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RCRAInfo File Specification Guide: Hazardous Waste Report Submissions for Industry Users

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INTRODUCTION

This document describes the file specifications for reporting data for the Hazardous Waste Report (also called the Biennial Report) specifically for use with the RCRAInfo Industry Application Biennial Report Module. ***Note: If your regulator is not using the RCRAInfo Industry Application to collect Biennial Report data, please verify that the flat file specifications presented in this document are applicable for your use.*** The material in this guide covers submissions by regulated sites to your regulator (State or EPA Region). 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 *RCRA Subtitle C Reporting, Instructions and Forms*, that is referenced throughout this document. You should have a complete copy of this document in your possession while using this guide. Copies of this document are available at https://rcrainfo.epa.gov/rcrainfoweb.

OVERVIEW OF DOCUMENT

The *RCRAInfo File Specification Guide: Hazardous Waste Report Submissions for Industry Users* 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 *RCRA Subtitle C Reporting, Instructions and Forms*, and describes the general purpose and outline of this document.

Section 2 (Changes from Previous Cycles) outlines the major 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.

Appendix A also provides the technical details on how to properly construct the flat files and the business rules that must be met.

INTENDED AUDIENCE

The intended audience for this guide is any site using its own software and procedures to extract hazardous waste data for submission to your regulator to satisfy your requirement to provide data for the Hazardous Waste Report.

This document was written assuming the reader 1) is familiar with the *RCRA Subtitle C Reporting, Instructions and Forms* and 2) understands basic computer concepts and terminology.

HAZARDOUS WASTE REPORT FORMS

The *RCRA Subtitle C Reporting, Instructions and Forms* document captures information from the following forms as they relate to the Hazardous Waste Report:

RCRA SUBTITLE C SITE IDENTIFICATION FORM

The Site Identification Form collects information on the site completing the Biennial Report forms package. The form is divided into nineteen items and two addendums. This information is **NOT** uploaded as part of your submission, but rather, you must enter your Site Identification information through the RCRAInfo Industry Application Biennial Report Module after you have uploaded your GM, WR, and/or OI forms. To enter your Site Identification Form, click the "Add Site ID Form" button from the current submission dashboard. The Site Identification Form will be pre-populated with your most recent information. You may add, revise, or delete any of the information on this form as appropriate.

GM FORM

The Waste Generation and Management Form (GM Form) is used for reporting on-site hazardous waste generation, management, and off-site shipment. The GM Form is divided into three sections that document 1) the source, characteristics, and quantity of hazardous waste generated; 2) the quantity of hazardous waste managed on-site along with the management method used; and 3) the quantity of hazardous waste shipped off-site for treatment, disposal, or recycling along with the off-site management method used. The site will submit GM form information via the GM1, GM2, GM3, GM4, and GM5 flat files.

WR FORM

The Waste Received from Off-site Form (WR Form) identifies hazardous wastes that were received from other hazardous waste sites and the method(s) used to manage them. The WR Form is divided into three identical parts (i.e., waste blocks), labeled Waste 1, Waste 2, and Waste 3, that collect information on the quantities and characteristics of each hazardous waste received from an off-site source and managed on-site. The site will submit WR form information via the WR1, WR2, and WR3 flat files.

OI FORM

The Off-site Identification Form (OI Form) captures the names and addresses of off-site installations and transporters. The OI information is optional on a national level, however, your regulator may require this information. The site will submit OI form information via the OI1 flat file.

QUESTIONS/COMMENTS

Questions on data submissions by individual sites should be directed to the appropriate State or EPA Regional personnel. For a list of the appropriate contacts see: https://rcrainfo.epa.gov/rcrainfoweb.

CHANGES FROM PREVIOUS CYCLES

MANAGEMENT METHOD CODES

The management method code "H141" will be deprecated after the 2025 Biennial Report Cycle. The "H141" code may be reported for the 2025 Biennial Report Cycle, but if known, the appropriate "S" code, defined below, should be used instead.

