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Agency

Office of
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RCRAInfo

File Specification Guide

1999 Hazardous Waste Report Submissions



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1.0 INTRODUCTION

This document describes the file specifications for reporting data for the 1999 Hazardous Waste Report (also called the Biennial Report). The material in this guide only covers submissions by states and regions to EPA Headquarters (HQ). The file specifications in this guide are not intended to be used to cover submissions by individual reporting sites. Also, this guide is only intended to specify the file and data formats for the submission, and is not intended to cover any procedural or EPA programmatic issues.

This document is designed to be used in conjunction with the *1999 Hazardous Waste Report, Instructions and Forms*, EPA Form 8700-13A/B. The *1999 Hazardous Waste Report, Instructions and Forms* are referenced throughout this document. You should have a complete copy of the *1999 Hazardous Waste Report, Instructions and Forms* in your possession while using this guide.

If you do not have a copy of the *1999 Hazardous Waste Report, Instructions and Forms*, acquire a copy before proceeding. (Copies of the *1999 Hazardous Waste Report, Instructions and Forms* are available at <http://www.epa.gov/epaoswer/hazwaste/data/#brs>.)

1.1 Overview of Document

The *File Specification Guide for 1999 Biennial Report Hazardous Waste Submissions* is divided into four sections:

Section 1 (Introduction) defines the intended audience for this guide, offers a brief description of the forms contained in the *1999 Hazardous Waste Report, Instructions and Forms*, and describes the general purpose and outline of this document.

Section 2 (Data Collection Changes) provides the changes in data collection implemented with the *1999 Hazardous Waste Report, Instructions and Forms*, as well as changes to the file specifications from previous Biennial Report Cycles.

Section 3 (Data Submission Overview) describes the overall characteristics for a data submission.

Section 4 (Technical Specifications) discusses the technical details of the data files and programs necessary for data submission.

Several appendices are included with this document. These appendices provide background material as well as detailed technical information necessary to properly prepare file submissions.

1.2 Who is the Intended Audience for this Guide?

The intended audience for this guide is any state or EPA Region that is using its own software and procedures to extract hazardous waste data from a state or regional system for submission to EPA HQ for inclusion in the National Oversight Database (NODB) for the 1999 Hazardous Waste Report; or any commercial software vendor who is preparing software for use/purchase by states and regions for preparation of state or regional submission of data for the 1999 Hazardous Waste Report. (Note: as in previous cycles, states or regions with their own software, or who use a data collection instrument

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different than the *Hazardous Waste Report, Instructions and Forms* developed by EPA HQ, are called translators. This cycle, because of the reliance on commercially developed software, this guide will serve as guidance for both translators and commercial software vendors.)

1.3 Hazardous Waste Report Forms

The *1999 Hazardous Waste Report, Instructions and Forms* capture information on the following forms. A brief description of the forms contained in the *1999 Hazardous Waste Report, Instructions and Forms* is given below.

Form IC

Form IC captures site identification information. An example of this information is the location address of the site. Form IC data are reported in the four "S" flat files: S1, S2, S3, and S5. The S4 file is omitted because the data stored in it are not requested for the current reporting year.

Form GM

Form GM captures information regarding the characteristics, management history, and treatment of a waste. Form GM data are reported in the seven "G" flat files: G1, G2, G3, G5, G6, G7, and G8. The G4 and G9 files are omitted because the data stored in them are not requested for the current reporting year. The records (lines) in each of these flat files contain key fields that link the information about a particular reported waste across the flat files.

Form WR

Form WR is used for reporting information regarding wastes received from off-site. Form WR information is reported in the R1, R2, R3, R4, and R5 flat files. The printed Form WR allows three received wastes to be reported on each Form WR page.

Form OI

Sites shipping or receiving waste to or from an off-site site report this information on Form OI. Form OI information is reported in the O1 and O2 flat files. The printed Form OI allows identification of five sites or transporters on each Form OI page.

Postcard

The postcard is included as a mechanism for sites to indicate that they do not need to file a Hazardous Waste Report.

Note: Only forms IC, GM, and WR are included in the data submitted to the EPA HQ National Oversight Database Administrator (NODBA). Postcards and form OI information are not to be submitted to the EPA HQ NODBA.

1.4 Data Files

Each of the printed *1999 Hazardous Waste Report* forms is reported by multiple records in multiple flat files similar to relational data tables. When the relationship between an answer block and a specific form page is 1:1 (e.g., Form GM, Section I, Block F, Source code), the values are captured in the primary flat file for that form. When the relationship between an answer block and a specific form page is n:1 (e.g., Form GM, Section I, Block B, EPA Hazardous Waste codes), a secondary flat file is used to capture the values.

Section 3 discusses in detail the steps necessary to ensure a successful data submission including identifying what sites should be reported and the types of files that must be included with each submission.

Section 4 provides details on important technical aspects of the file creation process such as how to correctly format data fields for Contact First Name and Certification First Name.

This document was written using the following assumptions:

- The reader is familiar with the *1999 Hazardous Waste Report, Instructions and Forms*.
- The reader understands basic computer concepts and terminology.

1.5 Related Documents

As mentioned in the introduction, the following document must be obtained as it is referenced throughout the document. The document may be obtained at <http://www.epa.gov/epaoswer/hazwaste/data/#brs>.

- *1999 Hazardous Waste Report, Instructions and Forms*.

1.6 Questions / Comments

Questions about this document should be directed to the RCRAInfo helpdesk at rcrainfo.help@epamail.epa.gov. Questions submitted to this helpdesk must only concern the file specification for submission of data from the States or EPA Regions to the NODBA. Questions on submissions of data by individual sites should be directed to appropriate State or EPA Regional personnel.

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2.0 CHANGES FROM PREVIOUS CYCLES

2.1 Data Collection Changes

As of the date of the publication of this guide, the *1999 Hazardous Waste Report, Instructions and Forms* have undergone no substantive changes from the *1997 Hazardous Waste Report, Instructions and Forms*. Only minor changes such as changing dates from 1997 to 1999 and correcting typographical errors have been made. At this time, the forms package is under review at the Office of Management and Budget (OMB). This guide may change should OMB require changes to the forms.

2.2 Changes to the File Specification Standards

The overall content, structure, and layout of the file specifications for submission of 1999 Biennial Report information are basically the same as for previous cycles. However, several changes have been made impacting key field identifiers (key field identifiers are used to uniquely identify each row of data in a data table) including specifically:

- The description for the key field identifiers for files G2, G3, R2, and R3 has been clarified. In each file, the sequence number is included as part of the key, while the actual code value is not part of the key.
- The key field identifiers for files G5 and G6 have been changed to remove the use in the key of certain data fields (for example, off-site shipment EPA ID in file G5) while including in the key the sequence number associated with the activity.

The changes to the key field identifiers for these files was an effort to allay past confusion (in the case of the G2, G3, R2, and R3 files) and to improve the mapping of data from the forms to the output files in the case of the G5 and G6 files. Because of these changes from previous cycles states/regions/commercial vendors should carefully examine the file specifications regarding key field identifiers.

A copy of this document can be found at <http://www.epa.gov/epaoswer/hazwaste/data/brvendor>. In the event that changes are required to this document the revised document will be posted along with an explanation of what changes have been made to the document. States/regions/commercial vendors should periodically check the above mentioned web site to see if any changes have been made to the file specification document.

2.3 Changes to the Data Collection Process

In previous Biennial Reporting cycles (1989, 1991, 1993, 1995, and 1997) EPA HQ provided the Biennial Reporting System (BRS) software to states and regions for use in processing Hazardous Waste Report submissions. For the 1999 Biennial Report cycle, the BRS software will not be provided to states and regions. States and regions are responsible for evaluating and procuring software to assist them in processing of Hazardous Waste Report submissions, by either developing software on their own, procuring software from commercial vendors, or procuring software from other States or regions.

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During the 1999 Biennial Report cycle EPA HQ will maintain the NODB, including the database load and data assessment software, ensure that all incoming data files conform to standards, and generate National Reports.

3.0 DATA SUBMISSION OVERVIEW

3.1 Data Requirements

Mandatory core data elements are required by the *1999 Hazardous Waste Report, Instructions and Forms*. Non-core data elements are not required to be reported. System required data elements are needed to effectively process the information. State/regional/commercial software must provide both mandatory core and system required data elements. Once the appropriate data files have been created, they will be sent to the NODBA for inclusion in the NODB.

A list of the fields in the *1999 Hazardous Waste Report, Instructions and Forms* that are required to be provided are listed in Appendix D. A list of the flat files that contain mandatory core elements is located in Appendix A. Appendix B contains the detailed file specifications for each flat file. Appendix E is a graphical representation of the forms in the *1999 Hazardous Waste Report, Instructions and Forms*, and shows the mapping between the form and the flat files.

3.2 Summary of Data Requirements

A state/regional/commercial software package must provide data for the mandatory core and system required data elements. A particular flat file may contain both mandatory core and non-core data elements. The following list identifies the applicable *1999 Hazardous Waste Reports* forms, as well as those flat files that contain mandatory core data elements.

- Form IC data (Identification and Certification):
Flat Files S1 and S2.
- Form GM data (Waste Generation and Management):
Flat Files G1, G2, G5, G6, and G7.
- Form WR data (Waste Received from Off-site):
Flat Files R1, R2, and R4.

In order to be acceptable, the mandatory core data and system required data elements must be properly formatted and meet the required data quality standards. The data quality standards for these elements are contained in Appendix C. In general, data submissions must meet all of the edits in the 1000 series and the 4000 series.

In addition to mandatory core data, states and regions are encouraged to provide as much non-core data as possible. This information will enhance the analytical usefulness of the NODB. Specifically, fields of interest include origin codes, source codes, and form codes for all records in the G1 and R1 files.

In addition to the flat files mentioned above, a control file must be developed for each submission to the NODB. In addition to naming each file that is part of the submission, the control file also contains other important information. A control file defines a set of flat files and controls the update process at the NODB.

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3.3 Testing the Translation Effort

It is the responsibility of the state/regional/commercial software package to produce complete sets of correctly formatted files for inclusion in the NODB. Correct formatting also includes generating a complete set of files with data for the entire state for the submission (as opposed to sending data for only one site in the submission).

3.4 Transferring the Data Files

Files produced by the state/regional/commercial software package will need to be transferred to the computer platform that will contain the NODB. Current plans are for the NODB to be located on a Unix server located at EPA's National Computing Center in North Carolina. The primary method for uploading files from the state/regional/commercial software package to the Unix server will be through the use of the Internet based File Transfer Protocol (FTP). For the purpose of preparing submissions to the NODB, state/regional/commercial software builders should assume that they will need to prepare flat files as designated by this guide, and that these flat files will need to be sent to the appropriate EPA Regional DBA either through floppy disks, attached as part of an E-mail message, or through some other form of electronic data transfer. For large submissions, file compression is recommended. Submission of data through the use of tapes is not recommended.

Before sending data to the Regional DBA, the following steps are suggested in order to ensure that the data transfer process proceeds smoothly:

- Once the data have been written to the transfer media, the transfer media should be tested to ensure readability and correctness of the data.
- If physical media is used for transferring the data, the media should be completely and accurately labeled. Any information or instruction required to correctly retrieve the flat files from the medium must also be included.
- A backup copy of the data files should be retained as a record of the submission, and for use in case the original submission is lost or damaged.
- The submission package should be shipped by a traceable means that provides a return receipt. The electronic media should be isolated in packaging that will protect it from magnetic and/or static electric disturbance.

3.5 Output Requirements

The state/region/commercial software package must produce a control file and all flat files that contain mandatory core and system required data elements. It is recommended that the state/region/commercial software package produce a set of reports detailing, summarizing, and characterizing the data submission for use if any problems occur during loading of the data.

3.6 States/Regions not using the *1999 Hazardous Waste Report, Instructions and Forms*

The information contained in the guide is equally applicable to states and regions who use a different data collection package than the *1999 Hazardous Waste Report, Instructions and Forms*. Translators are required to provide data equivalent to that collected by the *1999 Hazardous Waste Report, Instructions and Forms* (at least the mandatory data elements and the system required data elements). The following information is provided to help translators become familiar with the steps to ensure a successful data submission, including the following:

- Identify all sites for which information is to be translated.
- Access information that is equivalent to the *1999 Hazardous Waste Report* data.
- Establish the relationship between the equivalent data and the data required by the data submission.
- Validate that the equivalent data conforms to the appropriate data quality standards.
- Write translated data to appropriate flat files.
- Generate a control file for the translated flat files.

3.6.1 Identify Sites

At a minimum, the state/region must translate information for sites required to file the *1999 Hazardous Waste Report, Instructions and Forms*. The criteria that defines these sites is presented on page i of the *1999 Hazardous Waste Report, Instructions and Forms* under "Sites Required to File the Hazardous Waste Report."

3.6.2 Access Equivalent Data

As mentioned previously, at a minimum the mandatory core data elements for the sites being reported must be provided. A translator must identify the data elements and relations in their system equivalent to the data elements/relations represented by the Flat File Specifications in this document.

Also, the translator must provide the necessary system required data elements to allow for the data to be correctly stored in the NODB.

