the magnitude and duration of the violation and the population exposed. While no rigid formula need be followed, the following considerations should be kept in mind.

1. A violation of a hazardous air pollutant standard resulting in emissions above the standard should normally be considered significant unless the magnitude and duration of the violation are minimal and the violation nonrecurring.
2. A source in violation of a State Implementation Plan should be considered significant if the source is of sufficient size and is located so as to impact a nonattainment area. Sources above 250 tons per year emission potential as defined in the Alabama Power case should be considered significant violators are minimal and the violation generally nonrecurring. (To the extent that available data do not permit easy identification of sources in excess of 250 tons/year potential, sources with more than 100 tons/year actual emissions can be as a reasonable surrogate.) Other sources in nonattainment areas should also be included if the amount of excess emissions is considered jointly by the regional office and state as having an important impact on the continued nonattainment of the area.

3. Sources in attainment areas and not impacting nonattainment areas would not normally be considered significant because of the lack of direct health impact. While states, appropriately, should take action to resolve such violations, EPA will not give them high priority consideration.
4. Sources in violation of new source requirements, including NSPS and PSD/NSR permitting requirements, should also be considered to be significant violators unless the magnitude and duration of the violation are minimal.

As provided for in the agency's new accountability system, regional offices should meet with each of their states to jointly prepare an inventory of known significant violators. States should be encouraged to take the lead with respect to as much of the universe as possible. Wherever possible, EPA should use its resources to supplement those of the state rather than to take the lead on cases itself. This technical assistance can be either in the form of direct case assistance (if requested) or through sponsoring of technical workshops and other program building/supporting activities. EPA should assume the lead only where a state cannot or will not take the lead, despite whatever assistance EPA can provide.

DATE: May 5, 1982

SUBJECT: CDS Guidance for Tracking Sources on Compliance Schedules

FROM: John B. Rasnic, Chief
Compliance Monitoring Branch, DSSE

TO: Addressees

There has been some confusion about how to record compliance status in the Compliance Data System (CDS) for sources on schedules to install/modify control equipment. Some regions are tracking sources on federally enforceable delayed compliance orders (DCOs) as if such sources, if meeting the interim requirements of the DCO, are in compliance with the SIP. The Division of Stationary Source Enforcement (DSSE) disagrees with this approach.

Despite the fact that many DCOs are promulgated as SIP revisions, they are fundamentally different from Section 110 actions that revise the SIP. A DCO serves to insulate the source from further state, federal, or citizen enforcement under Sections 113 and 304 of the Clean Air Act for subsequent violation of the SIP, so long as the order is in effect and is being met. It does not replace the original SIP requirements as does a Section 110 revision. A DCO is a remedial action which corrects a violation rather than excusing it. For these reasons, we believe such distinctions warrant different approaches in tracking the compliance status of affected sources. Since this question was raised, DSSE is taking the opportunity to restate guidance on the entire subject of tracking sources on compliance schedules in CDS.

Sources meeting schedules which, because of a Section 110 action, are part of a federally approved SIP should be carried in CDS as in compliance and coded as SCMS = 4. The SIP code (SIPC) should be used to designate the type of schedule (SIPC = 2).

All other sources on compliance schedules should be tracked as "Meeting Compliance Schedules" (SCMS = 5). This included sources with compliance schedules established by DCOs and court orders.

The type of schedule for such sources should also be identified by using the proper SIP code, e.g., "federally enforceable DCO" (SIPC = 1).

If the need exists to track sources on federally approved SIP schedules, a special report listing such sources can be established.

DATE: February 2, 1982

SUBJECT: Guidance on Establishing State and Regional Programs for VOC Sources

FROM: Director
Division of Stationary Source Enforcement

TO: Air & Waste Management Division Directors, Regions I-X

Because of the changes to State Implementation Plans in response to Part D of the Clean Air Act, there has been a significant increase in the number of VOC sources (sources emitting volatile organic compounds) subject to regulation. Some VOC sources are subject to immediately effective regulations or compliance schedules under Part D, while others will not be subject until the 1982 or 1987 attainment dates. A large part of our future stationary program could be directed towards VOC sources and it will require a substantial effort to establish state and regional programs to address these sources. VOC sources will need particular attention because many could be "initial compliance" problems.

It is important for us to have a complete inventory of Class A1 VOC sources (sources emitting 100 t/yr or more actual or potential controlled emissions), and it appears that CDS is not yet complete. Discussions with regional staff over the past several months indicate that CDS inventories of VOC sources could be significantly improved. Estimates vary on the number of VOC sources nationally. A recent PEDCO study estimates that there are 5400 Class A VOC sources; however, CDS shows only 3900.

At least one region has responded to the increase in subject VOC sources by placing more program emphasis on these sources. Region V has written a "Strategy" for VOC sources and has given guidance to their states to assist them in building VOC inventories and establishing procedures for effectively monitoring the compliance of these sources.

Surveillance of VOC sources requires a different approach than the traditional compliance investigations we have been doing. Rather than relying on add-on controls to achieve compliance, the general trend in regulation of VOC sources has been towards the development of substitute materials and processes. In addition, the use of bubbles and longer averaging periods, prevalent in VOC regulations, often require more extensive record-keeping. Surveillance programs will have to be adapted to accommodate these changes. Both State and federal inspectors will have to learn about new industrial processes and how to use new analytical instruments. The large number of minor VOC sources will require changes in surveillance programs at the state level.

I encourage you to focus more attention on VOC sources:

- (1) Of primary importance is ensuring that CDS contains a complete inventory of Class A1 VOC sources.

EFFECTIVE: June 1, 1984

- (2) The regions should also work closely with the states to assist them in building inventories of VOC sources and establishing adequate compliance monitoring procedures.
- (3) Training of personnel in surveillance techniques is another priority task.

I would be interested in hearing about the progress you have made in addressing VOC sources and any particular technical or programmatic problems you have encountered in working in this area.

DATE: October 30, 1980

SUBJECT: Definition and Guidance for CDS Actions Identified for Headquarters' Use.

FROM: Director, Division of Stationary Source Enforcement (EN-341)

TO: Lance C. Vinson
Director, Enforcement Division, Region VII

RoxAnn Varzeas
CDS Coordinator, Region VIII

After reviewing regional responses (see Attachment 1) to our request for regional actions equivalent to those identified for Headquarters' use (March 17, 1980 "Conversion Tape Memo"), it is clear that definitions and guidance for the use of certain action types are needed. Therefore, a list of enforcement actions and appropriate definitions and guidance are listed below for your evaluation, comparison, and comment.

Headquarters' interest in these actions is based on a wide range of uses. The effort is necessary for the management of stationary source air programs subject to the Clean Air Act as well as providing a basis for program planning and budgeting. The conversion tape will facilitate statistical totalling of actions taken by the states and regions, and will also provide (by specifying retrieval criteria) a categorial breakdown of action types by industry (power plant, iron and steel, etc.); ownership (industrial, state, federal, municipal); initiator (EPA, State); and dates (initiated, completed). In addition, it will inform the Assistant Administrator for Enforcement of the progress of the additional program, areas where delays occur, the need for additional planning strategies and shifting of resources.

For these reasons, we urge you to consider each definition carefully. If an action does not meet the definition well, we would appreciate a brief explanation to clarify the difference. The following list contains the definitions of the actions identified for Headquarters' use:

1. Case Development Inspector - Any federally conducted site visit by EPA or its representative (contractor) intended to be used to initiate or support an enforcement action. This includes an inspection pursuant to a citizen's complaint or congressional request, but does not include conducting or observing an official stack test.
2. State Inspection - A site visit performed by a State or its representative to determine or verify the compliance of all emission points at a source with applicable state and federal air requirements. It does not include conducting or observing a stack test by approved EPA reference methods.