- S010 – The site receiving this waste stored/bulked and transferred the waste to another site for metals recovery including retorting, smelting, chemical, etc.
- S011 - The site receiving this waste stored/bulked and transferred the waste to another site for mercury recovery (includes mercury retorting, bulb/lamp crushing and mercury vapor recovery, thermostat recovery, mercury from medical equipment recovery, mercury car switch recovery, etc.)
- S015 - The site receiving this waste stored/bulked and transferred the waste to another site for deployment/deactivation of airbag waste followed by metals recovery
- S020 - The site receiving this waste stored/bulked and transferred the waste to another site for solvents recovery
- S039 - The site receiving this waste stored/bulked and transferred the waste to another site for other recovery or reclamation for reuse including acid regeneration, organics recovery, etc.
- S040 - The site receiving this waste stored/bulked and transferred the waste to another site for incineration; thermal destruction other than use as a fuel
- S041 - The site receiving this waste stored/bulked and transferred the waste to another site for open burning/open detonation (should be permitted under Subpart X with process code X01)
- S042 - The site receiving this waste stored/bulked and transferred the waste to another site for thermal desorption to remove organic contaminants from soil, sludge, or sediment by heating them in a unit called a "thermal desorber" to separate the contaminants
- S050 – The site receiving this waste stored/bulked and transferred the waste to another site for energy recovery (includes on-site fuel blending before energy recovery)
- S061 – The site receiving this waste stored/bulked and transferred the waste to another site for fuel blending prior to energy recovery at another site
- S070 – The site receiving this waste stored/bulked and transferrerd the waste to another site for chemical treatment (reduction / destruction / oxidation / precipitation)
- S081 – The site receiving this waste stored/bulked and transferred the waste to another site for biological treatment
- S090 – The site receiving this waste stored/bulked and transferred the waste to another site for polymerization (LDR standard as treatment method)
- S100 - The site receiving this waste stored/bulked and transferred the waste to another site for physical treatment only (adsorption / absorption / separation / stripping / dewatering)

- S110 - The site receiving this waste stored/bulked and transferred the waste to another site for stabilization prior to land disposal at another site (encapsulation / stabilization / fixation)
- S113 – The site receiving this waste stored/bulked and transferred the waste to another site for stabilization to remove hazardous waste characteristics or to achieve delisting levels
- S120 - The site receiving this waste stored/bulked and transferred the waste to another site for a combination of chemical, biological and/or physical treatment
- S121 - The site receiving this waste stored/bulked and transferred the waste to another site for neutralization only
- S122 - The site receiving this waste stored/bulked and transferred the waste to another site for evaporation
- S129 - The site receiving this waste stored/bulked and transferred the waste to another site for other treatment that does not include on-site disposal
- S130 - The site receiving this waste stored/bulked and transferred the waste to another site for surface impoundment that will be closed as a landfill (with prior treatment and/or stabilization meeting LDR treatment standard)
- S131 - The site receiving this waste stored/bulked and transferred the waste to another site for land treatment or application (with any prior treatment and/or stabilization)
- S132 - The site receiving this waste stored/bulked and transferred the waste to another site for landfill (with prior treatment and/or stabilization)
- S134 - The site receiving this waste stored/bulked and transferred the waste to another site for deepwell or underground injection (with or without treatment)

The following business rules have been revised to incorporate these new management method codes:

- GM1-050: If Source Code equals 'G25' then Management Method must equal a headquarter-defined management method in LU_MANAGEMENT_METHOD other than 'H141' or 'S' code else Management Method must equal blank
- GM5-030: Management Method must equal a headquarter-defined management method in LU_MANAGEMENT_METHOD other than 'H141' or 'S' code.

DATA SUBMISSION OVERVIEW

FLAT FILE SUBMISSIONS

The RCRAInfo Industry Application provides an interface for submitters to upload a ZIP file from their local file location to the Biennial Report dashboard. The uploaded file must be in the form of a ZIP file. These files must be:

- flat files;

- fixed-column formatted;

- formatted such that each record in the file is followed by a carriage return/line feed;

- formatted per the flat file specification's documented in this booklet.

A submitter is limited to filing data for **one SITE per ZIP file**.

There are no requirements as to the name of the ZIP file, however, it is recommended that you use the handler id associated with this site (e.g., ALD123456789.ZIP).