Information in the NODB is grouped at three levels (site, form type, and specific form) linked by four key elements.

The Site Level, represented by the EPA ID, is the first and highest level. The EPA ID is the first field in all flat file records, except the control file (CL). All flat file records associated with the same site have the same EPA ID.

The second level is the Form Type. The Form Type is identified by the flat file ID containing the record because Form Type is not present in any flat file as a separate field. This allows the same data

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elements to be used for multiple form types. For example, EPA waste codes associated with a generated waste (reported on Form GM) are placed in the G2 flat file records, while EPA waste codes associated with a received waste (reported on Form WR) are placed in R2 flat file records. When the flat files are loaded into the NODB, the load program sets the form type based on the name of the source flat file.

The third level is the specific form. This level of association is used to separate one generated waste from another generated waste or one received waste from another received waste. The specific wastes are differentiated by their respective page numbers. The variables used to define the specific form for Forms GM, WR, and OI are explained below.

Form GM

Form GM collects data associated with a single reported waste. Translators must provide records in the G1 - G8 (excluding G4) files for each waste generated or managed during the reporting cycle. Thus, each page number for the GM flat file records represents a single reported waste. All "G" flat file records containing data associated with the same waste reported for the same EPA ID will have the same page number. Page number takes the value of "00001" for the first reported waste (Form GM), and is incremented by one (1) with each following reported waste. The sub-page number variable for Form GM data (which is the third field in all the G flat files) must always be assigned the value of "01". (Note: the instructions on assignment of Page number for translators are different than for those states/regions/commercial software vendors supporting the *1999 Hazardous Waste Report, Instructions and Forms*. For vendors supporting the *1999 Hazardous Waste Report, Instructions and Forms*, Page number should be the same as the number assigned by the respondent to the actual form.)

Form WR

Form WR collects data associated with each reported waste received from off-site. Translators must provide records in the R1 - R5 files for each waste received from off-site. All "R" flat file records containing data associated with the same received waste reported for the same EPA ID will have the same page number. Page number takes the value of "00001" for the first received waste (Form WR), and is incremented by one (1) with each separate received waste reported. The sub-page number variable for Form WR data (which is the third field in all the R flat files) must always be assigned the value of "01". (Note: the instructions on assignment of Page number and Sub-page number for translators are different than for those states/regions/commercial software vendors supporting the *1999 Hazardous Waste Report, Instructions and Forms*. For vendors supporting the *1999 Hazardous Waste Report, Instructions and Forms*, Page number and Sub-page number should be the same as the number assigned by the respondent to the actual form. Sub-page number is '01' for the waste reported on the top of the WR form, '02' for the waste reported in the middle of the WR form, and '03' for the waste reported at the bottom of the WR form.)

Form OI

Form OI collects data identifying handlers from whom waste was received and to whom waste was shipped, plus all transporters used to ship waste during the reporting cycle. These source, destination, and transporting entities are identified by their EPA ID, name, and address. The page number for the OI flat file records represents a single handler record. Page number takes the value of "00001" for the first handler record, and is incremented by one (1) with each separate handler record reported.

3.6.3 Establish Data Equivalency

The translation software must reflect the rules that establish the mapping of between the equivalent data and the data required for submission to the NODBA. These rules need to be defined by the state using the *1999 Hazardous Waste Report, Instructions and Forms*, this document, and possibly, a data element dictionary and structure chart of its own system.

A copy of the *1999 Hazardous Waste Report* forms annotated to show in which flat file each data element is located can be found in Appendix E. In addition, all codes used in the submission must be from the code lists found in the *1999 Hazardous Waste Report, Instructions and Forms*.

3.6.4 Data Quality

A translator's data must pass a minimum set of data edits in order to provide information comparable to data gathered with the *1999 Hazardous Waste Report, Instructions and Forms*. A translator's data must also provide an accurate representation of hazardous waste activity for that state. A list of edits is included in this document as Appendix C. Translator files, at a minimum, must conform to all of the 1000 and 4000 series edits.

A translator must ensure that its data passes all appropriate data quality edits before that data is submitted to the NODBA. Data failing to conform to the appropriate data quality edits will cause the entire data submission to the NODBA to be rejected.

In addition to the 1000 and 4000 series edits, there is another set of edits that operates on fields that are not required, but which states and regions are encouraged to provide. These edits are called advanced edits. Advanced edits are edits in the 3000 series. Advanced edits are considered optional but are useful for states/regions providing more than mandatory core data elements.

3.6.5 Write Translated Data to Flat Files

Data must be written to the appropriate flat file or flat files. Appendix B specifies the field length and data type for a precise record format.

A complete translation effort may not include all available data flat files. For example, a translator submitting Form GM data in a state that does not collect information on state-specific waste codes would omit the G3 flat file from its submission. This is because the G3 file is used to store state hazardous waste codes only. Thus, files determined to be correctly null or empty should be omitted.

There is a hierarchical relationship among records for one site across different flat files. Data is classified according to where the information is a parent segment or a child segment. A parent

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segment may have any number of child segments, including none. However, every child must have one parent. Therefore, if a record for a child segment is in one flat file, there must be a record for its parent in another flat file. Briefly, the rule is that a child flat file record requires a parent flat file record.

Data for a site should only be written to the flat files after all records for that site pass the 1000 and 4000 series edit checks. Thus, all mandatory core data elements must have proper values for any of a site's data to be considered complete. If a site is incomplete, then the site's information must not be written to or must be stripped from the flat files. **It is not sufficient to eliminate the element in error and pass on the remainder of the site's data.**

3.6.6 Generating a Control File

Translators must always include a flat file named the control file (which has a flat file ID# = 'CL', as described in Appendix B), whenever submitting data. The control file records contain information describing the flat files being submitted. One control file record is created for each submitted flat file.

List the flat file names in the control file in sequential order as shown in Exhibit 1.

S1, S2, S3, S5, G1, G2, G3, G5, G6, G7, G8, R1, R2, R3, R4, and R5
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Exhibit 1. Control File Flat File Order

Note: The control file should contain information only on files generated. If a file is not generated, no information for the file should be placed in the control file. The S4, G4, G9, T1, T2, T3, T4, M1, M2, M3, M4, M5, M6, M7, O1, and O2 flat files were intentionally omitted from this list because either this information is no longer collected in the *1999 Hazardous Waste Report, Instructions and Forms* or, in the case of form OI, the form is not to be submitted to the NODBA.

3.7 Amount of data in a single submission

Each data submission from a state/region/commercial software package must contain all data for the state for which data is being submitted. Each data submission will completely overwrite all existing data for the state in the NODB.

3.8 Database Administration Routines

State/Regional/Commercial packages are responsible for all locally based routines dealing with the creation of the data files and data management. The implementer software is responsible for the backup, recovery, and archiving of transmitted files and the transmittal function.

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4.0 TECHNICAL SPECIFICATIONS

This section contains the standards that must be met when writing flat files. Failure to meet these specifications will result in the rejection of the flat files.

4.1 Rules and Format Conventions Required for Data Flat Files

The following sections detail the correct field formats for the data in your flat files. The NODBA may reject your flat files if your flat files fail to meet these specifications.

4.1.1 Alphanumeric Fields

Alphanumeric fields are identified in Appendix B, Flat File Specifications, as Data Type "A" fields. All alphabetic characters must be in UPPER CASE. Data Type "A" fields must be left-justified with all trailing spaces filled with the space character (i.e., ASCII HEX 20).

4.1.2 Integer Fields

Integer fields are identified in Appendix B, Flat File Specifications, as Data Type "I" fields. Data Type "I" fields must contain only numeric characters, be right-justified, and have all leading spaces zero (0) filled. The comma (,) character is not allowed.

Examples of incorrect and correct entries for an integer field defined with a length of five (5) are in Exhibit 2.

INCORRECT	CORRECT
1	00001
10,000	10000
750.25	00750

Exhibit 2. Incorrect and Correct Integer Entries

4.1.3 Fixed Decimal Fields

Fixed place decimal fields are identified in Appendix B, Flat File Specifications, as Data Type "D2" fields.

For all "D2" field entries, the value must explicitly represent two places following the decimal. Zero (0) filling of leading and/or trailing spaces is required.

The period (.) character, representing the decimal, must be included in the proper column position. The field length includes the decimal character. The comma (,) character is not allowed.

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Although some answer blocks on the *1999 Hazardous Waste Report, Instructions and Forms* provide for only one decimal place, the translator flat files require that two decimal places be represented in "D2" fields. Exhibit 3 shows incorrect and correct entries in a type "D2" field with a length of nine.

INCORRECT	CORRECT
56.89	000056.89
10,0032.1	100032.10
987654	987654.00

Exhibit 3. Incorrect and Correct Fixed Decimal Entries

4.1.4 Floating Decimal Fields

Floating decimal fields are identified in Appendix B, Flat File Specifications, as Data Type "FD" fields.

Type "FD" fields allow the decimal point to be placed at any column position within the field or omitted. Zero (0) filling of leading and/or trailing spaces is required. The comma (,) character is not allowed.

4.1.5 Sequence Number Fields

Some of the files in Appendix B, Flat File Specifications, require a sequence number to be provided for each record. The G2 file is an example of a file that requires a sequence number (the sequence number is field number 4). The sequence number is needed for data elements, such as the waste code, which may occur with multiple values for the waste. The sequence number takes the value "001" for the first occurrence of the sequenced data element for the waste and is then incremented by one with each successive occurrence of that same waste.

4.1.6 Negative Numbers

Negative numbers are not allowed anywhere in the data submission.

4.2 Indicating Don't Know (DK) and Not Applicable (NA)

The *1999 Hazardous Waste Report, Instructions and Forms* do not allow the use of "Don't Know" (DK) or "Not applicable" (NA). Flat files should not contain any values indicating "Don't Know" or "Not Applicable"

4.3 Record Termination

Each flat file record must be terminated by the correct end of record designation. All records should be terminated with a carriage return character followed by a line feed character.

4.4 Empty Fields

For fields that require no response, the field should be filled with the space character (i.e., blanks).

4.5 Flat File Hierarchy

Exhibit 4 shows the flat file hierarchy. Files connected by lines have a parent - child relationship. The file identified at the left terminus of a line is the parent. The file identified at the right terminus of a line is the child. For each record with a unique EPA ID (field number 1 in all flat file records) in a child flat file, there must be at least one corresponding record in the parent flat file with the same EPA ID. When a parent flat file distinguishes records using more than one key, it is the combination of the keys that identifies uniqueness. For example, the "G" series flat files use three keys (fields 1 - 3) to identify each "waste" being reported for a site. Thus, for each unique occurrence of the combined keys (EPA ID - Page Number - Sub-page Number) in the G2 flat file, there must be a corresponding record in the G1 file with the same values for all three keys. Likewise, for every G1 record with a unique value in key field 1 (EPA ID), there must be an S1 record with the same value for field 1.

4.6 Confidential Business Information (CBI)

Under existing RCRA statutes, sites may claim that certain items of information submitted as part of their Hazardous Waste Report contain Confidential Business Information (CBI). The procedures for handling CBI can be found in the *Procedures for Handling RCRA Confidential Business Information* (available from the EPA HQ RCRA Document Control Officer). A subset of these procedures is documented in the *Procedures for handling RCRA Confidential Business Information submitted for the Biennial Report*. (Copies of these documents can be requested from the RCRAInfo help desk at rcrainfo.help@epamail.epa.gov) In brief, it is not allowable to mingle CBI data with non-CBI data, and CBI data must be handled on a secure computer (either a computer that is kept in a secure environment or a computer which uses removable media where the media is kept in a secure environment).

For Hazardous Waste Reports, if any information for a site is claimed to be CBI all data for that site must be handled as CBI. CBI data must be submitted to the NODBA separately from non-CBI data. For example, if a state was submitting data on a 1,000 sites, and 2 sites claimed CBI, the state would need to submit two sets of data: one for the 998 non-CBI sites and with for the 2 CBI sites.

In previous Biennial Report cycles, some states/regions that have received CBI have worked with the submitting site to report the CBI data in such a manner as to mask the CBI data (in other words, change the CBI data so it no longer is CBI). This is not a requirement of EPA HQ, but as long as the data meets the minimum edit standards as detailed in the Appendices this solution is acceptable.