3. Overview Inspection - Any federally conducted site visit to a source reported by the State to be in compliance for all regulated pollutants and emission points for the purpose of confirming compliance, irrespective of the inspection result. Any other federal site visit for any other purpose, except stack testing, is a case development inspection. Any overview inspection which results in the discovery of a violation is still coded in CDS as an overview inspection. Subsequent site visits would be coded as case development inspections.
4. NOV Issued - A notice sent by EPA or the State pursuant to the authority granted under Section 113 of the Federal Clean Air Act Amendments of 1977 or similar State authority, informing a source that a violation of an applicable federal or state regulation has occurred.
5. State Administrative Order - A State administrative action (other than a civil or criminal action) against a source pursuant to state authority that is not federally enforceable.
6. Civil Action - Steps planned and taken by EPA or the State before referring a litigation report to DSSE pursuant to the authority granted under Section 113(b) of the Federal Clean Air Act Amendments of 1977 or similar State authority for violating applicable federal or state regulations.
7. Criminal Action - Steps planned and taken by EPA or the State before referring a litigation report to DSSE pursuant to the authority granted under Section 113(c) of the Federal Clean Air Act Amendments of 1977 or similar State authority for violating applicable federal or state regulations.
8. EPA 113(a)(1) SIP Order Issued - An administrative order issued by EPA pursuant to the authority granted under Section 113(a)(1) of the Federal Clean Air Act Amendments of 1977.
9. EPA 113(a)(3) Non-SIP Order Issued - An administrative order issued by EPA pursuant to the authority granted under Section 113(a)(3) of the Federal Clean Air Act Amendments of 1977.
10. EPA 113(a)(5) Stop Construction Order Issued - An administrative order issued by EPA pursuant to the authority granted under Section 113(a)(5) of the Federal Clean Air Act Amendments of 1977.
11. EPA 113(d)(1) Delayed Compliance Order Issued - An administrative order issued by EPA and promulgated in the Federal Register pursuant to the authority granted under Section 113(d)(1) of the Federal Clean Air Act Amendments of 1977.
12. 113(d)(2) Delayed Compliance Order Issued - An administrative order issued by the State and approved by EPA pursuant to the authority granted under Section 113(d)(2) of the Federal Clean Air Act Amendments of 1977.

13. 113(d)(3) Replacement/Shutdown Order Issued - An administrative order issued by EPA or submitted by the State, approved by EPA and promulgated in the Federal Register pursuant to the authority granted under Section 113 (d)(3) of the Federal Clean Air Act Amendments of 1977.
14. 113(d)(4) Innovative Technology Order Issued - An administrative order issued by EPA or submitted by the State, approved by EPA and promulgated in the Federal Register pursuant to the authority granted under Section 113 (d)(4) of the Federal Clean Air Act Amendments of 1977.
15. 113(d)(5) Coal Conversion Order Issued - An administrative order issued by EPA or submitted by the State, approved by EPA and promulgated in the Federal Register pursuant to the authority granted under Section 113 (d)(4) of the Federal Clean Air Act Amendments of 1977.
16. Primary 119 Smelter Order Issued - An administrative order issued by EPA or submitted by the State approved by EPA and promulgated in the Federal Register pursuant to the authority granted under Section 119 of the Federal Clean Air Act Amendments of 1977.
17. Source Test Conducted - An EPA or a State representative has conducted an actual measurement of emissions at the point of release for regulated pollutants within a facility, using EPA-approved reference methods. (Success or failure should be indicated by the results code, and the completion of the action indicated by entering the date the test was finished in the date achieved (DTAC) action type.)
18. Source Test Conducted - An EPA or a State representative has observed the performance of a source test by the owner or operator using EPA-approved reference methods.
19. Certification of Compliance - Any EPA or State ascertainment of compliance by methods other than an inspection or source test, usually by source supplied information. Other methods may include visible emissions observationa, "windshield inspections" and similar less comprehensive or reliable compliance determination methods.
20. Referred to DSSE - A litigation report has been prepared by the Region to initiate a civil or criminal action against a noncomplying source and sent to tee Division of Stationary Source Enforcement for evaluation.
21. PSD Application Complete - The owner of the proposed new source or existing source to be modified, subject to the Prevention of Significant Deterioration regulations, submits an application which contains all the information necessary for procesing the application. Designating an application complete for purposes of permit processing does not preclude additional information.

22. PSD Preliminary Determination - The permit application has been processed by the reviewing authority, and the proposed approval/disapproval of a permit is announced in the Federal Register and opened to public comment.
23. PSD Permit Issued - A final determination to issue a permit has been made by the reviewing authority and the permit is issued to the owner.
24. Offset Determination - The proposed new source or existing source to be modified or reconstructed, subject to EPA's Emission Offset Interpretative Ruling, details a plan for obtaining emission reductions from existing sources that are more than equivalent to offset its new emissions. The reviewing agency will examine the plan as part of the NSR permit review process to determine its acceptability. (Use the results code to indicate the acceptance of the proposed offset plan. The date approval/disapproval is determined should be entered in the date achieved (DTAC) action type.)
25. NSR Preliminary Determination - The permit application has been processed by the reviewing authority, and the proposed approval/disapproval of a permit is announced in the Federal Register and opened to public comment.
26. NSR Permit Issued - A final determination to issue a permit has been made by the reviewing authority and the permit is issued to the owner.
27. EPA Review of NSR Permit - The proposed State issuance of a permit is reviewed by EPA to ensure that all federal requirements are met. The Date Achieved (DTAC) should indicate when the EPA review is completed.

When EPA or the State issues a new source-related permit, the owner or operator of a proposed new source or existing source to be modified must inform the appropriate reviewing authority of the following actions:

28. New Source Commence Construction - EPA or the State receives notice that the owner or operator of a proposed new source or existing source to be modified has undergone a continuous program of construction or modification, or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification. Please note this action is differentiated from "Start Construction/Modification (Increment 3)" associated with violating existing sources on compliance schedules.
29. New Source Start-up - The owner or operator of a proposed new source or existing source to be modified sets the facility in operation for any purpose.

The statutorily-established period of time for issuing NESHAP waivers to sources emitting currently regulated pollutants has expired. Therefore, all NESHAP sources except those asbestos sources subject to Work Practice Standards should be in compliance achieved and maintained, shutdown. Only historic waivers should be listed in CDS.

Compliance schedule increments if progress should be monitored for adherence to enforceable dates agreed to by the regulatory agency. Each of the following schedule increment action types (if applicable) should be entered in CDS with an appropriate compliance date to track schedule progress (DTSC), and the actual date compliance with the increment is verified (DTAC).

- Submission of Final Control Plan (Increment 1)
- Binding Commitment to Purchase Control Equipment (Increment 2)
- Start Construction/Modification (Increment 3)
- End Construction/Modification (Increment 4)
- Final Compliance (Increment 5)

These definitions have been provided to reduce any further misinterpretation. Moreover, please alert Headquarters to any special procedures or selection criteria necessary to make complete retrievals on the above listed enforcement actions.

In regard to your response to the March 17, 1980 memo and subsequent telephone conversation, are the case development and overview inspections currently being conducted tracked in CDS? If so, what action types are used? Also, Region VIII has not differentiated dually-coded actions as requested. When separating dually-coded actions, please create a new action type if one does not exist and modify the action description. All historical dually-coded actions can remain unchanged. Headquarters will note that discrepancy when performing future retrievals of these historical actions. However, please code all future actions using the newly separated action types. Furthermore, the following action types from your response need clarification.

52 - EPA Inspections

Are these inspections case development inspections?

X4 - State 113(d) SIP DCO submitted to EPA

Your response informed us that this action is considered equivalent to the Headquarters action type 113(a) SIP Order. Section 113(a) relates to issuing an administrative order for a violation of any requirements of an applicable SIP requiring the source to comply or face a civil action. Section 113(d) relates to issuing an administrative order which specifies a schedule and final date for attaining compliance for any source unable to comply with an applicable SIP. These actions are not equivalent and should be tracked separately.