DATA IN A SINGLE SUBMISSION

Each submission must contain **ALL** of the data for your site. When the submission is processed, all data associated with the current cycle for your site will be deleted, therefore, it is imperative that your current submission contain all of the data for your site.

TECHNICAL SPECIFICATIONS

This section contains the standards that must be met when producing flat files for the Hazardous Waste Report data submission. Failure to meet these specifications will result in the rejection of the flat files and failure to load the data into the RCRAInfo Industy Application Biennial Report Module.

RULES AND FORMAT CONVENTIONS REQUIRED FOR DATA FLAT FILES

The following sub-sections detail the correct field formats for the data in the flat files.

ALPHANUMERIC FIELDS

Alphanumeric fields are identified in Appendix A as Data Type "A" fields. Data Type "A" fields must be left-justified with all trailing spaces filled with the space character (i.e., ASCII HEX 0x20 or ASCII Decimal 32).

Valid characters for alphanumeric fields are limited to:

`~!@#$%^&*()_-+={}[]|\:;"',.?/1234567890ABCDEFGHIJKLMNOPQRSTUVWXYZ

Invalid characters for alphanumeric fields include:

<>

If the "<" or ">" symbols are used to indicate less than or greater than, it is recommended that these symbols be replaced with "LT" or "GT".

As part of the RCRAInfo load routines, all lowercase letters (a-z) will be converted to uppercase characters (A-Z). Lowercase letters will not cause a submission to be rejected.

INTEGER FIELDS

Integer fields are identified in Appendix A as Data Type "I" fields.

Allowed values for integer fields are numbers 0-9 and the space character (ASCII Hex 0x20 or ASCII Decimal 32).

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

INCORRECT	CORRECT
1A	1
10,000	10000
750.25	750

Exhibit 2. Incorrect and Correct Integer Entries

FIXED DECIMAL FIELDS

Fixed place decimal fields are identified in Appendix A as Data Type "D" fields.

For all "D" field entries, the flat file specifications indicate the number of digits that the data element is allowed before the decimal and after the decimal. For example, D11.6 indicates that the number may have up to 11 digits before the decimal and 6 digits after the decimal (99999999999.999999). The field length includes the decimal character.

Allowed values for fixed decimal fields are numbers 0-9, the decimal character ".", and the space character (ASCII Hex 0x20 or ASCII Decimal 32).

Exhibit 3 shows incorrect and correct entries in a type "D5.2" field.

INCORRECT	CORRECT
10,032.1	10032.10
10,032A	10032

Exhibit 3. Incorrect and Correct Fixed Decimal Entries

NEGATIVE NUMBERS

Negative numbers are not allowed in the data submission.

RECORD TERMINATION

Each flat file record must be terminated by a line feed character (ASCII Hex 0x0A or ASCII Decimal 010), or a carriage return character (ASCII Hex 0x0D or ASCII Decimal 013) followed by a line feed character.

EMPTY FIELDS

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

APPENDIX A

Flat File Specifications and Data Edits

KEY FOR FLAT FILE TABLES

Data Type

A	Alphanumeric
I	Integer
D	Fixed Decimal

FLAT FILE NAMING CONVENTION

Flat files names are constructed in the following manner:

SSFFF.TXT

Where:

SS	=	State Postal Code
FFF	=	Flat file identifier (for example, GM1 or GM2)

FLAT FILE ID# - GM1

Source Form: GM **Description:** Waste Generation and Management Information

This file captures data elements that have 1:1 relationship to the reported waste. These data elements are as follows: GM Items 1.A, and 1.D through 1.G.

Key Fields: Handler ID (HANDLER_ID); Page Number (HZ_PG). Each record in the GM1 file must contain a unique combination of the Handler ID and Page Number.

Note: The GM1 file is REQUIRED for handlers that generated RCRA hazardous waste that, during the reporting cycle, was accumulated on-site; managed on-site in a treatment, storage, or disposal unit; and/or shipped off-site for management.