4.7 Location County

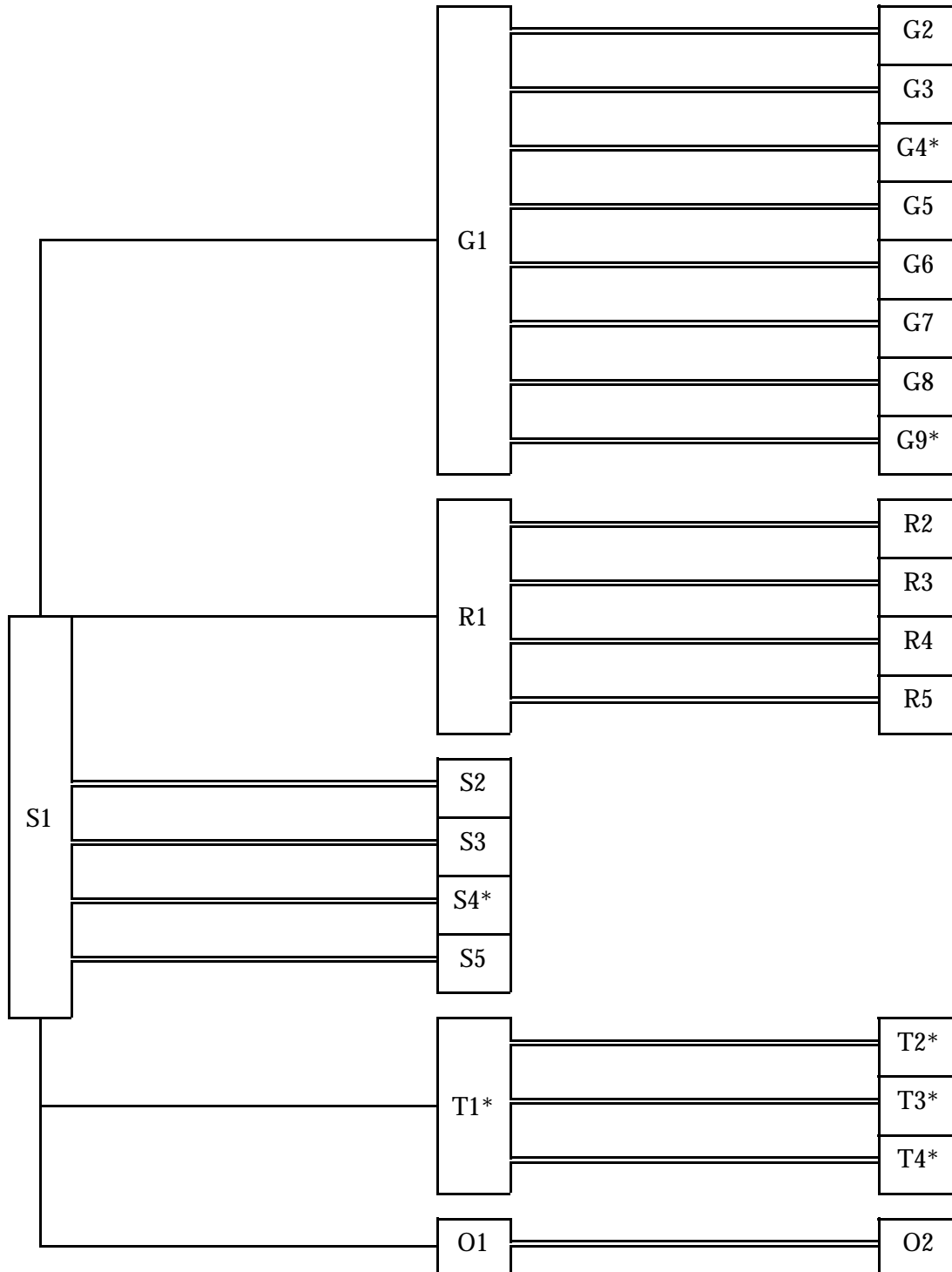
Form IC requests that respondents supply the name of the county in which the site is located. Field 9, flat file S1, contains this information. The proper formatting of this field is to concatenate the state postal code where the site is located with the state where the county is located. For example, if a site is located in Travis county in Texas, Field 9, Flat File S1, would show TXTRAVIS.

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In addition to Field 9, Field 5 is where the county code that corresponds to the county name is stored. For information on the translating county names to county codes see <http://www.sdct.itl.nist.gov/~harvill/co-codes/states.htm>. The correctly formatted response for Travis county in Texas is TX453.

4.7 Correct Formatting for Contact/Certification First Name

Form IC, Section III and Form IC, Section IV, ask for the first name, last name, and middle initial of the Contact Person and the Certification Person. Certification Person first name and middle initial is stored in Field 8, Flat File S2, and Contact First Name and middle initial is stored in Field 13, Flat File S2. The correct formatting of these fields is to concatenate the First Name and the middle initial and place the combined data into Field 8 or Field 13 as appropriate. The correct concatenation is to put the middle initial as the last character of the field. See the example files in the Appendices for further details.



NOTE: Flat Files marked with an asterisk (*) are not collected for the *1999 Hazardous Waste Report, Instructions and Forms*.

Exhibit 4. Flat File Hierarchy

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APPENDIX A

Mandatory Core and System Required Data Elements

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APPENDIX A - Mandatory Core and System Required Data Elements

A.1 Mandatory Core Data Elements

<u>Flat File ID</u>	<u>Mandatory Core Variable Name</u>	<u>Form Locations</u>
(all)	HID_NUM	IC, GM, WR
S1	HHANDLER	IC, GM, WR
S1	HLOC1STRT	IC
S1	HLOC2STRT	IC
S1	HLOC_CITY	IC
S1	HLOC_STATE	IC
S1	HLOC_ZIP	IC
S2	HMAIL1STRT	IC
S2	HMAIL2STRT	IC
S2	HMAIL_CITY	IC
S2	HMAIL_STATE	IC
S2	HMAIL_ZIP	IC
S2	HCONT_LAST	IC
S2	HCONT_FIRST	IC
S2	HCONT_TITL	IC
S2	HCONT_PHONE	IC
S2	CON_PH_EXT	IC
S2	CERT_LN	IC
S2	CERT_FN	IC
S2	CERT_TITLE	IC
S2	CERT_SIG_DTE	IC
S2	WST_GEN_STAT	IC
S2	ON_STOR_ST	IC
S2	ON_R_TDR_ST	IC
G7, R4	WST_DSCRIP	GM, WR
G2, R2	HZW_CODE	GM, WR
G1	GEN_QTY	GM
G1, R1	WST_QTY_UOM	GM, WR
G1, R1	WST_DENSITY	GM, WR
G1, R1	WST_DEN_UOM	GM, WR
G6	SYS_TDR	GM
G6	SYS_TDR_QTY	GM
G5, R1	IO_TDR_ID	GM, WR
R1	IO_TDR	WR
G5, R1	IO_TDR_QTY	GM, WR

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A.2 Flat Files That Contain Mandatory Core Elements

The following flat files contain mandatory core elements:

S1 and S2
G1, G2, G5, G6, and G7
R1, R2, and R4

A.3 System Required Elements

<u>System Required Variable Name</u>	<u>Form</u>	<u>Flat File IDs</u>
IC_COMM_SEQ	IC	S5
HZ_PG	GM, WR	G1, G2, G3, G5, G6, G7, G8, R1, R2, R3, R4, R5
SUB_PG_NUM	GM, WR	(same as above)
HZW_SEQ	GM, WR	G2, R2
SHZW_SEQ	GM, WR	G3, R3
IO_PG_NUM_SEQ	GM, WR	G5
SYS_PG_NUM_SEQ	GM, WR	G6
WST_DSCR_SEQ	GM, WR	G7, R4
WST_COMM_SEQ	GM, WR	G8, R5
OSITE_PGNUM	OI	O1, O2
OSITE_SUBNUM	OI	O1, O2
OI_COMM_SEQ	OI	O2

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A.4 Rules For Generating System-Required Elements

- HZ_PG
Use any integer greater than zero as long as HZ_PG and HID_NUM together form an unique key.
- SUB_PG_NUM
Always equals "01" for form GM. For form WR information gathered using the *1999 Hazardous Waste Report, Instructions and Forms* use 01, 02, or 03 as appropriate to correspond to the three wastes listed on the WR form. For state/regions not using the *1999 Hazardous Waste Report, Instructions and Forms* use 01 (using the analytical convention of one waste for every single WR form).
- HZW_SEQ
Use any integer greater than zero as long as HZ_PG, HID_NUM, and HZW_SEQ together form an unique key.

NOTE: Refer to Section 3.6.2 of this document for further discussion of the proper generation of the sub_pg_num field.

A.5 System Required Elements

In order to process some data items submitted in the flat files, the software also requires an associated sequence number. These are sequential numbers beginning with one and increasing by one to order the associated data. For example, if a comment is made up of six 60-character lines, each of six records will contain a single line of the comment and a sequence number of 1 to 6. The various sequence-number elements can be identified by the characters "SEQ" appearing in the data element name specified in the flat file layouts in Appendix A and Appendix B.

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APPENDIX B

Flat File Specifications

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APPENDIX B - Flat File Specifications

B.1 Key For Flat File Tables

Data Class

MC	Mandatory Core
N	Non-Core
S	System Required

Edit Type

B	Basic Edit
A	Advanced Edit

Data Type

A	Alphanumeric
I	Integer
D2	Fixed Decimal
FD	Floating Decimal

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B.2 Flat File Naming Convention

Flat files names are constructed in the following manner:

SSOFFNNN.FIL

Where:

SS	=	State Postal Code
0	=	Origin Code (R for files sent to the NODB)
FF	=	Flat file identifier (for example, G1 or G2)
NNN	=	Julian Date when file was created

Files must be named using all uppercase characters. Lowercase characters are not allowed in the file names.

Note: The two-character file ID distinguishes each flat file produced during the translation. For example, the correct name for a S3 file, containing VA data, produced on January 4th, is VASS3004.fil.

B.3 Flat Files

FLAT FILE ID# - CL						
Source Form: NA		Description: Name and statistical information for each flat file being submitted				
Record Length: 80						
Field Number	Starting Column	Field Length	Data Type	Description	Edit Type	Edit Number
1	1	12	A	File Name*	B	4012
2	13	1	A	System Required Field: Value = "Y" for all records.		
3	14	8	I	Date Created Format = CCYYMMDD	B	4013
4	22	8	I	Record Count		
5	30	8	A	System Required Field: Value = " " (blank) for all records.		
<p>NOTES: The CL control file is used to describe the flat files being submitted electronically. There must be one record in the control file for each flat file being submitted. Each CL record contains a flat file name (field 1), the date the flat file was created in "CCYYMMDD" format (field 3), and the number of records (lines) in the flat file (field 4). Two other system-required fields are also contained in each record. Field 2 is an alphanumeric field with a length of one and always takes the value "Y". Field 5 is an alphanumeric field with a length of eight which is always filled with the "blank" character.</p> <p>When creating the Control File, first list records S1-S5, then G1-G8, then R1-R5. The control file must never contain entries for files S4, G4, G9, T1 - T4, or O1 - O2. Only create records for files that contain one or more records.</p> <p>* Note: File name must be in uppercase characters.</p>						

FLAT FILE ID# - S1

Source Form: IC **Description:** Handler Location Information

Record Length: 193

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA Identification Number	IC-I-A	MC	B	1000, 1010
2	HHANDLER	13	40	A	Site/Company Name	IC-I-C	MC	B	1020
3	HSECOND_ID	53	12	A	State Identification Number	IC-I-A	N	-	-
4	POSTCARD	65	1	A	Postcard indicator (Note: for data on sites filing form IC, this variable should be '0')	Postcard checkboxes	N	B	4010
5	HLOC_CNTY_CD	66	5	A	State Postal Code Concatenated with County Code	System Generated	N	-	-
6	HLOC1STRT	71	30	A	Location Street 1	IC-I-E	MC	B	1030
7	HLOC2STRT	101	30	A	Location Street 2	IC-I-E	MC	-	-
8	HLOC_CITY	131	25	A	Location City	IC-I-F	MC	B	1040
9	HLOC_COUNTY	156	27	A	State Postal Code Concatenated with County Name	IC-I-H & B	N	A	3020
10	HLOC_STATE	183	2	A	Location State	IC-I-G	MC	B, A	1060, 4008
11	HLOC_ZIP	185	9	A	Location Zip Code	IC-I-H	MC	-	-

NOTE: This file should contain only one record for each EPA ID reporting. Also, any EPA ID appearing as the key in any of the "G", "R", or "O" files must also be represented here. The EPA ID number is the key field.

FLAT FILE ID# - S2

Source Form: IC **Description:** General Information

Record Length: 227

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA Identification Number	IC-I-A	MC	B	1000, 1010
2	HMAIL1STRT	13	30	A	Mailing Street 1	IC-II-B	MC	B	1070
3	HMAIL2STRT	43	30	A	Mailing Street 2	IC-II-B	MC	-	-
4	HMAIL_CITY	73	25	A	Mailing City	IC-II-C	MC	B	1080
5	HMAIL_STATE	98	2	A	Mailing State	IC-II-D	MC	B	1090
6	HMAIL_ZIP	100	9	A	Mailing Zip Code	IC-II-E	MC	-	-
7	CERT_LN	109	15	A	Certification Last Name	IC-IV-A	MC	-	-
8	CERT_FN	124	15	A	Certification First Name	IC-IV-A	MC	-	-
9	CERT_TITLE	139	15	A	Certification Title	IC-IV-B	MC	-	-
10	CERT_SIG_DTE	154	8	I	Certification Signature Date (CCYYMMDD)	IC-IV-D	MC	-	-
11	WST_GEN_STAT	162	1	A	Generator Status	IC-V-A	MC	B	1140, 1400
12	HCONT_LAST	163	15	A	Contact Last Name	IC-III-A	MC	B	1100
13	HCONT_FIRST	178	15	A	Contact First Name	IC-III-A	MC	B	1100
14	HCONT_TITL	193	15	A	Contact Title	IC-III-B	MC	-	-
15	HCONT_PHONE	208	10	A	Contact Phone Number	IC-III-C	MC	B	1110
16	CON_PH_EXT	218	4	A	Contact Phone Number Extension	IC-III-C	MC	-	-
17	ON_STOR_ST	222	1	A	On-site Waste Management Status Storage	IC-VI-A	MC	B	1147
18	ON_R_TDR_ST	223	1	A	On-site Waste Management Status RCRA T/R/D	IC-VI-B	MC	B	1148
19	-	224	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009

FLAT FILE ID# - S2

Source Form: IC **Description:** General Information

Record Length: 227

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
20	-	225	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
21	-	226	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
22	-	227	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009

NOTE: This file should contain only one record for each EPA ID reporting. Also, any EPA ID appearing as the key in any of the "G", "R", or "O" files must also be represented here. The EPA ID number is the key field.