X5 - State 113(d) Replacement DC Order Approved by EPA

EFFECTIVE: June 1, 1984

Your response informed us that this action is considered equivalent to the Headquarters action type 113(a)(3) Order Issued. Section 113(a)(3) relates to issuing an administrative order for a violation of Sections 111 (new sources), 112 (NESHAP) and 114 (inspections) requiring a source to comply or face a civil action. The supart in Section 113(d) referring to replacement delayed compliance orders is not equivalent to a 113(a)(3) order and should be tracked separately.

To stress again, the conversion tape effort does not entail any changes in coding practice by any region or state other than for those actions dually-coded or where a regionally equivalent action type currently does not exist. After comparing these definitions to your previous responses, return the reassessed action types to DSSE by November 21, 1980 (use Attachment 2). Any questions regarding the above should be directed to Howard Wright (FTS 755-0103) or Debra Favre (FTS 755-79827).

DATE: September 15, 1982

SUBJECT: Significant Violator Tracking Using CDS

FROM: Director
Stationary Source Compliance Division

TO: Directors, Air & Waste Management Divisions, Regions II-IV, VI, VIII
and X

Directors, Air Management Divisions, Regions I, V and IX

One of the objectives of the Administrator's Management Accountability System (MAS) is that resources be used to address significant air violators and return them to compliance. A significant violator was defined in the Kathleen M. Bennett memorandum December 29, 1981 and further guidance presented in another Bennett memorandum dated June 24, 1982. As a result, significant violators have been identified by all regions and lists sent to Headquarters. Progress on bringing these sources back into compliance will be reported to the Administrator under the MAS.

Compliance data about significant violators are required by the MAS to be reported on a quarterly basis. To minimize the reporting burden and more easily maintain a historic record of events associated with these violators as they are brought back into compliance, the Administrator has designated Compliance Data System (CDS) as the stationary source air enforcement reporting system for the MAS. Therefore, pertinent information on significant violators shall be transmitted to and retrieved through CDS. It is essential that such information be compiled and entered in a timely, reliable and expeditious fashion. Due to the weekly update cycle of CDS, these goals can all be achieved. However, some information in CDS on significant violators is in need of enhancement before both reporting to the MAS and tracking instructions as to when, how, and what to report through CDS on these sources are outlined below.

To facilitate identifying significant violators, SSCD has developed a new source-specific code in CDS to flag these sources. The code identifies significant violators by the acronym "SVIO." Its values indicate the lead enforcement agency responsible for bringing the source back to compliance. The values are:

B = Joint EPA/State action

E = EPA action

S = State action

Such flagged sources can be retrieved using "SVIO" as the sole selection criterion. At present, only Headquarters can flag sources identified as significant violators. However, others can retrieve such data using "SVIO" code.

The following source-specific information must be maintained in CDS on each significant violators:

<u>Information Type</u>	<u>CDS CODES</u>
Source Size	CLAS
Air Program	APCD
Source Compliance Status	SCMS
Pollutant	PLLT, PLUT
Pollutant-Specific Compliance Status	PCMS, CMST
Enforcement Action	ATPE
Date Action Scheduled	DTSC
Date Action Achieved	DTAC
Comments (as may be appropriate)	----

Please note this is consistent with the John Rasnic March 10, 1982, memorandum concerning tracking significant violators by pollutant (see attachment).

It is required that all information applicable to the entire source be entered at the source level (PTNO M 000). Any other data or enforcement actions should be entered only at the appropriate emission point. Do not enter the same data at both the source level and point level for a given source. Redundant data will only introduce confusion and necessitate your providing additional clarifying information.

In order to track progress on these sources, the appropriate information must be entered in timely manner into CDS. This means the information on sources should be entered on the first weekly update following the end of the quarter. Because of this time frame (necessitated by MAS reporting requirements), flow of such information from the State and/or EPA field personnel to the regional CDS manager must also be timely.

10.0 USER COMMUNICATIONS

In order to derive full benefit from the use of CDS, users must be able to receive answers to their problems or questions as quickly as possible. To assist the CDS User, a number of common types of communication are listed below.

10.1 EPA Policy and Enforcement Matters

For questions on EPA policy and enforcement matters, users should contact EPA SSCD, Howard Wright, Chief of Compliance Section.

10.2 Enhancements or Modifications to CDS

For any user communications, new features, system revisions, the CDS Newsletter will be produced on a quarterly basis and sent to CDS users. Any questions resulting from new features should be addressed to either EPA SSCD, Franklin C. Smith, CDS Data Base Coordinator, or to the CDS Operation and Maintenance Support Contractor, TRC Environmental Consultants, Inc.

10.3 Technical DP

For any communication dealing with Technical Data Processing applications, programming, system specification changes, minicomputer interface packages, users should contact their regional Data Processing Manager (for minicomputer applications) or the CDS Operation and Maintenance Support Contractor, TRC Environmental Consultants, Inc.

10.4 User Training

For training in use of CDS or WYLBUR, users should contact EPA SSCD, Franklin C. Smith, CDS Data Base Coordinator.

EFFECTIVE: June 1, 1984

APPENDIX

DATA ELEMENT DICTIONARY

<u>Page</u>	<u>Data Element</u>	<u>Abbr.</u>
	A. COMMON TO ALL CARD TYPES 1-8	
A-1	Region	REGN
A-3	State	STTE
A-5	County Code	CNTY
A-6	Source Number	SRCE
A-7	Emission Point Number	PTNO
A-8	Action Number	ANUM
A-9	Card Code	
A-10	Update Code	
	B. SOURCE LEVEL - CARD 1	
B-1	Air Quality Control Region	AQCR
B-2	City Code	CYCD
B-3	Source Name	SNME
B-4	Street Address	STRT
B-5	Regional Data Element 1	RDE1
B-6	Regional Data Element 2	RDE2
B-7	Regional Data Element 3	RDE3
B-8	Regional Data Element 4	RDE4
B-9	Regional Data Element 5	RDE5
	C. SOURCE LEVEL - CARD 2	
C-1	City Name	CYNM
C-2	Zip Code	ZIPC
C-3	State Registration Number	STRG
C-4	NEDS Cross-Reference Number	NEXS
C-5	SIC Code	SICC
C-6	Priority Code	PRIO
C-7	Government Facility Code	FEDF
C-8	Air Program Code	APCD
C-9	Air Program Status	APST
C-10	Regional Data Element 6	RDE6
C-11	Staff Personnel Code-Source	PERS
	D. SOURCE LEVEL - REPEATING POLLUTANT CARD 3	
D-1	Penalty Issue Addressed Indicator	PISA
D-2	Pollutant ID	PLLT
D-3	Pollutant Delete Flag	DROP
D-4	Pollutant Compliance	PCMS
D-5	Regional Data Element 14	RD14
D-6	Pollutant Classification	PCLS
D-7	Pollutant Air Quality Control Indicator	PAQC
D-8	Pollutant Loading	LOAD
D-9	Facility Capacity	FCAP

DATA ELEMENT DICTIONARY (Continued)

<u>Page</u>	<u>Data Element</u>	<u>Abbr.</u>
D-10	Regional Data Element 9	RDE9
D-11	Regional Data Element 10	RD10
D-12	Regional Data Element 11	RD11
D-13	Regional Data Element 12	RD12
D-14	Source Classification Code	CLAS
D-15	Loading Derivation Code	LDRC
E. POINT LEVEL - CARD 5		
E-1	SCC Code	SCC3, SCC6, SCC8
E-2	Capacity Code	CAPC
E-3	Compliance Status	CMST
E-5	SIP Code	SIPC
E-6	Pollutant Code	PLUT
E-7	State Regulation	SREG
E-8	Regional Data Element 15	RD15
E-9	Process Description	PRDS
E-10	Multiple Cross-Reference	MULT
E-11	Regional Data Element 7	RDE7
E-12	Procedural Compliance	CMS2
F. ACTION LEVEL - CARD 7		
F-1	Action Description	ADES
F-2	Civil Penalty Amount	PLTY
F-3	Action Type	ATPE
F-4	Date Achieved	DTAC
F-5	Date Scheduled	DTSC
F-6	Action Staff Code	PERA
F-7	Results Code	STAC
F-8	Regional Data Element 8	RDE8
G. COMMENTS		
G-1	Line Number	
G-2	Comments	

EFFECTIVE: June 1, 1984

A. COMMON TO ALL CARD TYPES 1 - 8

REGION

Definition: REGION is a two-position numeric region identifier.