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
HANDLER_ID	1	12	A	EPA Identification Number		Required	GM1-010, GM1-190
HZ_PG	13	5	I	Page Number		Required	GM1-020, GM1-190
FORM_CODE	18	4	A	Waste Form Code	GM-1-E	Required	GM1-060
UNIT_OF_MEASURE	22	1	A	Unit of Measure	GM-1-F	Required	GM1-080, GM1-090, GM1-100
WST_DENSITY	23	6	D3.2	Density	GM-1-F	Cond. Required	GM1-090
DENSITY_UNIT_OF_MEASURE	29	1	A	Density Unit of Measure (1 = lbs/gal; 2 = specific gravity)	GM-1-F	Cond. Required	GM1-100
MANAGEMENT_METHOD	30	4	A	Management Method (for source code 'G25" only)	GM-1-D	Cond. Required	GM1-050
WASTE_MIN_CODE	34	1	A	Waste Minimization Indicator	GM-1-G	Required	GM1-110

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
SOURCE CODE	35	3	A	Source Code	GM-1-D	Required	GM1-040, GM1-050, GM1-055, GM1-056, GM1-230
GEN_QTY	38	18	D11.6	Quantity Generated in Reporting Year	GM-1-F	Required	GM1-055, GM1-070
Not Applicable	56	1	A				
DESCRIPTION	57	240	A	Waste Stream Description	GM-1-A	Required	GM1-030
PUBLIC_NOTES	297	240	A	Comments/Notes	GM-4		
ON_SITE_MANAGEMENT	537	1	A	Was this Waste Stream Managed On-Site	GM-2	Required	GM1-120, GM1-130, GM1-140
OFF_SITE_SHIPMENT	538	1	A	Was this Waste Stream Shipped Off-Site	GM-3-A	Required	GM1-150, GM1-160, GM1-170
MIXED_WASTE	539	1	A	Hazardous and Radioactive Waste Mixture	GM-1-G	Required	GM1-220
COUNTRY_CODE	540	2	A	Country Code (for source code ‘G62’ only)	GM-1-D	Cond. Required	GM1-210
Total Record Length:		**541**					

GM1 Flat File Edit Specifications	
Edit Number	**Edit Description**
GM1-020	Page Number must be greater than zero.
GM1-030	Waste Stream Description must be provided.
GM1-040	Source Code must equal a valid nationally-defined value.
GM1-050	If Source Code equals 'G25' then Management Method must equal a valid nationally-defined value other than 'H141' or 'S' code else Management Method must equal blank.
GM1-055	If Source Code equals 'G17' then Quantity Generated must equal zero.
GM1-056	If Source Code equals 'G17' then handler must have opted into the Subpart K rule.
GM1-060	Form Code must equal a valid nationally-defined value.
GM1-070	Quantity Generated must be greater than or equal to zero.
GM1-080	Unit of Measure must equal a valid nationally-defined value.
GM1-090	If Unit of Measure equals '5', '6', or '7', then Density must be greater than zero else Density must equal 0.
GM1-100	If Unit of Measure equals '5', '6', or '7', then Density Unit of Measure must equal a valid nationally-defined value else Density Unit of Measure must equal blank.
GM1-110	Waste Minimization must equal a valid nationally-defined value.
GM1-120	On-Site Management Indicator must equal 'Y' or 'N'.
GM1-130	If On-Site Management Indicator equals 'Y' then at least one corresponding record must exist in GM5.
GM1-140	If On-Site Management Indicator equals 'N' then no corresponding record may exist in GM5.
GM1-150	Off-Site Management Indicator must equal 'Y' or 'N'.
GM1-160	If Off-Site Management Indicator equals 'Y' then at least one corresponding record must exist in GM4.
GM1-170	If Off-Site Management Indicator equals 'N' then no corresponding record may exist in GM4.
GM1-190	For each handler and page number in GM1, one record must exist in GM2 or GM3.
GM1-200	If Source Code equals 'G76' then Subpart P – Reverse Distributor in BR site identification form must equal 'Y'.
GM1-210	If Source Code equals 'G62' then Country Code must equal a valid nationally-defined value.
GM1-220	Mixed Waste must equal 'Y' or 'N'.
GM1-230	If Source Code equals 'G61' then no corresponding record may exist in GM5.