FLAT FILE ID# - S3

Source Form: IC **Description:** Recycling Limitations, Reasons for not Generating, Source Reduction Limitation

Record Length: 44

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA Identification Number	IC-I-A	MC	B	1000, 1010
2	-	13	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
3	-	14	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
4	-	15	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
5	-	16	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
6	-	17	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
7	-	18	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
8	-	19	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
9	-	20	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
10	-	21	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
11	-	22	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
12	-	23	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
13	-	24	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
14	-	25	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
15	-	26	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
16	-	27	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
17	NGEN1	28	1	A	Reason For Not Generating 1	IC-V-B-1	N	A	3023
18	NGEN2	29	1	A	Reason For Not Generating 2	IC-V-B-2	N	A	3023
19	NGEN3	30	1	A	Reason For Not Generating 3	IC-V-B-3	N	A	3023
20	NGEN4	31	1	A	Reason For Not Generating 4	IC-V-B-4	N	A	3023

FLAT FILE ID# - S3

Source Form: IC **Description:** Recycling Limitations, Reasons for not Generating, Source Reduction Limitation

Record Length: 44

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
21	NGEN5	32	1	A	Reason For Not Generating 5	IC-V-B-5	N	A	3023
22	NGEN6	33	1	A	Reason For Not Generating 6	IC-V-B-6	N	A	3023
23	NGEN7	34	1	A	Reason For Not Generating 7	IC-V-B-7	N	A	3023
24	-	35	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
25	-	36	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
26	-	37	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
27	-	38	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
28	-	39	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
29	-	40	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
30	-	41	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
31	-	42	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
32	-	43	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
33	-	44	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009

NOTE: This file should contain only one record for each EPA ID reporting. Also, any EPA ID appearing as a key in any of the "G", "R", or "O" files must also be represented here. The EPA ID number is the key field.

FLAT FILE ID# - S4

This file is no longer necessary because the data transmitted in this file is no longer requested in the *1999 Hazardous Waste Report, Instructions and Forms*.

Do not include an S4 file in your data submission.

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FLAT FILE ID# - S5

Source Form: IC **Description:** Form IC Comments from Respondent

Record Length: 74

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Classes	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA Identification Number	IC-I-A	MC	B	1000, 1010
2	IC_COMM_SEQ	13	2	I	Form IC Comment Sequence Number	Assigned by Respondent	S	-	4011
3	IC_COMMENT	15	60	A	Form IC Comment	Bottom of Form IC	N	-	4014

NOTE: All records having the same EPA ID number must have unique sequence numbers. IC comments are limited to twelve (sequence numbers 1-12) 60-character lines for each EPA ID number. The combination of the EPA ID number and the Sequence Number are the key fields for this file.

FLAT FILE ID# - G1

Source Form: GM **Description:** Waste Measurement Information

Record Length: 101

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned By Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	System Required Field: Value = "01" for all records.		S	A	4006
4	WST_FORM	20	4	A	Waste Form Code (First character is always "B".)	GM-I-H	N	A	3060
5	WST_QTY_UOM	24	1	A	Unit of Measure	GM-II-B	MC	B	1220
6	WST_DENSITY	25	5	D2	Density	GM-II-B	MC	B	1201, 1230
7	WST_DEN_UOM	30	1	A	Density Unit of Measure ("1" = lbs/gal "2" = sg)	GM-II-B	MC	B	1230
8	WST_ORIGIN	31	1	A	Waste Origin Code	GM-I-E	N	A	3070
9	OR_SYS_TYP	32	4	A	Origin System Type (First character is always "M".)	GM-I-E	N	A	3080
10	ON_SITE_MANG	36	1	A	On-site Handling ("Y" = YES "N" = NO)	GM-II-C	N	A	3041
11	OFF_SITE_SHP	37	1	A	Off-site Handling ("Y" = YES "N" = NO)	GM-III-A	N	A	3042
12	-	38	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
13	PT_MEASURE	39	1	A	Point of Measurement	GM-I-G	N	A	3410
14	RAD_MIX	40	1	A	RCRA-Radioactive Mixed	GM-I-I	N	A	3430
15	SIC_CODE	41	4	A	SIC Code	GM-I-D	N	A	3040
16	WST_SOURCE	45	3	A	Source Code (First character is always "A".)	GM-I-F	N	A	3050

FLAT FILE ID# - G1

Source Form: GM **Description:** Waste Measurement Information

Record Length: 101

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
17	-	48	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
18	-	49	12	D2	System Required Field: Value = " " (blank) for all records.		-	-	4009
19	GEN_QTY	61	12	D2	Quantity Generated in Reporting Year	GM-II-A	MC	B	1203
20	-	73	1	A	System Required Field: Value = " " (blank) for all records.		-	-	4009
21	-	74	12	D2	System Required Field: Value = " " (blank) for all records.		-	-	4009
22	-	86	4	FD	System Required Field: Value = " " (blank) for all records.		-	-	4009
23	-	90	12	D2	System Required Field: Value = " " (blank) for all records.		-	-	4009

NOTES: The records in the G1 flat file capture data elements that have a 1:1 relationship to the reported waste, for these data elements the reported waste may contain only one value. If you examine Form GM, you will note these data elements are as follows: GM Section I, Blocks D through I; GM Section II, Blocks A through C; and GM Section III, Block A. The EPA ID number and GM page number are the key fields for each record.

Each record in the G1 file must contain a unique combination of the EPA ID Number and Page Number.

FLAT FILE ID# - G2

Source Form: GM **Description:** EPA Hazardous Waste Codes for each GM page

Record Length: 26

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	System Required Field: Value = "01" for all records.		S	A	4006
4	HZW_SEQ	20	3	I	Hazardous Waste Code Sequence Number	Assigned by Respondent	S	-	4011
5	HZW_CODE	23	4	A	EPA Hazardous Waste Code	GM-I-B	MC	B	1150

NOTES: The G2 flat file captures only the information contained in Section I, Block B of the GM form. The relationship of the data element to the reported waste is *n:1*. There can be multiple EPA waste codes for each unique reported waste. The EPA ID Number, the GM Page Number, and the Sequence Number are the key fields in each record.

The sequence number must be unique for all records with the same EPA ID Number, Page Number, and Sub-Page Number.

FLAT FILE ID# - G3**Source Form:** GM **Description:** State Hazardous Waste Codes for each GM page**Record Length:** 28

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	System Required Field: Value = "01" for all records.		S	A	4006
4	SHZW_SEQ	20	3	I	State Hazardous Waste Code Sequence Number	Assigned by Respondent	S	-	4011
5	SHZW_CODE	23	6	A	State Hazardous Waste Code	GM-I-C	N	B	1150, 4014

NOTES: The G3 flat file is identical to the G2 flat file except that the data element captured is the State hazardous waste code as described in GM Section I, Block C and field five is six characters long. The EPA ID Number, the GM Page Number, and the Sequence Number are the key fields in each record.

The sequence number must be unique for all records with the same EPA ID Number, Page Number, and Sub-Page Number.

FLAT FILE ID# - G4

This file is no longer necessary because the data transmitted in this file is no longer requested in the 1999 Hazardous Waste Report, Instructions and Forms.

Do not include a G4 file in your data submission.

FLAT FILE ID# - G5

Source Form: GM **Description:** Off-Site Management Information for the Reported Waste on Each GM Page

Record Length: 53

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	System Required Field: Value = "01" for all records.		S	A	4006
4	IO_TDR	20	4	A	Off-site System Type (First Character is Always "M".)	GM-III-C	N	A	3090,3100
5	IO_TDR_ID	24	12	A	EPA ID No. of Off-site Facility Shipped to	GM-III-B	MC	B, A	1260, 3090
6	IO_TDR_QTY	36	12	D2	Total Quantity Shipped to EPA ID in Field 5 in Current Reporting Year	GM-III-E	MC	B, A	1207, 1260, 3090
7	IO_PG_NUM_SEQ	48	5	I	Off-site Sequence Number	GM-III Site# Block	S	-	4011
8	OFSITE_AVAIL	53	1	A	Off-site Availability Code	GM-III-D	N	A	3460

NOTES: The G5 flat file captures Off-Site treatment information for the reported waste being reported as represented in GM Section III, Blocks B through E. The reporter will number the waste's Off-site recipients 1 to *n*. A G5 record is created for each entry indicating shipment of hazardous waste. The EPA ID Number, GM Page Number, and Shipment Sequence Number (IO_PG_NUM) are the key fields in each record.

There may be multiple records with the same EPA ID Number, Page Number, and Sub-Page Number. All records with the same EPA ID Number, Page Number, and Sub-Page Number must have a unique Sequence Number (IO_PG_NUM_SEQ).

FLAT FILE ID# - G6**Source Form:** GM **Description:** On-site Management Information for the Reported Waste on Each GM Page.**Record Length:** 40

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	System Required Field: Value = "01" for all records.		S	A	4006
4	SYS_TDR	20	4	A	On-site System Code (First character is always "M".)	See Section II	MC	B	1250
5	SYS_TDR_QTY	24	12	D2	Quantity Treated, Disposed or Recycled On-site in Current Reporting Year	See Section II	MC	B	1208, 1250
6	SYS_PG_NUM_SEQ	36	5	I	On-site Sequence Number	GM-II System# Block	S	-	4011

NOTES: The G6 flat file captures On-Site Treatment information as contained in the "On-Site System 1" and "On-Site System 2" blocks of GM Section II. Each G6 record identifies one on-site treatment system type and the quantity of the reported waste that was treated in that on-site system. On-site systems for each reported waste are numbered 1 to *n*. The EPA ID Number, GM Page Number, and Sequence Number (SYS_PG_NUM_SEQ) are the key fields in each record.

There may be multiple records with the same EPA ID Number, Page Number, and Sub-Page Number. All records with the same EPA ID Number, Page Number, and Sub-Page Number must have a unique Sequence Number (SYS_PG_NUM_SEQ).

FLAT FILE ID# - G7**Source Form:** GM **Description:** Text Description of Reported Waste for Each GM Page**Record Length:** 81

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	System Required Field: Value = "01" for all records.		S	A	4006
4	WST_DSCR_SEQ	20	2	I	Line/Sequence Number for Each 60-Character Line of Description Text	Assigned by Respondent	S	-	4011
5	WST_DSCR_P	22	60	A	Waste Description	GM-I-A	MC	-	4014

NOTES: The G7 flat file captures the description of the reported waste corresponding to Form GM, Section I, Block A. The text description is limited to 720 characters and text must be parsed to 60-character lines numbered "01" to "12" by the respondent. Each G7 record contains one 60-character line of the reported waste description. The EPA ID Number, GM Page Number, and Sequence Number are the key fields in each record.

There may be multiple records with the same EPA ID Number, Page Number, and Sub-Page Number. All records with the same EPA ID Number, Page Number, and Sub-Page Number must have unique line sequence numbers.

FLAT FILE ID# - G8

Source Form:	GM	Description:	User Comments for Each GM Page
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Record Length:	81
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Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	System Required Field: Value = "01" for all records.		S	A	4006
4	WST_COMM_SEQ	20	2	I	Line/Sequence Number for Each 60-Character Line of Comment Text	Assigned by Respondent	S	-	4011
5	WST_COMMENT	22	60	A	Comments	Bottom of GM Form	N	-	4014

NOTES: The format of the G8 flat file is identical to that of the G7 flat file, except that the records correspond to comment text for the GM form page. The EPA ID Number, GM Page Number, and Sequence Number are the key fields in each record.

There may be multiple records with the same EPA ID Number, Page Number, and Sub-Page Number. All records with the same EPA ID Number, Page Number, and Sub-Page number must have unique sequence numbers.

FLAT FILE ID# - G9

This file is no longer necessary because the data transmitted in this file is no longer requested in the 1999 Hazardous Waste Report, Instructions and Forms.

Do not include a G9 file in your data submission.