Retrieval Abbreviation	REGN	Valid Values:	
		01 through 10	
Card Type	1-8	See attachment showing the region locations and the states associated with each region.	
Card Columns	1-2		
Data Element Length	2		
Data Type	NUMERIC		
Justified	LEFT	Masterfile Record Type	20-47
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 reentered with the correct region code.

REGION CODE

States have been assigned to regions as follows:

<u>Region</u>	<u>States</u>
01-Boston	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
02-New York	New Jersey, New York, Puerto Rico, Virgin Islands
03-Philadelphia	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia
04-Atlanta	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
05-Chicago	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
06-Dallas	Arkansas, Louisiana, New Mexico, Oklahoma, Texas
07-Kansas City	Iowa, Kansas, Missouri, Nebraska
08-Denver	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming
09-San Francisco	Arizona, California, Hawaii, Nevada, Guam, American Samoa, Trust Territories
10-Seattle	Alaska, Idaho, Oregon, Washington

STATE

Definition: STATE is a two-position numeric state code. The State codes are derived from the Storage and Retrieval of Aeromeric Data Manual (SAROAD) published by OAQPS.

Retrieval Abbreviation	STTE	Valid Values:	
		01-56	
Card Type	1-8	See attached showing the states associated with each state code.	
Card Columns	3-4		
Data Element Length	2		
Data Type	NUMERIC		
Justified	LEFT	Masterfile Record Type	20-47
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 reentered with the correct state code.

STATE CODE

The CDS system uses the following two-digit SAROAD state codes:

01	Alabama	31	New Jersey
02	Alaska	32	New Mexico
03	Arizona	33	New York
04	Arkansas	34	North Carolina
05	California	35	North Dakota
06	Colorado	36	Ohio
07	Connecticut	37	Oklahoma
08	Delaware	38	Oregon
09	District of Columbia	39	Pennsylvania
10	Florida	40	Puerto Rico
11	Georgia	41	Rhode Island
12	Hawaii	42	South Carolina
13	Idaho	43	South Dakota
14	Illinois	44	Tennessee
15	Indiana	45	Texas
16	Iowa	46	Utah
17	Kansas	47	Vermont
18	Kentucky	48	Virginia
19	Louisiana	49	Washington
20	Maine	50	West Virginia
21	Maryland	51	Wisconsin
22	Massachusetts	52	Wyoming
23	Michigan	53	American Samoa
24	Minnesota	54	Guam
25	Mississippi	55	Virgin Islands
26	Missouri	56	Trust Territories
27	Montana		
28	Nebraska		
29	Nevada		
30	New Hampshire		

COUNTY CODE

Definition: COUNTY CODE is a four-digit numeric county identifier. The county codes are derived from the SAROAD manual.

Retrieval Abbreviation	CNTY	Valid Values:	
Card Type	1-8	All county codes must be present on the CDS County Code/AQCR Table.	
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:

*** = 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.

SOURCE NUMBER

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	20-47
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 may be used 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.

EMISSION POINT NUMBER

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 000 refers to the entire source.

Retrieval Abbreviation	PTNO	Valid Values: 000 through 999	
Card Type	1-8		
Card Columns	14-16		
Data Element Length	3		
Data Type	NUMERIC		
Justified	LEFT	Masterfile Record Type	20-47
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 000			
*** = Fatal Error		* = Warning Error	

Coding Considerations:

When a card type 1 is entered as a new transaction, an emission point 000 is generated by the system; however, it is possible to enter an emission point 000 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 may 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 000 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 of 02, the CDS point number 020 could represent the particulate emissions and point 021 could represent the SO₂ emissions.

ACTION NUMBER

Definition: ACTION NUMBER is a two-digit numeric sequential action identifier.

Retrieval Abbreviation	ANUM	Valid Values: 00 through 99	
Card Type	1-8		
Card Columns	17-18		
Data Element Length	2		
Data Type	NUMERIC		
Justified	LEFT	Masterfile Record Type	20-47
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 00 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.

CARD CODE

Definition: CARD CODE is a one-digit numeric field which identifies the type of fixed format information found on the CDS input punch card.

<u>Retrieval Abbreviation</u>		Valid Values:
Card Type	1-8	1 = Source record.
Card Columns	19	2 = Source record.
Data Element Length	1	3 = Pollutant record.
Data Type	NUMERIC	4 = Source comment.
		5 = Emission point record.
		6 = Emission point comment.
		7 = Action record.
		8 = Action comment.
<u>Justified</u>		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:

UPDATE CODE

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	80	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 000		
***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

UPDATE CODE

Coding Considerations: (Continued)

transaction. By coding an asterisk anywhere in a data field, that data field will be changed to spaces (date values will be zeroed out).

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 000 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.

EFFECTIVE: June 1, 1984

B. SOURCE LEVEL - CARD 1

AIR QUALITY CONTROL REGION

Definition: AIR QUALITY CONTROL REGION (AQCR) is a three-digit numeric value.

Retrieval Abbreviation	AQCR	Valid Values:	
Card Type	1	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 Columns	20-22		
Data Element Length	3		
Data Type	NUMERIC		
Justified	LEFT	Masterfile Record Type	20
Required on New Entry	YES	Masterfile Position	21-23
Nationally Controlled	YES	Masterfile Length	3

Edit Error Messages:

*** = 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.

EFFECTIVE: June 1, 1984

CITY CODE

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:	
Card Type	1	If the field is being used, it should be a four-digit numeric code found in the SAROAD manual.	
Card Columns	23-26		
Data Element Length	4		
Data Type	NUMERIC		
Justified	LEFT	Masterfile Record Type	20
Required on New Entry	NO	Masterfile Position	24-27
Nationally Controlled	NO	Masterfile Length	4

Edit Error Messages:

*** = 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 from the EPA's Office of Air Quality Planning and Standards.

SOURCE NAME

Definition: SOURCE NAME is a 20-position alphanumeric facility identifier.

Retrieval Abbreviation	SNME	Valid Values: All alphanumeric characters.	
Card Type	1		
Card Columns	27-46		
Data Element Length	20		
Data Type	ALPHANUMERIC		
Justified	LEFT	Masterfile Record Type	20
Required on New Entry	YES	Masterfile Position	28-47
Nationally Controlled	NO	Masterfile Length	20
Edit Error Messages:			
***SOURCE NAME REQUIRED ON NEW ENTRY			
*** = Fatal Error		* = Warning Error	

Coding Considerations:

The first position of facility name must be filled 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 attached example developed by Region V.

EFFECTIVE: June 1, 1984

STREET ADDRESS

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	20		
Data Type	ALPHANUMERIC		
Justified	LEFT	Masterfile Record Type	20
Required on New Entry	NO	Masterfile Position	48-67
Nationally Controlled	NO	Masterfile Length	20

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.