FLAT FILE ID# - GM2

Source Form: GM **Description:** EPA Hazardous Waste Codes

This file captures the information contained in Item 1.B of the GM form. The relationship of these data records to the reported waste is *n*:1, that is, there can be multiple waste codes for each reported waste.

Key Fields: Handler ID (HANDLER_ID); Page Number (HZ_PG); EPA Waste Code (EPA_WASTE_CODE). Each record in the GM2 file must contain a unique combination of the Handler ID, Page Number, and EPA Waste Code.

Note: For each waste stream, either EPA Hazardous Waste Code information (GM2) is REQUIRED or State Hazardous Waste Code information (GM3) is REQUIRED.

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
HANDLER_ID	1	12	A	EPA Identification Number		Required	GM2-010
HZ_PG	13	5	I	Page Number		Required	GM2-010
EPA_WASTE_CODE	18	4	A	EPA Hazardous Waste Code	GM-1-B	Required	GM2-020
Total Record Length:		**21**					

GM2 Flat File Edit Specifications	
Edit Number	**Edit Description**
GM2-010	Handler ID and Page Number must exist in GM1.
GM2-020	EPA Waste Code must equal a valid nationally-defined value.
GM2-030	EPA Waste Code may only equal 'PHRM' if the Source Code equals 'G61' and the Form Code equals 'W005'.

FLAT FILE ID# - GM3

Source Form: GM **Description:** State Hazardous Waste Codes

This file captures the information contained in Item 1.C of the GM form. The relationship of these data records to the reported waste is *n*:1, that is, there can be multiple waste codes for each reported waste.

Key Fields: Handler ID (HANDLER_ID); Page Number (HZ_PG); State Waste Code (STATE_WASTE_CODE). Each record in the GM3 file must contain a unique combination of the Handler ID, Page Number, and State Waste Code.

Note: For each waste stream, either EPA Hazardous Waste Code information (GM2) is REQUIRED or State Hazardous Waste Code information (GM3) is REQUIRED.

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
HANDLER_ID	1	12	A	EPA Identification Number		Required	GM3-010
HZ_PG	13	5	I	Page Number		Required	GM3-010
STATE_WASTE_CODE	18	6	A	State Hazardous Waste Code	GM-1-C	Required	GM3-020
Total Record Length:		**23**					

GM3 Flat File Edit Specifications	
Edit Number	**Edit Description**
GM3-010	Handler ID and Page Number must exist in GM1.
GM3-020	State Waste Code must equal a valid implementer-defined value.

FLAT FILE ID# - GM4

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

This file captures off-site treatment information for the reported waste as represented in GM Items 3.B through 3.D. The relationship of these data records to the reported waste is *n*:1, that is, there can be multiple off-site information for each reported waste.

Key Fields: Handler ID (HANDLER_ID); Page Number (HZ_PG); Off-Site Sequence Number (IO_PG_NUM_SEQ). Each record in the GM4 file must contain a unique combination of the Handler ID, Page Number, and Off-Site Sequence Number.

Note: The GM4 file is REQUIRED for handlers that generated RCRA hazardous waste that, during the reporting cycle, was shipped off-site for management.

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
HANDLER_ID	1	12	A	EPA Identification Number		Required	GM4-010
HZ_PG	13	5	I	Page Number		Required	GM4-010
IO_PG_NUM_SEQ	18	5	I	Off-Site Sequence Number		Required	GM4-020
MANAGEMENT_METHOD	23	4	A	Management Method	GM-3-C	Required	GM4-040
IO_TDR_ID	27	12	A	EPA ID Number of the Facility to which Waste was Shipped	GM-3-B	Required	GM4-030, GM4-060
IO_TDR_QTY	39	18	D11.6	Total Quantity Shipped to EPA ID in Current Reporting Year	GM-3-D	Required	GM4-050
Total Record Length:		**56**					

GM4 Flat File Edit Specifications	
Edit Number	**Edit Description**
GM4-010	Handler ID and Page Number must exist in GM1.
GM4-020	Off-Site Sequence must be greater than zero.
GM4-030	EPA ID Number of the Facility to which Waste was Shipped must begin with a state postal code.
GM4-035	EPA ID Number of the Facility to which Waste was Shipped cannot equal 'VARIOUS', 'MISC', 'MANY', 'MEXICO', or 'CANADA'.
GM4-037	EPA ID Number of the Facility to which Waste was Shipped must be at least four characters and no more than twelve characters.
GM4-040	Management Method must equal a valid nationally-defined value.
GM4-050	Total Quantity Shipped to EPA ID in Current Reporting Year must be greater than zero and less than 99,999,999,999.999999.
GM4-060	EPA ID Number of the Facility to which Waste was Shipped cannot equal the Handler ID.