FLAT FILE ID# - R1

Source Form: WR **Description:** Received Waste Description and Measurement Information

Record Length: 59

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	Waste Number (Allowed values "01", "02", or "03")	Printed on Form	S	A	4007
4	WST_FORM	20	4	A	Form code (First Character is Always "B".)	WR-G	N	A	3060
5	WST_QTY_UOM	24	1	A	Unit of Measure	WR-F	MC	B	1220
6	WST_DENSITY	25	5	D2	Density	WR-F	MC	B	1230, 1201
7	WST_DEN_UOM	30	1	A	Density Unit of Measure ("1" = lbs/gal "2" = sg)	WR-F	MC	B	1230
8	RAD_MIX	31	1	A	RCRA-Radioactive mixed	WR-H	N	A	3440
9	IO_TDR	32	4	A	System Type Code (First Character is Always "M".)	WR-I	MC	B	1091
10	IO_TDR_ID	36	12	A	Off-site Source EPA ID Number	WR-D	MC	B	1262
11	IO_TDR_QTY	48	12	D2	Quantity Received in Current Reporting Year	WR-E	MC	B	1307

NOTES: The R1 file captures data elements that have a 1:1 relationship to the received waste. The R1 flat file may contain only one record for each received waste being reported. The EPA ID Number and WR Page Number are the key fields in each record.

Each record in the R1 file must contain a unique combination of EPA ID Number, Page Number, and Waste Number .

FLAT FILE ID# - R2

Source Form: WR **Description:** EPA Hazardous Waste Codes for Each Reported Waste Received

Record Length: 26

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	Waste Number (Allowed values "01", "02", or "03")	Printed on Form	S	A	4007
4	HZW_SEQ	20	3	I	Hazardous Waste code Sequence Number	Assigned by Respondent	S	-	4011
5	HZW_CODE	23	4	A	EPA Hazardous Waste Code	WR-B	MC	B	1150

NOTES: The R2 file contains the EPA hazardous waste codes for each WR form page as described in Form WR, Block B. The relationship of the data element to the reported waste is *n:1*. The EPA ID Number, WR Page Number, Sub-page Number, and Waste Code Sequence number are the key fields in each record.

The sequence number must be unique for all records with the same EPA ID Number, Page Number, and Waste Number.

FLAT FILE ID# - R3

Source Form: WR **Description:** State Hazardous Waste Codes for Each Reported Waste Received

Record Length: 28

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	Waste Number (Allowed values "01", "02", or "03")	Printed on Form	S	A	4007
4	SHZW_SEQ	20	3	I	State Hazardous Waste Code Sequence Number	Assigned by Respondent	S	-	4011
5	SHZW_CODE	23	6	A	State hazardous waste code	WR-C	N	B	1150, 4014

NOTES: The rules for the R3 file are identical to those of the R2 except that the waste code is the State hazardous waste code as described in Form WR, Block C. The EPA ID number, WR Page Number, Sub-page Number, and Waste Code Sequence Number are the key fields in each record.

The sequence number must be unique for all records with the same EPA ID Number, Page Number, and Waste Number.

FLAT FILE ID# - R4**Source Form:** WR **Description:** Description of Reported Waste Received on Each WR Page**Record Length:** 81

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	Waste Number (Allowed values "01", "02", or "03")	Printed on Form	S	A	4007
4	WST_DSCR_SEQ	20	2	I	Line/Sequence Number for Each 60-Character Line of Description Text	Assigned by Respondent	S	-	4011
5	WST_DSCR_P	22	60	A	Description of Received Hazardous Waste	WR-A	MC	-	4014

NOTES: The R4 flat file captures the received waste description corresponding to Form WR, Block A. The length of the text description is limited to 720 characters and must be parsed to 60-character lines numbered "01" to "12" by the respondent. The EPA ID Number, WR Page Number, and Line Sequence Number are the key fields in each record.

Records with the same EPA ID Number, Page Number, and Waste Number must have sequence numbers.

FLAT FILE ID# - R5**Source Form:** WR **Description:** User Comments for Each WR Page**Record Length:** 81

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	B	1910
2	HZ_PG	13	5	I	Page Number	Assigned by Respondent	S	A	4005
3	SUB_PG_NUM	18	2	I	Waste Number (Allowed values "01", "02", or "03")	Printed on Form	S	A	4007
4	WST_COMM_SEQ	20	2	I	Line/Sequence Number for Each 60-Character Line of Comment Text	Assigned by Respondent	S	-	4011
5	WST_COMMENT	22	60	A	Comments	Bottom of WR Form	N	-	4014

NOTES: The format of the R5 flat file is identical to that of the R4 flat file except that the records correspond to comment text for the WR form page. The EPA ID number, WR page number, and Line Sequence Number are the key fields in each record.

Records with the same EPA ID Number, Page Number, and Waste Number must have sequence numbers.

FLAT FILE ID# - T1

This file is no longer necessary because the data transmitted in this file is no longer requested in the 1999 Hazardous Waste Report, Instructions and Forms.

Do not include a T1 file in your data submission.

FLAT FILE ID# - T2

This file is no longer necessary because the data transmitted in this file is no longer requested in the 1999 Hazardous Waste Report, Instructions and Forms.

Do not include a T2 file in your data submission.

FLAT FILE ID# - T3

This file is no longer necessary because the data transmitted in this file is no longer requested in the 1999 Hazardous Waste Report, Instructions and Forms.

Do not include a T3 file in your data submission.

FLAT FILE ID# - T4

This file is no longer necessary because the data transmitted in this file is no longer requested in the 1999 Hazardous Waste Report, Instructions and Forms.

Do not include a T4 file in your data submission.

FLAT FILE ID# - O1

Source Form: OI **Description:** Identification of All Handlers to Whom or From Whom Waste was Shipped, and Transporters

Record Length: 170

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	A	3960
2	OFF_ID	13	12	A	Off-site Installation or Transporter EPA ID Number	OI-A	N	A	3260
3	OSITE_PGNUM	25	5	I	Page Number	Assigned by Respondent	S	-	-
4	OSITE_SUBNUM	30	2	I	System Required Field: Value = "01" for all records.		S	-	-
5	WST_GEN_FLG	32	1	A	Handler Type = Generator ("X" = True " " = False)	OI-C	N	A	3320
6	WST_TRNS_FLG	33	1	A	Handler Type= Transporter ("X" = True " " = False)	OI-C	N	A	3320
7	WST_TSDR_FLG	34	1	A	Handler Type = TSDR ("X" = True " " = False)	OI-C	N	A	3320
8	ONAME	35	40	A	Name of Off-site Installation or Transporter	OI-B	N	A	3270
9	O1STREET	75	30	A	1st Street Address Line of Installation or Transporter	OI-D	N	A	3330
10	O2STREET	105	30	A	2nd Street Address Line of Installation or Transporter	OI-D	N	-	-
11	OCITY	135	25	A	City	OI-D	N	A	3330
12	OSTATE	160	2	A	State	OI-D	N	A	3330
13	OZIP	162	9	A	Zip Code	OI-D	N	-	-

NOTES: The relationship between all site information data elements is 1:1. All O1 records will be unique. The EPA ID Number and OI Page Number are the key fields in each record.

Each record in the O1 file must contain a unique combination of EPA ID Number and Page Number.

FLAT FILE ID# - O2**Source Form:** OI **Description:** User Comments**Record Length:** 81

Field No.	Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Data Class	Edit Type	Edit Number
1	HID_NUM	1	12	A	EPA ID Number	Site ID Block	MC	A	3960
2	OSITE_PGNUM	13	5	I	Page Number	Assigned by Respondent	S	-	-
3	OSITE_SUBNUM	18	2	I	System Required Field: Value = "01" for all records.		S	-	-
4	OI_COMM_SEQ	20	2	I	Line/Sequence Number for Each 60-Character Line of Comment Text	Assigned by Respondent	S	-	-
5	OI_COMMENT	22	60	A	60-Character Comment Line	Bottom of OI Form	N	-	-

NOTES: The O2 flat file captures the text "Comments" for each OI page number. The length of the text description is limited to 720 characters and must be parsed to 60-character lines numbered "01" to "12" by the respondent. Each O2 record contains the line number and it's respective 60-character text block. The EPA ID Number, OI Page Number, and Line Sequence Number are the key fields in each record.

Records with the same EPA ID Number and Page Number must have unique line/sequence numbers.

APPENDIX C

Data Assessment Edits

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APPENDIX C - Data Assessment Edits

Error Number	Form	Basic Advanced	Logic to Select Errors	Edit Descriptions
1000	IC	Bas	· FIRST TWO CHARACTER OF HID_NUM NE STATE POSTAL CODE FOR WHICH DATA IS BEING SUBMITTED	The first two characters of the EPA ID must match the state code for which data is being submitted.
1010	IC	Bas	· HID_NUM FAILS CHECK DIGIT	The EPA ID must pass the check digit routine.
1020	IC	Bas	· HHANDLER EQ ' '	Handler name must not be blank.
1030	IC	Bas	· HLOC1STRT EQ ' '	Street must not be blank.
1040	IC	Bas	· HLOC_CITY EQ ' '	City, town, village, etc. must not be blank.
1060	IC	Bas	· HLOC_STATE NE VALID STATE POSTAL CODE	State must be a valid postal code.
1070	IC	Bas	· HMAIL1STRT EQ ' '	Street must not be blank.
1080	IC	Bas	· HMAIL_CITY EQ ' '	City or town must not be blank.
1090	IC	Bas	· HMAIL_STATE NE VALID STATE POSTAL CODE	State must be a valid postal code.
1091	WR	Bas	· FORM_IND EQ WR · IO_TDR NE VALID SYSTEM TYPE CODE	The System Type Code field must contain a valid code if the Form Indicator field equals 'WR'.
1100	IC	Bas	· HCONT_LAST EQ ' '	Last name of contact must not be blank.
1100	IC	Bas	· HCONT_FIRST EQ ' '	First name of contact must not be blank.
1110	IC	Bas	· HCONT_PHONE EQ ' '	Contact phone number must not be blank.
1140	IC	Bas	· WST_GEN_STAT NE 1-4	Generator status must be 1-4.

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Error Number	Form	Basic Advanced	Logic to Select Errors	Edit Descriptions
1147	IC	Bas	· ON_STOR_ST NE 1-5	Storage indicator must be 1-5.
1148	IC	Bas	· ON_R_TDR_ST NE 1-3	RCRA treatment, recycling, or disposal indicator must be 1-3.
1150	GM WR	Bas Bas	· FORM_IND EQ 'GM' OR 'WR' AND HZW_CODE NE VALID WASTE CODE - or - · HZW_CODE EQ ' ' AND SHZW_CODE EQ ' '	All records in files G2 and R2 must contain valid EPA Hazardous Waste Codes (including LABP). Records with blank or null EPA Hazardous Waste Codes are not permitted. For a single GM form or a single waste on a WR form, if no EPA hazardous waste code exists, then at least one State Waste Code must exist.
1201	GM, WR	Bas	· FORM_IND EQ 'GM' OR 'WR', AND · WST_DENSITY GT 99.99, OR · WST_DENSITY GT 0 AND LT 0.01, OR · WST_DENSITY LT 0	The waste density (variable WST_DENSITY) must be less than or equal to 99.99 and greater than or equal to 0.01, or 0 on Form GM, WR.
1203	GM	Bas	· FORM_IND EQ GM · GEN_QTY GT 999999999.99, OR · GEN_QTY GT 0 AND LT 0.01, OR · GEN_QTY LT 0	The quantity generated in the reporting year (variable GEN_QTY) must be less than or equal to 999999999.99 and greater than or equal to 0.01, or 0 on Form GM.
1207	GM	Bas	· FORM_IND EQ GM · IO_TDR_QTY GT 999999999.99, OR · IO_TDR_QTY GT 0 AND LT 0.01, OR · IO_TDR_QTY LT 0	The total quantity shipped off-site in the reporting year (variable IO_TDR_QTY) must be less than or equal to 999999999.99 and greater than or equal to 0.01, or 0 on Form GM.

Error Number	Form	Basic Advanced	Logic to Select Errors	Edit Descriptions
1208	GM	Bas	<ul style="list-style-type: none"> · FORM_IND EQ GM · SYS_TDR_QTY GT 999999999.99, OR · SYS_TDR_QTY GT 0 AND LT 0.01, OR · SYS_TDR_QTY LT 0 	The total quantity treated, disposed, or recycled on-site in the reporting year (variable SYS_TDR_QTY) must be less than or equal to 999999999.99 and greater than or equal to 0.01, or 0 on Form GM.
1220	GM WR	Bas Bas	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' OR 'WR', AND · WST_QTY_UOM NE 1-7 	The unit of measure code (variable WST_QTY_UOM) must be 1-7.
1230	GM WR	Bas Bas	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' OR 'WR', AND · WST_QTY_UOM EQ 5-7, AND · WST_DEN_UOM NE '1' OR '2' OR · WST_DENSITY LE 0 	Density (variable WST_DENSITY) must be greater than zero and Density Unit of Measure (variable WST_DEN_UOM) must be 1 or 2 if the waste quantity unit of measure (variable WST_QTY_UOM) is 5-7.
1250	GM	Bas	<ul style="list-style-type: none"> · FORM_IND EQ GM, AND · SYS_TDR NE VALID SYSTEM TYPE, OR · SYS_TDR_QTY LE 0 	BOTH the On-site Management System Type AND On-site Management Quantity fields must contain corresponding valid values or corresponding blanks. If either the On-site Management System Type OR On-site Management Quantity field contains a valid value, the other field must contain a valid value.
1260	GM	Bas	<ul style="list-style-type: none"> · FORM_IND EQ GM, AND · FIRST TWO CHARACTERS OF IO_TDR_ID NE 'FC', AND · IO_TDR_ID FAILS CHECK DIGIT ROUTINE, OR · IO_TDR_QTY LE 0 	BOTH the Off-site ID AND Off-site Shipment Quantity fields must contain corresponding valid values or corresponding blanks. If either the Off-site ID OR Off-site Shipment Quantity field contains a valid value, the other field must contain a valid value. If either field is blank, both fields must be blank. Note: IO_TDR_ID is considered valid if the first two characters are 'FC'.