REGIONAL DATA ELEMENT 1Definition: REGIONAL DATA ELEMENT 1 - 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	20
Required on New Entry	NO	Masterfile Position	140
Nationally Controlled	NO	Masterfile Length	1

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

Typical usages of this field include identifiers for (as of March 1982):

Region I	Attainment/Nonattainment, Archiving
Region II	State delegation for NSPS, NESHAPS
Region III	Attainment/Nonattainment
Region IV	MSEE Priority Sources
Region V	Attainment/Nonattainment
Region VI	SIP-PSD
Region VII	Attainment/Nonattainment
Region VIII	Attainment/Asphalt Plants
Region IX	PSD NSR Applicability
Region X	Major Sources

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REGIONAL DATA ELEMENT 2

Definition: REGIONAL DATA ELEMENT 2 - 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 (as of March 1982):

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	NESHAP and PSD Application Numbers
Region VII	Not Subject to PSD but under Review
Region VIII	Vapor Recovery
Region IX	Future Effective Permit Processing
Region X	Indian Reservations

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 3

Definition: REGIONAL DATA ELEMENT 3 - 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 (as of March 1982):

Region I	Sources to be Archived
Region II	PSD Status
Region III	MSEE Identifier - State Tracking Information
Region IV	Major SIP Sources
Region VII	Continuous Monitoring
Region VIII	Subject to State Audit
Region IX	Mobile Sources - Significant Violators
Region X	

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 4

Definition: REGIONAL DATA ELEMENT 4 - user supplied.

Retrieval Abbreviation	RDE4	Valid Values:	
Card Type	1		
Card Columns	70-74		
Data Element Length	5		
Data Type	ALPHANUMERIC		
Justified		Masterfile Record Type	20
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 SIC Code, only the first four positions may be used; columns 70-73 must be numeric and column 74 must be blank.

Other typical usages of this field include identifiers for (as of March 1982):

Region II	Enforcement Docket Number, PSD, I.D. of New Source
Region III	Major Bulk Terminal
Region IV	Additional Staff Codes
Region V	SIC Codes - Minnesota
Region VII	Nebraska Case Numbers
Region VIII	Continuous Monitoring
Region IX	VOC Numbers

REGIONAL DATA ELEMENT 5Definition: REGIONAL DATA ELEMENT 5 - 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	20
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 (as of March 1982):

Region II	Multiple Docket Numbers, Federal Facility Types
Region III	V=Violators
Region V	Indiana Information
Region IX	State Cross-Reference Numbers
Region X	Tertiary SIC Codes, Federal Facility Types

EFFECTIVE: June 1, 1984

C. SOURCE LEVEL - CARD 2

CITY NAME

Definition: CITY NAME gives the location of the facility.

Retrieval Abbreviation	CYNM	Valid Values:	
		All alphanumeric characters.	
Card Type	2		
Card Columns	20-34		
Data Element Length	15		
Data Type	ALPHANUMERIC		
Justified	LEFT	Masterfile Record Type	20
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.

ZIP CODE

Definition: ZIP CODE is the five-digit numeric postal zone of the actual location of the facility.

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	20
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.

EFFECTIVE: June 1, 1984

STATE REGISTRATION NUMBER

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	40-54		
Data Element Length	15		
Data Type	ALPHANUMERIC		
Justified	LEFT	Masterfile Record Type	20
Required on New Entry	NO	Masterfile Position	90-104
Nationally Controlled	NO	Masterfile Length	15

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

When the state identifier is consistently entered into this field, CDS reports can be sorted in the same way as the state's files are sorted.

NEDS CROSS-REFERENCE NUMBER

Definition: NEDS CROSS-REFERENCE NUMBER 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	20
Required on New Entry	YES	Masterfile Position	105-108
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.

For source numbering convenience, the last four positions of Source Number should be the NEDS Cross-Reference Number. If this method is used, the first digit of the CDS Source Number should be the Air Program Code.

SIC CODE

Definition: SIC CODE is the Standard Industrial Class Code. It refers to the primary product produced or service performed by the facility.

Retrieval Abbreviation	SICC	Valid Values: All numerics.	
Card Type	2		
Card Columns	59-62		
Data Element Length	4		
Data Type	NUMERIC		
Justified	LEFT	Masterfile Record Type	20
Required on New Entry	YES	Masterfile Position	109-112
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
Superintendent of Documents
Washington, DC 20402

Stock Number 4101-0066

PRIORITY CODE

Definition: PRIORITY CODE is a field reserved for Headquarters 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		Masterfile Record Type	20
Required on New Entry	NO	Masterfile Position	113
Nationally Controlled	YES	Masterfile 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:

<u>Value</u>	<u>Description</u>	<u>Value</u>	<u>Description</u>
M	Municipal Incinerator	X	Coal- & Oil-Fired Power Plant
N	Nuclear Power Plants	Y	Coal- & Gas-Fired Power Plant
R	Refinery	Z	Oil- & Gas-Fired Power Plant
I	Iron and Steel, Non-Priority	G	Gas-Fired Power Plant
P	Iron and Steel, Priority	D	Diesel-Fired Internal Combustion Power Plant
S	Smelter	T	Gas Turbine-Power Plant
C	Coal-Fired Power Plant	A	All Fossil Fuel Fired Power Plants, i.e., C, O, & G
O	Oil-Fired Power Plant		
U	Undetermined Fuel-Fired Power Plants		

GOVERNMENTAL FACILITY CODE

Definition: GOVERNMENTAL FACILITY CODE identifies facilities owned or operated by a governmental unit. This code was formerly called the Federal Facility Code.

Retrieval Abbreviation	PEDF	Valid Values:	
		0, 1, 2, 3, 4, 5	
Card Type	2		
Card Columns	64		
Data Element Length	1		
Data Type	NUMERIC		
Justified		Masterfile Record Type	20
Required on New Entry	NO	Masterfile Position	113
Nationally Controlled	YES	Masterfile Length	1

Edit Error Messages:

*** = 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/O - All other facilities not owned or operated by a federal state or local government.

AIR PROGRAM 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.

Retrieval Abbreviation	APCD	Valid Values:	
Card Type	2	0 = SIP Source	
Card Columns	65	1 = SIP Source under Federal Jurisdiction	
Data Element Length	1	4 = ESECA	
Data Type	ALPHANUMERIC	5 = OTHER	
		6 = PSD	
		7 = NSR	
		8 = NESHAP	
		9 = NSPS	
Justified		Masterfile Record Type	20
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 enforcement activity, except for sources under direct federal jurisdiction.

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.

AIR PROGRAM STATUS

Definition: AIR PROGRAM STATUS represents the operational condition of a facility for a given air program. This field is particularly applicable for NSPS, NSR, PSD, and NESHAP sources. If different points have different operating statuses, the APST should reflect the most advanced operational status of all the points.

Retrieval Abbreviation	APST	Valid Values: O, P, C, D, R, S, T, X	
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:

O = Operating
 P = Planned (has applied for a construction permit)
 C = Under Construction
 T = Temporarily Closed - Shutdown
 X = Permanently Closed - Dismantled
 D = NESHAP Demolition
 R = NESHAP Renovation
 S = NESHAP Spraying

} Should be used only for sources with APCD=8.

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 6

Definition: REGIONAL DATA ELEMENT 6 - user supplied.

Retrieval Abbreviation	RDE6	Valid Values: All alphanumeric characters.	
Card Type	2		
Card Columns	67-76		
Data Element Length	10		
Data Type	ALPHANUMERIC		
Justified		Masterfile Record Type	20
Required on New Entry	NO	Masterfile Position	153-162
Nationally Controlled	NO	Masterfile Length	10

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

Typical usages of this field include identifiers for (as of March 1982):

Region V	Additional Pollutants - Steel Information
Region VI	PSD Permit Numbers
Region VII	ESECA OFU Numbers
Region IX	Stage II Non-Compliance - MSEE Number
Region X	GSA Federal Facility Number

STAFF PERSONNEL CODE - SOURCE

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 two numeric characters.

Retrieval Abbreviation	PERS	Valid Values:	
Card Type	2	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 Columns	77-79		
Data Element Length	3		
Data Type	ALPHANUMERIC		
Justified	LEFT	Masterfile Record Type	20
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.