FLAT FILE ID# - GM5

Source Form: GM **Description:** On-Site Management Information for the Reported Waste

This file captures on-site treatment information for the reported waste as represented in GM Item 2. The relationship of these data records to the reported waste is *n*:1, that is, there can be multiple off-site information for each reported waste.

Key Fields: Handler ID (HANDLER_ID); Page Number (HZ_PG); On-Site Sequence Number (SYS_PG_NUM_SEQ). Each record in the GM5 file must contain a unique combination of the Handler ID, Page Number, and On-Site Sequence Number.

Note: The GM5 file is REQUIRED for handlers that generated RCRA hazardous waste that, during the reporting cycle, was accumulated on-site or managed on-site in a treatment, storage, or disposal unit.

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
HANDLER_ID	1	12	A	EPA Identification Number		Required	GM5-010
HZ_PG	13	5	I	Page Number		Required	GM5-010
SYS_PG_NUM_SEQ	18	5	I	On-Site Sequence Number		Required	GM5-020
MANAGEMENT_METHOD	23	4	A	Management Method	GM-2	Required	GM5-030
SYS_TDR_QTY	27	18	D11.6	Total Quantity Treated, Disposed, or Recycled On-Site in Current Reporting Year	GM-2	Required	GM5-040
Total Record Length:		**44**					

GM5 Flat File Edit Specifications	
Edit Number	**Edit Description**
GM5-010	Handler ID and Page Number must exist in GM1.
GM5-020	On-Site Sequence must be greater than zero.
GM5-030	Management Method must equal a valid nationally-defined value other than 'H141' or 'S' code.
GM5-040	Total Quantity Treated, Disposed, or Recycled On-Site in Current Reporting Year must be greater than zero and less than 99,999,999,999.999999.

FLAT FILE ID# - WR1

Source Form: WR **Description:** Waste Received From Off-Site

This file captures the information contained in Item A and Items D through H of the WR form. The relationship of these data records to the reported site is *n*:1, that is, there can be multiple received waste for each site.

Key Fields: Handler ID (HANDLER_ID); Page Number (HZ_PG); Waste Number (SUB_PG_NUM). Each record in the WR1 file must contain a unique combination of the Handler ID, Page Number and Waste Number.

Note: The WR1 file is REQUIRED for handlers who, during the reporting cycle, received RCRA hazardous waste from off-site.

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
HANDLER_ID	1	12	A	EPA Identification Number		Required	WR1-010, WR1-130
HZ_PG	13	5	I	Page Number		Required	WR1-020, WR1-130
SUB_PG_NUM	18	1	I	Waste Number		Required	WR1-030, WR1-130
FORM_CODE	19	4	A	Form Code	WR-G	Required	WR1-100
UNIT_OF_MEASURE	23	1	A	Unit of Measure	WR-F	Required	WR1-070, WR1-080, WR1-090
WST_DENSITY	24	6	D3.2	Density	WR-F	Cond. Required	WR1-080
DENSITY_UN IT_OF_MEASURE	30	1	A	Density Unit of Measure (1 = lbs/gal; 2 = specific gravity)	WR-F	Cond. Required	WR1-090
*** Not Applicable ***	31	1	A				
MANAGEMENT_METHOD	32	4	A	Management Method	WR-H	Required	WR1-110
IO_TDR_ID	36	12	A	Off-Site Source EPA ID Number	WR-D	Required	WR1-050, WR1-055, WR1-057, WR1-058
IO_TDR_QTY	48	18	D11.6	Quantity Received in Current Reporting Year	WR-E	Required	WR1-060