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Error Number	Form	Basic Advanced	Logic to Select Errors	Edit Descriptions
1262	WR	Bas	<ul style="list-style-type: none"> · FORM_IND EQ WR, AND · FIRST TWO CHARACTERS OF IO_TDR_ID NE VALID STATE POSTAL CODE OR 'FC' 	The first two characters of a generating site's ID (as reported by the receiving site on the WR form) must be a valid state code or 'FC'.
1307	WR	Bas	<ul style="list-style-type: none"> · FORM_IND EQ WR, AND · IO_TDR_QTY GT 999999999.99, OR · IO_TDR_QTY LT 0.01 	The total quantity received in the reporting year (variable IO_TDR_QTY) must be less than 999999999.99 and greater than 0.01 on Form WR.
1400	IC	Bas	<ul style="list-style-type: none"> · WST_GEN_STAT EQ 1, AND · NO FORM GM RECORDS ARE PRESENT 	If the site indicated it was a large quantity generator on Form IC, Section V, Block A (variable WST_GEN_STAT equals '1'), then at least one GM Form must be completed for that site.
1910	GM WR	Bas Bas	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' or 'WR' · HID_NUM NOT IN S1 FILE 	Form GM or WR is present for this EPA ID, but no Form IC information has been submitted for this site.
3020	IC	Adv	<ul style="list-style-type: none"> · MATCH &FILE BY HLOC_COUNTY · FILE HCOUNTY2 IF &LINES EQ 0 · POSTCARD EQ '0' or ' ' 	County name must be valid if Form IC is required.
3023	IC	Adv	<ul style="list-style-type: none"> · NGEN1 - NGEN7 NE 'X' · WST_GEN_STAT EQ 4 · POSTCARD EQ '0' OR ' ' 	At least one of the reasons for not generating must be 'X' if the generator status equals 4, if Form IC is required.
3040	GM	Adv	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' · DECODE SIC_CODE(SICCODE) 	SIC code must be valid.
3041	GM	Adv	<ul style="list-style-type: none"> · FORM_IND EQ GM · ON_SITE_MANG NE Y or N or ' ' 	Indicator of on-site treatment must be Y, or N, or blank.

Error Number	Form	Basic Advanced	Logic to Select Errors	Edit Descriptions
3042	GM	Adv	<ul style="list-style-type: none"> · FORM_IND EQ GM · OFF_SITE_SHP NE Y or N or ' ' 	Indicator of off-site treatment must be Y, or N, or blank.
3050	GM	Adv	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' · DECODE WST_SOURCE(WSTSOURC) 	Source code must be valid.
3060 3060	GM WR	Adv Adv	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' · DECODE WST_FORM(WSTEFORM) 	Form code must be valid.
3070	GM	Adv	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' · WST_ORIGIN NE 1-5 	Origin code must be 1-5.
3080	GM	Adv	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' · WST_ORIGIN EQ 5 · DECODE OR_SYS_TYP(SYSTYPE) 	If origin code is equal to 5, then the Origin System Type (variable OR_SYS_TYP) must be valid.
3090	GM	Adv	<ul style="list-style-type: none"> · FORM_IND EQ GM · DECODE IO_TDR(SYSTYPE) · IO_TDR_ID Fails Check Digit · IO_TDR_QTY LT 0.01 or GT 9999999999.99 	All three fields, System Type (IO_TDR), Off-Site ID (IO_TDR_ID), and TDR Quantity (IO_TDR_QTY) must be valid if any of these fields are greater than blank or greater than 0.
3100	GM	Adv	<ul style="list-style-type: none"> · FORM_IND EQ GM · IO_TDR NE ' ' · OFF_SITE_SHP EQ N 	System type must be blank if off-site shipment indicator (variable OFF_SITE_SHP) is no.
3260	OI	Adv	<ul style="list-style-type: none"> · OFF_ID FAILS CHECK DIGIT 	EPA ID of off-site installation or transporter must pass EPA ID check digit routine.
3270	OI	Adv	<ul style="list-style-type: none"> · ONAME EQ ' ' 	Name of off-site installation or transporter must not be blank.

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Error Number	Form	Basic Advanced	Logic to Select Errors	Edit Descriptions
3320	OI	Adv	<ul style="list-style-type: none"> · WST_GEN_FLG EQ ' ' · WST_TRNS_FLG EQ ' ' · WST_TSDR_FLG EQ ' ' 	At least one of the three handler types (Generator, Transporter, or TSDR) must not be blank.
3330	OI	Adv	<ul style="list-style-type: none"> · OCITY EQ ' ' · WST_TRNS_FLG EQ ' ' 	Off-site installation city must not be blank unless transporter is equal to an 'X' and generator and TSDR are blank.
3330	OI	Adv	<ul style="list-style-type: none"> · DECODE OSTATE(STATE) · WST_TRNS_FLG EQ ' ' 	Off-site installation state must be valid unless transporter is equal to an 'X' and generator and TSDR are blank.
3330	OI	Adv	<ul style="list-style-type: none"> · O1STREET EQ ' ' · WST_TRNS_FLG EQ ' ' 	Address of off-site installation must not be blank unless transporter is equal to an 'X' and generator and TSDR are blank.
3410	GM	Adv	<ul style="list-style-type: none"> · PT_MEASURE NE 1-4 	The Point of Measure must be a valid value (1, 2, 3, or 4).
3430 3440	GM WR	Adv Adv	<ul style="list-style-type: none"> · RAD_MIX NE 1 or 2. 	The RCRA Radioactive Mixed Indicator must be a valid value (1 or 2).
3460	GM	Adv	<ul style="list-style-type: none"> · IF IO_TDR_ID NE ' ' · OFSITE_AVAIL NE 1 or 2 <li style="text-align: center;">- or - · IF IO_TDR_ID EQ ' ' · OFSITE_AVAIL NE ' ' 	The Off-site Availability Code must be a valid value (1 or 2) if there is an Off-site shipment, otherwise the field is blank.
3960	OI	Adv	<ul style="list-style-type: none"> · HID_NUM not in SITES 	The EPA ID filing a Form OI must also either have filed a Form IC or a Postcard.

Error Number	Form	Basic Advanced	Logic to Select Errors	Edit Descriptions
4005	GM WR	Bas Bas	<ul style="list-style-type: none"> · FORM_IND EQ 'GM' OR 'WR', AND · HZ_PG LE 0 	The page number (variable HZ_PG) on a GM or WR form must be greater than 0.
4006	GM	Bas	<ul style="list-style-type: none"> · FORM_IND EQ 'GM', AND · SUB_PG_NUM NE '01' 	The sub-page number (variable SUB_PG_NUM) on a GM form must be equal to '01'.
4007	WR	Bas	<ul style="list-style-type: none"> · FORM_IND EQ 'WR', AND · SUB_PG_NUM NE '01' OR '02' OR '03' 	The sub-page number (variable SUB_PG_NUM) on a WR form must be '01' or '02' or '03'.
4008	IC	Bas	<ul style="list-style-type: none"> · HLOC_STATE NE FIRST TWO CHARACTERS OF HID_NUM 	On a Form IC the state in the site's location address (variable HLOC_STATE) must be the same as the first two characters of the site's EPA ID.
4009	IC, GM, WR	Bas	<ul style="list-style-type: none"> · ITEMS SPECIFIED AS BLANK NE ' ' 	Items designated as blanks in the flat file specifications must blank.
4010	IC	Bas	<ul style="list-style-type: none"> · POSTCARD NE '0' or ' ' 	Site has filed a Postcard (Field Name POSTCARD in file S1 not equal to '0' or ' '). Note: This edit is used to identify sites filing Postcards. Information on sites filing Postcards is not to be submitted to the NODBA.
4011	IC, GM, WR	Bas	<ul style="list-style-type: none"> · SEQUENCE NUMBER LE 0 	All sequence number must be greater than 0.

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Error Number	Form	Basic Advanced	Logic to Select Errors	Edit Descriptions
4012	Ctrl file	B	<ul style="list-style-type: none"> · CHARACTERS 1-2 NE VALID STATE POSTAL CODE, OR VARIES FROM FILE TO FILE, OR IS DIFFERENT FROM STATE FOR WHICH DATA IS BEING SUBMITTED · CHARACTERS 4-5 NE VALID FLAT FILE IDENTIFIER · CHARACTERS 6-8 LE 0, OR GT 366 	File name must be correctly formatted. Characters 1-2 of the file name must be the same for all records, and must be a valid state postal code, and must be the same as the state postal code for which data is being submitted. Characters 4-5 of the file name must be a valid flat file identifier. Characters 6-8 must be numeric, and greater than 0, and less than or equal to 366. All files mentioned in the control file must be present in the data submission and must contain one or more records with valid data.
4013	Ctrl file	B	<ul style="list-style-type: none"> · CHARACTERS 14-21 NE VALID DATE 	The date data created value must be a valid date.
4014	S5, G3, G7, G8, R3, R4, R5	B	<ul style="list-style-type: none"> · DESCRIPTION, COMMENTS, OR STATE WASTE CODE EQ BLANK 	Waste description, waste comments, Form IC comments, and state waste code fields must contain at least one non-blank character in order for the record to be loaded. (Note: this does not require that these fields be provided. It does require that if records with this data are present in the data submission that these fields be non-blank.)
4015	All	B		Data in record must conform to data field type. Integer fields must contain only character 0-9 and “ ”. Decimal fields must contain only the characters 0-9, “ ”, and “.”. Date fields must represent a valid date. All key fields must be present, and the duplicate keys (two or more records with the same keys) are not allowed.

APPENDIX D

What Information Must Be Reported

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APPENDIX D - What Information must be Reported

The following lists the information on each form of the *1999 Hazardous Waste Report, Instructions and Forms* that must be provided:

FORM IC

Section I

Block A	EPA Identification Number
Block C	Site/Company Name
Block E	Location Street Name and Number
Block F	Location City
Block G	Location State
Block H	Location Zip Code

Section II

Block B	Mailing Address Street Name and Number
Block C	Mailing Address City
Block D	Mailing Address State
Block E	Mailing Address Zip Code

Section III

Block A	Site Contact Last Name, First Name, and Initial
Block B	Site Contact Title
Block C	Site Contact Area Code, Telephone Number, and Extension

Section IV

Block A	Report Certification Official Last Name, First Name, and Initial
Block B	Report Certification Official's Title
Block D	Report Certification Date of Signature

Section V

Block A	Current reporting year Generator Status
---------	---

Section VI

Block A	Storage subject to RCRA Permitting requirements
Block B	Treatment, disposal, or recycling subject to RCRA Permitting requirements

FORM GM

Site Name

EPA Identification Number

Section I

Block A	Waste Description
Block B	EPA Hazardous Waste Codes

Section II

Block A	Quantity generated in current reporting year
Block B	Unit of Measure and density information

For each On-site Process System

	EPA Process System Code
	Quantity treated, disposed, recycled on-site in that process system

Section III

For each Off-site Shipment

Block B	EPA ID number of the site the waste was shipped to
Block E	Quantity of waste shipped to that EPA ID

FORM WR

Site Name

EPA Identification Number

For each waste reported (one waste per section)

Block A	Description of hazardous waste
Block B	EPA Hazardous Waste Codes
Block D	Off-site source EPA ID number
Block E	Quantity received in current reporting year
Block F	Unit of measure and density
Block I	EPA Process System Type

FORM OI

Not required

APPENDIX E

Hazardous Waste Report Annotated Forms

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APPENDIX E - Hazardous Waste Report Annotated Forms

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER

SITE NAME: _____

EPA ID NO: .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -



U.S. ENVIRONMENTAL PROTECTION AGENCY

1999 Hazardous Waste Report

FORM IC

IDENTIFICATION AND CERTIFICATION

Instructions: Please see the detailed instructions beginning on page 7 of the instructions and forms booklet before completing this form. In each number for instructions specific to each section is provided below.

Sec. I Site name and location address. Check the box in items A, B, C, E, F, G, and H if same as label; if different, enter corrections. If label is absent, enter information. Instructions page 7.

A. EPA ID No. S(x) - 1 Same as label <input type="checkbox"/> or → .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	B. County S1-9 Same as label <input type="checkbox"/> or →
---	---

C. Site/company name S1-2 Same as label <input type="checkbox"/> or →	D. Has the site name associated with the EPA ID changed since 1995? <input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No
--	---

E. Street name and number. If not applicable, enter industrial park, building name, or other physical location description.
Same as label or →

F. City, town, village S1-8 Same as label <input type="checkbox"/> or →	G. State S1-10 Same as label <input type="checkbox"/> or → .) 2) -	H. Zip Code S1-11 Same as label <input type="checkbox"/> or → .) 2) 2) 2) - .) 2) 2) 2) -
--	---	---

Sec. II Mailing address of site. Instructions page 7.