EFFECTIVE: June 1, 1984

D. SOURCE LEVEL - REPEATING POLLUTANT CARD 3

PENALTY ISSUE ADDRESSED INDICATOR

Definition: PENALTY ISSUE ADDRESSED INDICATOR indicates the status of the Penalty Issue for Significant Violators subject to the "Post 82" Enforcement Policy. For every Significant Violator placed on a schedule (Compliance Code 5), there is a need to address the Penalty Issue before full resolution of the violation is considered achieved. For sources placed on a schedule which have had the issue addressed, code a "Y" into the field. If the Significant Violator is not subject to the "Post 82" Enforcement Policy, code an "X" into the field. If the Significant Violator is on a schedule but the Penalty Issue has not been addressed, do not code anything into the field.

Retrieval Abbreviation	PISA	Valid Values:	
Card Type	3	X, Y, (Blank)	
Card Columns	21		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		Masterfile Record Type	30
Required on New Entry	NO	Masterfile Position	22
Nationally Controlled	YES	Masterfile Length	1
Edit Error Messages: N/A			
*** = Fatal Error		* = Warning Error	

Coding Considerations:

X = Not subject to "Post 82" Policy.
Y = Penalty Issue Addressed.
(BLANK) = Penalty Issue not Addressed.

POLLUTANT ID

Definition: POLLUTANT ID is used to identify the pollutant for which pollutant compliance data is being entered.

Retrieval Abbreviation		Valid Values:	
PLL T			
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	N2 - NO ₂
AS - Arsenic	OD - Odors
BE - Beryllium	OT - Other
BZ - Benzene	PB - Lead
CD - Cadmium	PT - Particulate Matter (total)
CE - Coke Oven Emissions	S2 - SO ₂
CO - Carbon Monoxide	TS - Total Reduced Sulfur
FL - Fluorides	VE - Visible Emissions
HC - Hydrocarbons (Volatile Organic Compounds)	VC - Vinyl Chloride
HG - Mercury	ZN - Zinc

POLLUTANT DELETE FLAG

Definition: POLLUTANT DELETE FLAG is used to remove from the masterfile all data related to a repeating pollutant.

Retrieval Abbreviation	DROP	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.

This data element is valid for data entry only.

POLLUTANT COMPLIANCE

Definition: POLLUTANT COMPLIANCE indicates the source emissions compliance for a given pollutant based on the worst-case emission point producing the indicated pollutant.

Retrieval Abbreviation	PCMS	Valid Values:	
		0 - 9	
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:

- 0 Unknown
- 1 In violation - no schedule
- 2 In compliance by source test
- 3 In compliance by inspection
- 4 In compliance by certification
- 5 Meeting compliance schedule
- 6 In violation, not meeting schedule
- 7 In violation, unknown with respect to schedule
- 8 No applicable emission regulation
- 9 In compliance - closed down

Pollutant compliance (PCMS) and Pollutant ID (PLLT) must be maintained for all Class A significant violators.

Order of worst-case to best-case pollutant level compliance:

PCMS = 1-6-0-7-5-4-3-2,8,9.

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 14

Definition: REGIONAL DATA ELEMENT 14 - user supplied.

Retrieval Abbreviation	RD14	Valid Values:	
		All alphanumeric characters.	
Card Type	3		
Card Columns	26; 38; 50		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		Masterfile Record Type	30
Required on New Entry	NO	Masterfile Position	REPEATING
Nationally Controlled	NO	Masterfile Length	1

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

EFFECTIVE: June 1, 1984

POLLUTANT CLASSIFICATION

Definition: POLLUTANT CLASSIFICATION assigns a source classification code to an individual pollutant in the repeating pollutant area.

Retrieval Abbreviation	PCLS	Valid Values:	
Card Type	3	Input File	
Card Columns	27; 39; 51	1 = A1	
		2 = A2	
		B = B	
		U = Unknown	
Data Element Length	1		
Data Type			
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 CLASSIFICATION			
*** = Fatal Error			
* = Warning Error			

Coding Considerations:

The single character code on the input card will generate a one- or two-digit code on the master file. The generated master file PCLS values must be used for selection card values on a CDS retrieval.

<u>Input Values</u>	<u>Retrieval Values</u>
1	A1
2	A2
B	B
U	UK

POLLUTANT AIR QUALITY CONTROL INDICATOR

Definition: POLLUTANT AIR QUALITY CONTROL INDICATOR shows whether or not a source emits a criteria pollutant for which its county is nonattainment. When coupled with the pollutant ID (PLLT), the exact nonattainment status, by pollutant, is indicated for the county the source is located in.

Retrieval		Valid Values:	
Abbreviation	PAQC	A, N, U, 1, 2	
Card			
Type	3		
Card			
Columns	28; 40; 52		
Data Element			
Length	1		
Data			
Type	ALPHANUMERIC		
Justified		Masterfile	30
		Record Type	
Required on		Masterfile	
New Entry	YES	Position	REPEATING
Nationally		Masterfile	
Controlled	YES	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 - Nonattainment for primary and secondary standards for a given pollutant.

1 - Nonattainment for primary standards only, for pollutant SO₂.

2 - Nonattainment for secondary standards only, for pollutants PT or S2.

U - Unclassified.

Consult the Federal Register for a complete listing of all attainment and nonattainment areas. This list is periodically updated in the Federal Register.

All attainment designations are at the county level. System limitations preclude such designations at the sub-county level.

POLLUTANT LOADING

Definition: POLLUTANT LOADING indicates the annual pollutant loading of a given pollutant. The pollutant loading shown should be compatible with the Source Classification Code (CLAS).

Retrieval Abbreviation	LOAD	Valid Values:	
Card Type	3		
Card Columns	29-33; 41-45; 53-57		
Data Element Length	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 emissions in tons per year. No decimals or fractions should be used. Leading spaces are acceptable, but not leading zeros, i.e., 00150.

To make this a meaningful data element, a source level comment (card code 4) identifying the year of operation for the emissions listed should always accompany this data element. However, please note that this code (LOAD) is not intended to track annual emissions, but rather serve as an indicator of, and justification for, the CLAS code indicated for this source.

FACILITY CAPACITY

Definition: FACILITY CAPACITY indicates the total output capacity of the principal product produced at a facility. This might be expressed as barrels per day, megawatts, etc.

Retrieval Abbreviation		Valid Values:	
Card Type	FCAP		
	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	43-49
Nationally Controlled	NO	Masterfile Length	7

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

- 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.
- For refineries, use barrels of petroleum processed per calendar day.
- For petroleum storage facilities, use thousands of barrels total capacity.
- For incinerators (sewage sludge or municipal refuse), use tons per day/incineration rate.
- For electric utilities, use total megawatt design capacity.
- For coal-fired boiler sources, use Million British Thermal Units per Hour (MMBTUH) heat input capacity.

This field is a confidential data element. An appropriate password must be used to access this field's data.

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 9

Definition: REGIONAL DATA ELEMENT 9 - user supplied.

Retrieval Abbreviation		Valid Values:	
RDE9			
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 (as of March 1982):

Region II	NPDES Permit Numbers
Region III	PSD Permit Numbers
Region IV	County Names
Region V	PSD Application Number - General Industry Catalogue
Region VII	Air Program Status of Points in NSPS
Region IX	Date Reported as Significant Violator

REGIONAL DATA ELEMENT 10Definition: REGIONAL DATA ELEMENT 10 - 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:

Region III	District Offices
Region IV	State Inspection Year
Region V	Lead Enforcement Role - All States;
	Lead Enforcement Role - Ohio
Region VIII	Opacity Readings
Region IX	Assigned to Project Officer

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 11

Definition: REGIONAL DATA ELEMENT 11 - 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:

Region III	Continuous Monitoring Code
Region IV	B=Selected CLASS B Sources in Nonattainment Areas
Region V	Lead Enforcement
Region VIII	P=Primary Source

REGIONAL DATA ELEMENT 12Definition: REGIONAL DATA ELEMENT 12 - user supplied.