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
DESCRIPTION	66	240	A	Waste Stream Description	WR-A	Required	WR1-040
PUBLIC_NOTES	306	240	A	Comments / Notes	Bottom of Form		
Total Record Length:		**545**					

WR1 Flat File Edit Specifications	
Edit Number	**Edit Description**
WR1-020	Page Number must be greater than zero.
WR1-030	Waste Number must equal '1', '2', or '3'.
WR1-040	Waste Stream Description must be provided.
WR1-050	The first two characters of the Off-Site Handler EPA ID Number must be a state postal code or 'FC' (foreign country)
WR1-055	Off-Site Handler EPA ID Number cannot equal 'VARIOUS', 'MISC', or 'MANY'.
WR1-057	Off-site Handler EPA ID must be at least four characters and no more than twelve characters.
WR1-058	Off-site handler EPA ID cannot equal Handler ID.
WR1-060	Total Quantity Received in Current Reporting Year must be greater than zero and less than 99,999,999,999.999999.
WR1-070	Unit of Measure must equal a valid nationally-defined value.
WR1-080	If Unit of Measure equals '5', '6', or '7', then Density must be greater than zero else Density must equal 0.
WR1-090	If Unit of Measure equals '5', '6', or '7', then Density Unit of Measure must equal a valid nationally-defined value else Density Unit of Measure must equal blank.
WR1-100	Form Code must equal a valid nationally-defined value.
WR1-110	Management Method must equal a valid nationally-defined value.
WR1-130	For each Handler, Page Number, and Waste Number in WR1, one record must exist in WR2 or WR3.

FLAT FILE ID# - WR2

Source Form: WR **Description:** EPA Hazardous Waste Codes

This file captures the information contained in Item B of the WR form. The relationship of these data records to the reported waste is *n*:1, that is, there can be multiple waste codes for each reported waste.

Key Fields: Handler ID (HANDLER_ID); Page Number (HZ_PG); Waste Number (SUB_PG_NUM); EPA Waste Code (EPA_WASTE_CODE). Each record in the WR2 file must contain a unique combination of the Handler ID, Page Number, Waste Number, and EPA Waste Code.

Note: For each waste stream, either EPA Hazardous Waste Code information (WR2) is REQUIRED or State Hazardous Waste Code information (WR3) is REQUIRED.

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
HANDLER_ID	1	12	A	EPA Identification Number		Required	WR2-010
HZ_PG	13	5	I	Page Number		Required	WR2-010
SUB_PG_NUM	18	1	I	Waste Number		Required	WR2-010
EPA_WASTE_CODE	19	4	A	EPA Hazardous Waste Code	WR-B	Required	WR2-020
Total Record Length:		**22**					

WR2 Flat File Edit Specifications	
Edit Number	**Edit Description**
WR2-010	Handler ID, Page Number and Waste Number must exist in WR1.
WR2-020	EPA Waste Code must equal a valid nationally-defined value.
WR2-030	EPA Waste Code may only equal ‘PHRM’ if the Form Code equals ‘W005’.

FLAT FILE ID# - WR3

Source Form: WR **Description:** State Hazardous Waste Codes

This file captures the information contained in Item C of the WR form. The relationship of these data records to the reported waste is *n*:1, that is, there can be multiple waste codes for each reported waste.

Key Fields: Handler ID (HANDLER_ID); Page Number (HZ_PG); Waste Number (SUB_PG_NUM); State Waste Code (STATE_WASTE_CODE). Each record in the WR3 file must contain a unique combination of the Handler ID, Page Number, Waste Number, and State Waste Code.

Note: For each waste stream, either EPA Hazardous Waste Code information (WR2) is REQUIRED or State Hazardous Waste Code information (WR3) is REQUIRED.

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
HANDLER_ID	1	12	A	EPA Identification Number		Required	WR3-010
HZ_PG	13	5	I	Page Number		Required	WR3-010
SUB_PG_NUM	18	1	I	Waste Number		Required	WR3-010
STATE_WASTE_CODE	19	6	A	State Hazardous Waste Code	WR-C	Required	WR3-020
Total Record Length:		**24**					

WR3 Flat File Edit Specifications	
Edit Number	**Edit Description**
WR3-010	Handler ID, Page Number and Waste Number must exist in WR1.
WR3-020	State Waste Code must equal a valid implementer-defined value.