A. Is the mailing address the same as the location address? 1 Yes (SKIP TO SEC. III) 2 No (CONTINUE TO BOX B)

B. Number and street name of mailing address S2-2, S2-3

C. City, town, village S2-4	D. State S2-5 .) 2) -	E. Zip Code S2-6 .) 2) 2) 2) - .) 2) 2) 2) -
-----------------------------	---------------------------	---

Sec. III Name, title, and telephone number of the person who should be contacted if questions arise regarding this report. Instructions page 7.

A. Last Name S2-12	First name S2-13	M.I.	B. Title S2-14	C. Telephone Number S2-15 .) 2) 2) - .) 2) 2) - .) 2) 2) 2) - Extension .) 2) 2) 2) - S2-16
--------------------	------------------	------	----------------	---

Sec. IV "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties under Section 3008 of the Resource Conservation and Recovery Act for submitting false information, including the possibility of fine and imprisonment for knowing violations." Instructions page 8.

A. Last Name S2-7	First name S2-8	M.I.	B. Title S2-9
C. Signature			D. Date of signature S2-10 .) 2) - .) 2) - .) 2) - Month Day Year

Sec. V	Generator status. Instructions begin on page 8.	
A. 1999 RCRA generator status (CHECK ONE BOX BELOW) S2-11 <input type="checkbox"/> 1 LQG <input type="checkbox"/> 2 SQG <input type="checkbox"/> 3 CESQG <input type="checkbox"/> 4 Non-generator (CONTINUE TO BOX B)	} SKIP TO SEC. VI	B. Reason for not generating (CHECK ALL THAT APPLY) <input type="checkbox"/> 1 Never generated S3-17 <input type="checkbox"/> 2 Out of business S3-18 <input type="checkbox"/> 3 Only excluded or delisted waste S3-19 <input type="checkbox"/> 4 Only non-hazardous waste S3-20 <input type="checkbox"/> 5 Periodic or occasional generator S3-21 <input type="checkbox"/> 6 Waste minimization activity S3-22 <input type="checkbox"/> 7 Other (SPECIFY IN COMMENTS BOX BELOW) S-23

Sec. VI	On-site waste management status. Instructions page 10.	
A. Storage subject to RCRA permitting requirements S2-17 .)) -		B. Treatment, disposal, or recycling subject to RCRA permitting requirements S2-18 .)) -

Comments: S5-2 = Line/Sequence Number
 S5-3 = 60-Character Line of Text

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:
 SITE NAME: _____

 EPA ID NO: .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -
 G(x) - 1



U.S. ENVIRONMENTAL PROTECTION AGENCY
 1999 Hazardous Waste Report

FORM GM

WASTE GENERATION AND MANAGEMENT

Instructions: Please see the detailed instructions beginning on page 11 of the instructions and forms booklet before completing this form. In addition, the page specific to each box is provided in parentheses.

Sec. I	A. Waste description (page 12) 7-4 = LINE SEQUENCE NUMBER G7-5 = 60 CHARACTER LINE OF TEXT					
B. EPA hazardous waste code (page 12) .) 2) 2) 2) - .) 2) 2) 2) - G2-4 .) 2) 2) 2) - .) 2) 2) 2) - .) 2) 2) 2) - G2-5			C. State hazardous waste code (page 13) 3-4 G3-5 .) 2) 2) 2) 2) - .) 2) 2) 2) 2) -			
D. SIC code (page 13) .) 2) 2) 2) - G1-15	E. Origin code (page 13) System Type .) - G1-8 G1-9 . M 2) 2) 2) -	F. Source code (page 14) G1-16 . A 2) 2) -	G. Point of measurement (p. 14) G1-13 .) -	H. Form code (page 14) G1-4 . B 2) 2) 2) -	I. RCRA-radioactive mixed (page 14) G1-14 .) -	

Sec. II	A. Quantity generated in 1999 (page 15) G1-19 .) 2) 2) 2) 2) 2) 2) 2) - . .) -	B. UOM (page 15) G1-5 Density .) 2) - . .) 2) - G1-7 <input type="checkbox"/> 1 lbs/gal <input type="checkbox"/> 2 sg	C. Did this site do any of the following to this waste: treat on site, dispose on site, recycle on site, or discharge to a sewer/POTW? (page 15) G1-10 <input type="checkbox"/> 1 Yes (CONTINUE TO ON-SITE PROCESS SYSTEM 1) <input type="checkbox"/> 2 No (SKIP TO SEC. III)
ON-SITE PROCESS SYSTEM 1 G6-6		ON-SITE PROCESS SYSTEM 2 G6-6	
On-site process system type (page 16) G6-4 . M 2) 2) 2) -		Quantity treated, disposed, or recycled on site in 1999 (page 16) G6-5 .) 2) 2) 2) 2) 2) 2) 2) - . .) -	
On-site process system type (page 16) G6-4 . M 2) 2) 2) -		Quantity treated, disposed, or recycled on site in 1999 (page 16) G6-5 .) 2) 2) 2) 2) 2) 2) 2) - . .) -	

Sec. III	A. Was any of this waste shipped off site in 1999 for treatment, disposal, or recycling? (page 17) <input type="checkbox"/> 1 Yes (CONTINUE TO BOX B) <input type="checkbox"/> 2 No (FORM IS COMPLETE) 1-11			
Site 1 G5-7	B. EPA ID No. of facility waste was shipped to (page 17) G5-5 .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) - G5-4 →	C. System type shipped to (p.17) . M 2) 2) 2) -	D. Off-site availability code (page 17) G5-8 .) -	E. Total quantity shipped in 1999 (page 17) G5-6 .) 2) 2) 2) 2) 2) 2) 2) - . .) -
Site 2 G5-7	B. EPA ID No. of facility waste was shipped to (page 17) G5-5 .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) - G5-4 →	C. System type shipped to (p.17) . M 2) 2) 2) -	D. Off-site availability code (page 17) G5-8 .) -	E. Total quantity shipped in 1999 (page 17) G5-6 .) 2) 2) 2) 2) 2) 2) 2) - . .) -
Site 3 G5-7	B. EPA ID No. of facility waste was shipped to (page 17) G5-5 .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) - G5-4 →	C. System type shipped to (p.17) . M 2) 2) 2) -	D. Off-site availability code (page 17) G5-8 .) -	E. Total quantity shipped in 1999 (page 17) G5-6 .) 2) 2) 2) 2) 2) 2) 2) - . .) -

Comments: G8-4 = LINE SEQUENCE NUMBER
 G8-5 = 60 CHARACTER LINE OF TEXT

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER SITE NAME: _____

 EPA ID NO: .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -
 R(x) - 1



U.S. ENVIRONMENTAL PROTECTION AGENCY
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WASTE RECEIVED FROM OFF SITE

Instructions: Please see the detailed instructions beginning on page 19 of the instructions and forms booklet before completing this form. In addition, the page instructions specific to each box is provided in parentheses.

Waste 1	A. Description of hazardous waste (page 19) R4-4 = LINE SEQUENCE NUMBER R4-5 = 60 CHARACTER LINE OF TEXT	B. EPA hazardous waste code (page 20) .) 2) 2) 2) - .) 2) 2) 2) - R2-4 .) 2) 2) 2) - .) 2) 2) 2) - R2-5	C. State hazardous waste code (page 20) .) 2) 2) 2) 2) 2) - R3-4 R3-5 .) 2) 2) 2) 2) 2) -
D. Off-site handler EPA ID number (page 20) R1-10 .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	E. Quantity received in 1999 (page 20) R1-11 .) 2) 2) 2) 2) 2) 2) 2) 2) 2) - . .) -	F. UOM (page 20) Density R1-6 .) - .) 2) - . .) 2) - R1-5 □ 1 lbs/gal □ 2 sg R1-7	
G. Form code (page 21) R1-4 . ^B 2) 2) 2) -	H. RCRA-radioactive mixed (page 21) R1-8 .) -	I. System type (page 21) R1-9 . ^M 2) 2) 2) -	

Waste 2	A. Description of hazardous waste (page 19)	B. EPA hazardous waste code (page 20) .) 2) 2) 2) - .) 2) 2) 2) - .) 2) 2) 2) - .) 2) 2) 2) -	C. State hazardous waste code (page 20) .) 2) 2) 2) 2) 2) - .) 2) 2) 2) 2) 2) -
D. Off-site handler EPA ID number (page 20) <input type="checkbox"/> Check if same as in Waste 1 .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	E. Quantity received in 1999 (page 20) .) 2) 2) 2) 2) 2) 2) 2) 2) 2) - . .) -	F. UOM (page 20) Density .) - .) 2) - . .) 2) - □ 1 lbs/gal □ 2 sg	
G. Form code (page 21) . ^B 2) 2) 2) -	H. RCRA-radioactive mixed (page 21) .) -	I. System type (page 21) . ^M 2) 2) 2) -	

Waste 3	A. Description of hazardous waste (page 19)	B. EPA hazardous waste code (page 20) .) 2) 2) 2) - .) 2) 2) 2) - .) 2) 2) 2) - .) 2) 2) 2) -	C. State hazardous waste code (page 20) .) 2) 2) 2) 2) 2) - .) 2) 2) 2) 2) 2) -
D. Off-site handler EPA ID number (page 20) <input type="checkbox"/> Check if same as in Waste 2 .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	E. Quantity received in 1999 (page 20) .) 2) 2) 2) 2) 2) 2) 2) 2) 2) - . .) -	F. UOM (page 20) Density .) - .) 2) - . .) 2) - □ 1 lbs/gal □ 2 sg	
G. Form code (page 21) . ^B 2) 2) 2) -	H. RCRA-radioactive mixed (page 21) .) -	I. System type (page 21) . ^M 2) 2) 2) -	

Comments: R5-4 = LINE SEQUENCE NUMBER
 R5-5 = 60 CHARACTER LINE OF TEXT

FORM OI

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME: _____

EPA ID NO: .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -
O(x) - 1



U.S. ENVIRONMENTAL PROTECTION AGENCY

1999 Hazardous Waste Report

OFF-SITE IDENTIFICATION

Instructions: Please read the detailed instructions on the reverse side before completing this form.

Site 1	A. EPA ID No. of off-site installation or transporter O1-2 .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	B. Name of off-site installation or transporter O1-8
	C. Handler type (CHECK ALL THAT APPLY) <input type="checkbox"/> Generator O1-5 <input type="checkbox"/> Transporter O1-6 <input type="checkbox"/> TSDR facility O1-7	D. Address of off-site installation O1-9 ADDR, LINE 1 O1-10 ADDR, LINE 2 Street _____ City O1-11 _____ State .) 2) - O1-12 Zip .) 2) 2) 2) - .) 2) 2) 2) - O1-13

Site 2	A. EPA ID No. of off-site installation or transporter .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	B. Name of off-site installation or transporter
	C. Handler type (CHECK ALL THAT APPLY) <input type="checkbox"/> Generator <input type="checkbox"/> Transporter <input type="checkbox"/> TSDR facility	D. Address of off-site installation Street _____ City _____ State .) 2) - Zip .) 2) 2) 2) - .) 2) 2) 2) -

Site 3	A. EPA ID No. of off-site installation or transporter .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	B. Name of off-site installation or transporter
	C. Handler type (CHECK ALL THAT APPLY) <input type="checkbox"/> Generator <input type="checkbox"/> Transporter <input type="checkbox"/> TSDR facility	D. Address of off-site installation Street _____ City _____ State .) 2) - Zip .) 2) 2) 2) - .) 2) 2) 2) -

Site 4	A. EPA ID No. of off-site installation or transporter .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	B. Name of off-site installation or transporter
	C. Handler type (CHECK ALL THAT APPLY) <input type="checkbox"/> Generator <input type="checkbox"/> Transporter <input type="checkbox"/> TSDR facility	D. Address of off-site installation Street _____ City _____ State .) 2) - Zip .) 2) 2) 2) - .) 2) 2) 2) -

Site 5	A. EPA ID No. of off-site installation or transporter .) 2) 2) - .) 2) 2) - .) 2) 2) - .) 2) 2) -	B. Name of off-site installation or transporter
	C. Handler type (CHECK ALL THAT APPLY) <input type="checkbox"/> Generator <input type="checkbox"/> Transporter <input type="checkbox"/> TSDR facility	D. Address of off-site installation Street _____ City _____ State .) 2) - Zip .) 2) 2) 2) - .) 2) 2) 2) -

Comments: O2-4 = LINE SEQUENCE NUMBER
O2-5 = 60 CHARACTER LINE OF TEXT

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APPENDIX F

EPA Check Digit Routine

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APPENDIX F - EPA ID Check Digit Routine

F.1 Parts of an EPA ID

Positions in the ID	Data	Allowed Values
1-2	State Postal Code	Alphabetic characters only, must be valid state postal code
3	Site designation	A-Z, 0-9
4-11	ID digits	0-9
12	Check digit	0-9

IDs that have a P, T, or F as the third character do not have to pass the check digit routine. Each character (positions 1 - 12 inclusive) must be non-blank.