Retrieval Abbreviation		Valid Values:	
RD12			
Card Type	3		
Card Columns	76		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		Masterfile Record Type	30
Required on New Entry	NO	Masterfile Position	34
Nationally Controlled	NO	Masterfile Length	1
Edit Error Messages:			
*** = Fatal Error		* = Warning Error	

Coding Considerations:

Region V uses this field to indicate Major Source Enforcement Effort (MSEE) case delegation.

Region IV	V=VOC Sources
Region V	Indicator of Major SCC
Region VI	NSPS & PSD=M for Continuous Monitoring
Region IX	Actual/Potential Tons/Yr.

SOURCE CLASSIFICATION CODE

Definition: SOURCE CLASSIFICATION CODE - designation used for program planning purposes. Categorizes sources according to the Alabama Power decision's definition of major source.

Retrieval Abbreviation	CLAS	Valid Values:	
Card Type	3	A1 = Class A1	
		A2 = Class A2	
		UK = Unknown	
		B = Class B	
Card Columns	77-78		
Data Element Length	2		
Data Type	ALPHANUMERIC		
Justified	LEFT	Masterfile Record Type	30
Required on New Entry	YES	Masterfile Position	50-51
Nationally Controlled	YES	Masterfile Length	2
Edit Error Messages:			
*INVALID SOURCE CLASSIFICATION CODE			
*** = Fatal Error		* = Warning Error	

Coding Considerations:

Class A retrieval will include Class A1 plus Class A2.

Class A = Class A1 + A2

Class A1 = Actual or potential controlled emissions 100 t/yr as per
Alabama Power

Class A2 = Actual emissions 100 t/yr, but potential uncontrolled
emissions 100 t/yr

Class B = Potential uncontrolled emissions 100 t/yr

Class UK = Unknown

Class = Blank

All operating sources must be classified according to these categories.

LOADING DERIVATION CODE

Definition: LOADING DERIVATION CODE indicates the method of emissions estimation used to determine the source classification code for the source.

Retrieval Abbreviation	LDRC	Valid Values:	
Card Type	3	A = Actual or estimated actual	
Card Columns	79	P = Potential controlled per <u>Alabama Power</u> decision	
Data Element Length	1	I = Incomplete source loading information	
Data Type	ALPHABETIC	Blank = Assumed potential controlled per <u>Alabama Power</u> decision	
Justified	N/A	Masterfile Record Type	30
Required on New Entry	NO	Masterfile Position	52
Nationally Controlled	NO	Masterfile Length	1

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

The Loading Derivation Code must be coded for all Class A1 sources.

If LDRC is equal to 'A', at least one pollutant for that source must have emissions in the pollutant loading field equal to or greater than 100 tons per year.

EFFECTIVE: June 1, 1984

E. POINT LEVEL - CARD 5

SCC CODE

Definition: SCC CODE is the NEDS Source Classification Code which provides a detailed analysis of the process creating the emission for this point. The SCC code provides a very precise description of the process. The code is particularly useful for identifying processes which cross industrial category lines (SIC), e.g., boilers, sulfuric acid plants.

Retrieval Abbreviation	SCC3, SCC6, SCC8	Valid Values:	
Card Type	5	Consult the NEDS coding manual or AP-42 for a list of valid values. The CDS edit accepts blanks or an 8-position numeric field.	
Card Columns	20-27		
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 should be coded on all points other than 000, the retrieval can select on either the first 3 positions, the first 6 positions, or all 8 positions. SCC3 retrieves on the first 3 positions of the SCC Code; SCC6 retrieves on the first 6 positions of SCC Code; and SCC8 retrieves on the entire SCC Code.

For some industries, SSCD 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 20 to obtain SCC8 on output reports. SCC3 and SCC6 are not password protected on output reports.

CAPACITY CODE

Definition: CAPACITY CODE is used for coal-fired boilers other than electrical utilities and identifies the boiler heat input capacity in tons of MMBTUH. A boiler with a heat input capacity 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		
Justified	LEFT	Masterfile Record Type	34
Required on New Entry	NO	Masterfile Position	29-30
Nationally Controlled	YES	Masterfile Length	2

Edit Error Messages:

*** = Fatal Error

* = Warning Error

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 20 to obtain a printout of this field.

COMPLIANCE STATUS

Definition: COMPLIANCE STATUS gives the regional office an indication of whether a source is in compliance, not in compliance, or its compliance status is unknown, with regard to emission regulations at the point level.

Retrieval Abbreviation	CMST	Valid Values:	
		0 through 9	
Card Type	5		
Card Columns	30		
Data Element Length	1		
Data Type	NUMERIC		
Justified		Masterfile Record Type	34
Required on New Entry	YES	Masterfile Position	31
Nationally Controlled	YES	Masterfile Length	1
Edit Error Messages:			
***INVALID COMPLIANCE STATUS			
*** = Fatal Error		* = Warning Error	

Coding Considerations:

Must be coded on the point 000; may be coded on the other emission points.

Compliance Status Code:

- 0 Unknown
- 1 In violation - no schedule
- 2 In compliance by source test
- 3 In compliance by inspection
- 4 In compliance by certification
- 5 Meeting compliance schedule
- 6 In violation, not meeting schedule
- 7 In violation, unknown with respect to schedule
- 8 No applicable emission regulation
- 9 In compliance - closed down

The Compliance Status on Point 000 (entire source) should reflect the worst-case emission compliance of any process within the source. The Compliance Status on all other points should reflect the compliance of that particular point.

EFFECTIVE: June 1, 1984

COMPLIANCE STATUS
(Continued)

Coding Considerations (Continued):

At the 000 point, this is the same as SCMS.

At a minimum, all significant violators (SCMS=1,5,6,7) must have compliance status maintained at the point level.

Order of worst-case to best-base point level compliance:

CMST = 1-6-0-7-5-4-3-2-8-9.

SIP CODE

Definition: SIP CODE provides the regional office with a method of identifying the type of enforcement schedule which has been negotiated with a source not presently meeting enforceable SIP emission limits.

Retrieval Abbreviation	SIPC	Valid Values: Blank, 0 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
<u>Edit Error Messages:</u>			
*INVALID SIP CODE			
*** = Fatal Error		* = Warning Error	

Coding Considerations:

This field must be coded for all Class A sources which have a Source Compliance Status of 1, 5, 6 or 7.

Blank	No schedule
0	Schedule status unknown
1	Federally enforceable DCO
2	Federally approved SIP schedule (should have SCMS=4)
3	Federal court order 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

POLLUTANT CODE

Definition: POLLUTANT CODE indicates the type of pollutant emitted by a particular emission point.

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 of one of the following values:

Valid Values:

AB - Asbestos	N2 - NO ₂
AS - Arsenic	OD - Odors
BE - Beryllium	OT - Other
BZ - Benzene	PB - Lead
CD - Cadmium	PT - Particulate Matter (Total)
CE - Coke Oven Emissions	S2 - SO ₂
CO - Carbon Monoxide	TS - Total Reduced Sulfur
FL - Fluorides	VC - Vinyl Chloride
HC - Hydrocarbons (Volatile Organic Compounds)	VE - Visible Emission
HG - Mercury	ZN - Zinc

STATE REGULATION

Definition: STATE REGULATION contains the state's emission regulation number for a given pollutant. In the case of NSPS or NESHAP facilities, use the Part 60 or Part 61 Subpart notation (letters B thru HH) found in the Code of Federal Regulations, Title 40.

Retrieval Abbreviation	SREG	Valid Values: All alphanumeric values.	
Card Type	5		
Card Columns	34-48		
Data Element Length	15		
Data Type	ALPHANUMERIC		
Justified	LEFT	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:

NSPS and NESHAP subpart entries should be placed at every subject emission points. Sources subject to only one subpart should enter it at the triple zero point as well. Sources subject to several subparts should enter the code "MULT" at the triple zero point to indicate multiple applicability and the appropriate subparts at the emission point level.

Entries must be left-hand justified, with consistent use of abbreviations and spacing to facilitate national as well as regional retrievals.