FLAT FILE ID# - OI1							
Source Form: OI **Description:** Identification of All Handlers to Whom or From Whom Waste was Shipped, and Transporters This file captures information from the OI form. Key Fields: Handler ID (HANDLER_ID); Page Number (OSITE_PGNUM). Each record in the OI1 file must contain a unique combination of the Handler ID and Page Number.							
Field Name	**Starting Column**	**Field Length**	**Data Type**	**Description**	**Location on Form**	**Required / Cond. Required**	**Edit Number(s)**
HANDLER_ID	1	12	A	EPA Identification Number		Required	OI1-010
OI_PG	13	5	I	Page Number		Required	OI1-020
OFFSITE_INSTALLATION_ID	18	12	A	Off-Site Installation or Transporter EPA ID Number	OI-A	Required	OI1-030, OI1-040
GENERATOR_FLAG	30	1	A	Handler Type = Generator	OI-C	Required	OI1-050
TRANSPORTER_FLAG	31	1	A	Handler Type = Transporter	OI-C	Required	OI1-060
TSDR_FLAG	32	1	A	Handler Type = Receiving Facility	OI-C	Required	OI1-070
OI_NAME	33	80	A	Name of Off-Site Installation or Transporter	OI-B	Required	OI1-080
OI_STREET_NO	113	12	A	Installation or Transporter Street Number	OI-D		
OI_STREET1	125	50	A	Installation or Transporter Street Address1	OI-D	Cond. Required	OI1-090
OI_STREET2	175	50		Installation or Transporter Street Address2			
OI_CITY	225	25	A	Installation or Transporter City	OI-D	Cond. Required	OI1-100
OI_STATE	250	2	A	Installation or Transporter State	OI-D	Cond. Required	OI1-110, OI1-120
OI_ZIP	252	14	A	Installation or Transporter Zip Code	OI-D	Cond. Required	OI1-130, OI1-140
OI_COUNTRY	266	2	A	Installation or Transporter Country	OI-D	Required	OI1-110, OI1-120, OI1-140, OI1-150

Field Name	Starting Column	Field Length	Data Type	Description	Location on Form	Required / Cond. Required	Edit Number(s)
PUBLIC_NOTES	268	1000	A	Comments / Notes	Bottom of OI Form		
Total Record Length:		**1267**					

OI1 Flat File Edit Specifications	
Edit Number	**Edit Description**
OI1-020	Page Number must be greater than zero.
OI1-030	Off-site Installation Number must begin with a state postal code or 'FC'.
OI1-040	Off-site Installation ID must be at least four characters and no more than twelve characters.
OI1-050	Generator Flag must equal 'Y' or 'N'.
OI1-060	Transporter Flag must equal 'Y' or 'N'.
OI1-070	Receiving Facility Flag must equal 'Y' or 'N'.
OI1-080	Handler Name must be provided.
OI1-090	If Generator Flag = 'Y' or TSDR Flag equals 'Y' then Installation or Transporter Street1 must be provided.
OI1-100	If Generator Flag = 'Y' or TSDR Flag equals 'Y' then Installation or Transporter City must be provided.
OI1-110	If Installation or Transporter Country equals 'US' or blank and Generator Flag = 'Y' or TSDR Flag equals 'Y', then Installation or Transporter State must equal a state postal code.
OI1-120	If Installation or Transporter Country does not equal 'US', then Installation or Transporter State must equal a valid nationally-defined value.
OI1-130	If Generator Flag = 'Y' or TSDR Flag equals 'Y' then Installation or Transporter Zip must be provided.
OI1-140	If Installation or Transporter Country equals 'US' and Installation or Transporter Zip is provided, then Installation or Transporter Zip must be one of the following formats: 99999 or 99999-9999 or 999999999 where '9' is any numeric value.
OI1-150	Installation or Transporter Country must equal a valid nationally-defined value.

End of document.