F.2 Example check digit calculation

EPA ID passing the check digit routine: MDD123456782

Position in the ID	Value from the ID	Multiplier	Multiplication of Value * Multiplier	Adjusted Value*
4	1	1	1	1
5	2	2	4	4
6	3	1	3	3
7	4	2	8	8
8	5	1	5	5
9	6	2	12	3
10	7	1	7	7
11	8	2	16	7
sum				38**

* If the value obtained by multiplying the value in the ID by the multiplier is less than 10 than the adjusted value is the same as the result of the multiplication. If the value obtained by the multiplication is greater than 10, the adjusted value is the value of the multiplication minus 9.

** To see if the ID passes the check digit routine, subtract the sum of the adjusted values (38) from the next highest multiple of 10 (40). In this case, the value obtained is $40-38=2$. The value obtained by the subtraction must match the last digit in the EPA ID to pass the check digit routine.

The check digit routine for IDs with a 0-9 as the third character is slightly different. For these IDs, the ID must pass the check digit routine as specified above. An alternate check digit routine is also used for EPA IDs that have a numeric value (0-9) in the third position. In this case, the value of the number in the 12th position of the ID is added to the previously calculated sum. The resulting sum is subtracted from the next higher multiple of 10. The result of the subtraction is compared to the value in the 3rd position in the EPA ID. If the values match the EPA ID passes the alternate check digit. If the values do not match the ID fails the alternate check digit. If the site fails both tests, the ID fails the check digit routine. If the site passes either test, it passes the check digit test.

The following table presents several examples for illustration.

EPA ID	Pass/Fail	Comments
MDD123456782	Pass	Check sum is 38. Subtract 38 from next higher multiple of 10 (40) and compare to 12 th position of ID. $40-38 = 2 = 12^{\text{th}}$ position, therefore EPA ID passes check digit.
MDD223456782	Fail	Check sum is 39. Subtract 39 from next higher multiple of 10 (40) and compare to 12 th position of ID. $40-39 = 1$ which is not equal to the 12 th position (2), therefore EPA ID fails check digit.
MD1123456782	Pass	Check sum is 38. Subtract 38 from next higher multiple of 10 (40) and compare to 12 th position of ID. $40-38 = 2 = 12^{\text{th}}$ position, therefore EPA ID passes check digit.
MD9123456783	Pass	Check sum is 38. Subtract 38 from next higher multiple of 10 (40) and compare to 12 th position of ID. $40-38 = 2$ which is not equal to the 12 th position (3), therefore EPA ID fails first check digit routine. Since the value in the 3 rd position is numeric, the alternate check digit routine also needs to be checked. For the alternate check digit routine, the check sum is $38+3=41$. The check sum is subtracted from the next higher multiple of 10 (50) and compared to the value in the 3 rd position. In this case, the calculation is $50-41=9$ which equals the 3 rd position. Therefore, the EPA ID passes the check digit routine.

MD8123456783	Fail	<p>Check sum is 38. Subtract 38 from next higher multiple of 10 (40) and compare to 12th position of ID. $40-38 = 2$ which is not equal to the 12th position (3), therefore EPA ID fails first check digit routine. Since the value in the 3rd position is numeric, the alternate check digit routine also needs to be checked.</p> <p>For the alternate check digit routine, the check sum is $38+3=41$. The check sum is subtracted from the next higher multiple of 10 (50) and compared to the value in the 3rd position. In this case, the calculation is $50-41=9$ which does not equal the 3rd position (8). Therefore, the EPA ID fails the check digit routine.</p>
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APPENDIX G

Example Flat Files

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APPENDIX G - Example Flat Files

This appendix contains diagrams of the flat files that would have been created by a state/regional/commercial software package assuming that the example forms contained in Appendix A of the *1999 Hazardous Waste Report, Instructions and Forms* were all the forms that were filed for a particular state. Please note that due to the use of fictitious data in the examples in the forms package that the flat files would be rejected because of the use of EPA IDs that do not begin with the proper state postal code. For the purposes of this example, assume that the files shown are for a submission from the State of Virginia, which was prepared on January 30, 2000 by the EPA Regional office for VA.

The fields, column numbers, and line numbers are indicated for each flat file. The actual contents of the flat file appear below the solid line border.

Legend:

11111111112 Column Numbers
12345678901234567890

FIRST--REC IN-FILE Contents of File
SECOND-REC IN-FILE
THIRD--REC IN-FILE

Control File Correctly Named: VARCL030.FIL

1111111111222222222233333333
1234567890123456789012345678901234567

VARS1030.FILY2000013000000003
VARS2030.FILY2000013000000003
VARG1030.FILY2000013000000008
VARG2030.FILY2000013000000011
VARG5030.FILY2000013000000005
VARG6030.FILY2000013000000005
VARG7030.FILY2000013000000013
VARG8030.FILY2000013000000003
VARR1030.FILY2000013000000005
VARR2030.FILY2000013000000005
VARR4030.FILY2000013000000005

S1 Flat File: Correctly Named: VARS1030.FIL

1111111111222222222233333333333444444444455555555556666666666777777777788888888889999999999		
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890		
ABD586810349WASTE DISPOSAL INC.	0	250 WASTE TREATMENT BOULEVARD
XYD910848737ABC PAINTING CO.	0	200 N. JEFFERSON STREET
YZD567890123PLATERS, INC.	0	999 INDUSTRIAL HIGHWAY

S1 Flat File continued

000000001111111111222222222233333333333444444444455555555556666666666777777777788888888889999999999			
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890			
	MARS	ABUNIVERSE	AB82883
	RCRA CITY	XYHAZARD	XY999880045
	MYTOWN	YZMERCURY	YZ999201056

S2 Flat File: Correctly Named: VARS2030.FIL

1111111111222222222233333333333444444444455555555556666666666777777777788888888889999999999			
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890			
ABD586810349P.O. BOX 1000		VENUS	AB8
XYD910848737200 N. JEFFERSON STREET		RCRA CITY	XY9
YZD567890123999 INDUSTRIAL HIGHWAY		MYTOWN	YZ9

S2 Flat File continued

000000001111111111222222222233333333334444444444555555555566666666667777777777888888888899999999990
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890

28811000SHUTTLE	ROBERT	IENVIRONMENTAL	E200002111SHUTTLE	ROBERT	IENVIRON.
99880045DOUGH	JOHN	ZENVIRONMENTAL	S200002121DOUGH	JOHN	ZENVIRONM
99201056SMITH	GEORGE	CVICE PRESIDENT	200002201DOE	MARY	JENVIRONM

S2 Flat File continued

000000001111111111222222222233333333334444444444555555555566666666667777777777888888888899999999990
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890

ENGINE7077177170 23
ENTAL S9992842800030511
ENTAL S9999291000020231

G1 Flat File: Correctly Named: VARG1030.FIL

1111111111222222222233333333334444444444555555555566666666667777777777888888888899999999990
123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890

ABD5868103490000301B303100.00	5M041YN	124953A74	000000760.00
ABD5868103490000401B305200.00	5M111YN	124953A77	000000100.00
ABD5868103490000501B114508.3415M132YN	124953A79	000006000.00	
XYD9108487370000301B203508.0011	NY	127532A21	000012500.00
YZD5678901230000301B202508.0011	YN	123471A07	000002880.00
YZD5678901230000401B6012	5M021NY	123471A73	000000001.00
YZD5678901230000501B107501.0021	YN	123471A22	011836000.00
YZD5678901230000601B5022	5M077NY	123471A75	000000050.50

G2 Flat File Correctly Named: VARG2030.FIL

11111111112222222
12345678901234567890123456
ABD5868103490000301001F001
ABD5868103490000301002F003
ABD5868103490000401001F006
ABD5868103490000501001F006
ABD5868103490000501002F001
ABD5868103490000501003F003
XYD9108487370000301001F003
YZD5678901230000301001F001
YZD5678901230000401001F001
YZD5678901230000501001D006
YZD5678901230000601001F006

G3 Flat File Correctly Omitted. Data not present on forms.

G4 Flat File Correctly Omitted. Data not requested in the *1999 Hazardous Waste Report, Instructions and Forms*.

G5 Flat File Correctly Named: VARG5030.FIL

11111111112222222222333333333344444444445555555555
12345678901234567890123456789012345678901234567890123456789

XYD9108487370000301M041ABD586810349000007500.00000011
XYD9108487370000301M141BCD687901345000000500.00000021
XYD9108487370000301M021EFG789012678000003250.00000031
YZD5678901230000401M042ABD586810349000000001.00000011
YZD5678901230000601M111ABD586810349000000050.00000011

G6 Flat File Correctly Named: VARG6030.FIL

1111111111222222222233333333334
1234567890123456789012345678901234567890

ABD5868103490000301M132000000760.0000001
ABD5868103490000401M132000000100.0000001
ABD5868103490000501M135000006000.0000001
YZD5678901230000301M021000002880.0000001
YZD5678901230000501M135011836000.0000001

G7 Flat File Correctly Named: VARG7030.FIL

111111111122222222223333333333444444444455555555556666666666777777777788
12345678901234567890123456789012345678901234567890123456789012345678901

ABD586810349000030101INCINERATOR ASH FROM THE INCINERATION OF SPENT SOLVENTS AND
ABD586810349000030102STILL BOTTOMS.
ABD586810349000040101STABILIZED SOLID GENERATED FROM STABILIZING WASTEWATER TREAT
ABD586810349000040102MENT SLUDGE.
ABD586810349000050101LANDFILL LEACHATE DISCHARGED TO POTW.
XYD910848737000030101IGNITABLE SPENT SOLVENT FROM LINE FLUSHING OPERATIONS; MIXTU
XYD910848737000030102RE OF XYLENE AND ACETONE.
YZD567890123000030101SPENT HALOGENATED SOLVENTS FROM DEGREASING OPERATIONS.
YZD567890123000040101STILL BOTTOMS GENERATED FROM THE ON-SITE RECYCLING OF SPENT
YZD567890123000040102HALOGENATED SOLVENT.
YZD567890123000050101RINSEWATERS FROM ELECTROPLATING OPERATIONS CHARACTERISTICALL
YZD567890123000050102Y HAZARDOUS FOR CADMIUM.
YZD567890123000060101WASTEWATER TREATMENT SLUDGE

G8 Flat File Correctly Named: VARG8030.FIL

111111111122222222223333333333444444444455555555556666666666777777777788
12345678901234567890123456789012345678901234567890123456789012345678901

VAD586810349000030101SECT. I, BOX E. SYSTEM TYPE M042 APPLIES TO A SMALL AMOUNT O
VAD586810349000030102F THE WASTE.
VAD586810349000050101SECTION I, BOX B: F001, F003 CODES ARE FROM INCINERATOR ASH.

G9 Flat File Correctly Omitted. Data not requested in the 1999 Hazardous Waste Report, Instructions and Forms.

R1 Flat File Correctly Named: VARR1030.FIL

 1111111111222222222233333333333344444444445555555555
12345678901234567890123456789012345678901234567890123456789

VAD5868103490000601B203508.0012M041XYD910848737000007500.00
VAD5868103490000602B601200.00 2M042YZD567890123000000001.00
VAD5868103490000603B502200.00 2M111YZD567890123000000050.00
VAD5868103490000701B502200.00 2M111CDD987654321000000020.00
VAD5868103490000702B502200.00 2M111EFD123456789000000010.00

R2 Flat File Correctly Named: VARR2030.FIL

 111111111122222222
12345678901234567890123456

VAD5868103490000601001F003
VAD5868103490000602001F001
VAD5868103490000603001F001
VAD5868103490000701001F006
VAD5868103490000702001F006

R3 Flat File Correctly Omitted. Data not present on forms.

R4 Flat File Correctly Named: VARR4030.RIL

111111111122222222223333333333444444444455555555556666666666777777777788
12345678901234567890123456789012345678901234567890123456789012345678901

VAD586810349000060101IGNITABLE SPEND SOLVENT; MIXTURE OF XYLENE AND ACETONE
VAD586810349000060201STILL BOTTOMS, HALOGENATED SOLVENT
VAD586810349000060301WASTEWATER TREATMENT SLUDGE
VAD586810349000070101WASTEWATER TREATMENT SLUDGE
VAD586810349000070201WASTEWATER TREATMENT SLUDGE

R5 Flat File Correctly Omitted. Data not present on forms.

T1 Flat File Correctly Omitted. Data not requested in the *1999 Hazardous Waste Report, Instructions and Forms.*

T2 Flat File Correctly Omitted. Data not requested in the *1999 Hazardous Waste Report, Instructions and Forms.*

T3 Flat File Correctly Omitted. Data not requested in the *1999 Hazardous Waste Report, Instructions and Forms*.

T4 Flat File Correctly Omitted. Data not requested in the *1999 Hazardous Waste Report, Instructions and Forms*.

O1 Flat File Correctly Omitted. Data not present on forms.

O2 Flat File Correctly Omitted. Data not present on forms.

End of document.