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 15

Definition: REGIONAL DATA ELEMENT 15 - user supplied.

Retrieval Abbreviation	RD15	Valid Values:	
		All alphanumeric characters.	
Card Type	5		
Card Columns	49		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		Masterfile Record Type	34
Required on New Entry	NO	Masterfile Position	50
Nationally Controlled	NO	Masterfile Length	1

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

EFFECTIVE: June 1, 1984

PROCESS DESCRIPTION

Definition: PROCESS DESCRIPTION is a brief description of the physical emission point such as a boiler or cupola. At the 000 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	50-74		
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 000 and if the source has a valid SIC Code, the SIC Code description is generated as the Process Description on Point 000 when the source is first placed on the CDS masterfile.

MULTIPLE CROSS-REFERENCE

Definition: MULTIPLE CROSS-REFERENCE 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 010, 011 and 012 refer to three different pollutants being emitted from one process or piece of equipment, points 011 and 012 should cross reference 010.

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 7

Definition: REGIONAL DATA ELEMENT 7 - 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

PROCEDURAL COMPLIANCE

Definition: PROCEDURAL COMPLIANCE should be used for all NSR, PSD, NSPS, NESHAP, and SIP facilities under construction or subject to performance tests, continuous emission monitoring requirements, 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, PCMS, and SCMS to indicate the compliance of an operating facility subject to immediately effective emission regulations.

Retrieval Abbreviation	CMS2	Valid Values:	
		A, B, C, 8, V, I, N, Blank	
Card Type	5		
Card Columns	79		
Data Element Length	1		
Data Type	ALPHANUMERIC		
Justified		Masterfile Record Type	34
Required on New Entry	NO	Masterfile Position	80
Nationally Controlled	YES	Masterfile Length	1

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

<u>Code</u>	<u>Value</u>
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)

EFFECTIVE: June 1, 1984

F. ACTION LEVEL - CARD 7

ACTION DESCRIPTION

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 00.

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	20-34		
Data Element Length	15		
Data Type	ALPHANUMERIC		
Justified	LEFT	Masterfile Record Type	46
Required on New Entry		Masterfile Position	40-54, 107-156
Nationally Controlled	YES	Masterfile Length	15, 50

Edit Error Messages:

*** = Fatal error

* = Warning Error

Coding Considerations:

Two action descriptions are generated from Action Type; the first is a 50-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 00 is specified in card columns 53 and 54, the Edit Program will pick up a 15-position Action Description from card columns 20 through 34 of the card 7 and place this description on both the short and long Action Description on the CDS masterfile. Action Type 00 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 00 should be most useful for infrequently used actions which are not on the Action Table.

CIVIL PENALTY AMOUNT

Definition: CIVIL PENALTY AMOUNT indicates the civil penalty assessed against a facility in the final, legally binding agreement between the enforcement authority and the source.

<u>Retrieval Abbreviation</u>	<u>PLTY</u>	<u>Valid Values:</u>	
		All numeric values.	
<u>Card Type</u>	7		
<u>Card Columns</u>	46-52		
<u>Data Element Length</u>	7		
<u>Data Type</u>	NUMERIC		
<u>Justified</u>	RIGHT	<u>Masterfile Record Type</u>	46
<u>Required on New Entry</u>	NO	<u>Masterfile Position</u>	93-99
<u>Nationally Controlled</u>	NO	<u>Masterfile Length</u>	7

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

This field should be used in conjunction with the following action types:

24	State Civil Penalty
26	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.

ACTION TYPE

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 00 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 00 is coded in the Action Type field, the Edit Program will pick up an Action Description from card columns 20 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 SSCD 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.

DATE ACHIEVED

Definition: DATE ACHIEVED is the date on which an action is completed in month-day-year format.

Retrieval Abbreviation	DTAC	Valid Values:	
Card Type	7	Blanks or zeros are acceptable. If numeric other than zero, day must be between 01 and 31, month must be between 01 and 12, and year must be greater than 60.	
Card Columns	55-60		
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.

DATE SCHEDULED

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:	
Card Type	7	Blanks or zeros are acceptable. Otherwise, day must be between 01 and 31, month must be between 01 and 12, and year must be greater than 60.	
Card Columns	61-66		
Data Element Length	6		
Data Type	NUMERIC		
Justified	LEFT	Masterfile Record Type	46
Required on New Entry	YES	Masterfile Position	23-48
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, 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.

ACTION STAFF CODE

Definition: ACTION STAFF CODE is a three-position code referring to the staff member assigned to complete the action.

Retrieval Abbreviation	PERA	Valid Values: 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 Type	7		
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.

RESULTS CODE

Definition: RESULTS CODE indicates the results of an action, such as action achieved, action not achieved, or action rescheduled.

Retrieval Abbreviation	STAC	Valid Values: 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 Type	7		
Card Columns	70-71		
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 can indicate the success of an action, including whether or not the action was carried out.

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.

EFFECTIVE: June 1, 1984

REGIONAL DATA ELEMENT 8

Definition: REGIONAL DATA ELEMENT 8 is user supplied.

Retrieval Abbreviation	RDE8	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 (as of March 1982):

Region V	SO ₂ Compliance Status
Region VII	Opacity Readings

EFFECTIVE: June 1, 1984

G. COMMENTS

Source - Card 4
Point - Card 6
Action - Card 8

LINE NUMBER

Definition: LINE NUMBER is used by the computer to distinguish one comment line from another.

Retrieval Abbreviation		Valid Values:	
		0 through 9, A and B	
Card Type	4, 6, 8		
Card Columns	20		
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 date 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.

COMMENTS

Definition: COMMENTS can be used to place on the CDS masterfile data which does not fit into any fixed card format.

Retrieval		Valid Values:	
Abbreviation		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	22-80
Nationally Controlled	NO	Masterfile Length	59

Edit Error Messages:

*** = Fatal Error

* = Warning Error

Coding Considerations:

All comments can be retrieved on a Source Data Report, and only action comments can be retrieved on an Action Summary Report. Any or all comments may be retrieved on a Quick Look Report.

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 enforcement action information or compliance status information; other card types are available for these purposes.

TECHNICAL REPORT DATA <i>(Please read Instructions on the reverse before completing)</i>		
1. REPORT NO. EPA 340/1-84-003	2.	3. RECIPIENT'S ACCESSION NO.
4. TITLE AND SUBTITLE Compliance Data System User's Guide	5. REPORT DATE September 1984	6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Mr. Robert Bowers Mr. Chris Mason	8. PERFORMING ORGANIZATION REPORT NO.	
9. PERFORMING ORGANIZATION NAME AND ADDRESS The Research Corporation of New England 800 Connecticut Blvd. East Hartford, Conn. 06108	10. PROGRAM ELEMENT NO.	11. CONTRACT/GRANT NO. 68-01-4145
12. SPONSORING AGENCY NAME AND ADDRESS Stationary Source Compliance Division Office of Air and Radiation 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 Quality Assurance of and specific procedures to be utilized by operators of the Compliance Data System.		
16. ABSTRACT This Compliance Data System (CDS) Quality Assurance Manual is designed to be the primary source of user documentation regarding CDS. This manual provides four services to the CDS data manager. First it serves as a quick-reference user's guide for data entry. It contains instructions and definitions for all CDS data elements. Second, it provides an outline for effective data entry procedures. This outline helps to ensure not only that data is correct before it enters CDS, but that it is checked for accuracy all during the edit and update processes. Third, this manual explains several methods of checking existing data on CDS and provides a step-by-step approach for analyzing and correcting erroneous data. Finally, this manual contains a list of references and sources of information which can help the data manager in the search for accurate, reliable data. The manual contains a complete review of CDS communications documents and user assistance staff available to supply helpful information on all capabilities of CDS. In short, the CDS Quality Assurance Manual is designed to be an easy reference guide to help the CDS data manager maintain data reliability.		
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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