

# Toxic Release Inventory Basic Data File Format Documentation v15

**Prepared by:**



The Environmental Protection Agency  
Office of Environmental Information  
Office of Information Analysis and Access  
Environmental Analysis Division  
Toxics Release Information Branch

**Date:**

November 15, 2016

# Table of Contents

TRI Basic Data File Format - Introduction.....	3
File Format Information.....	3
File Content Types.....	<b>Error! Bookmark not defined.</b>
File Naming Conventions .....	4
File Usage – Limiting Factors .....	5
Zeros in the Data .....	5
Appendix A: Record Layout.....	7
Appendix B: Chemical Classifications .....	15

## TRI Basic Data File Format - Introduction

Industrial facilities that meet Toxics Release Inventory (TRI) Program reporting requirements submit their data to EPA using either the reporting Form R or Form A. The *TRI Basic Data Files* contain the reporting form data elements most frequently requested by TRI data users, including the quantities of toxic chemicals released into the environment on site at facilities; the quantities transferred off site to other facilities; and summary data concerning releases, recycling, energy recovery and treatment.

This document defines and describes the structure of these data files. It lists the record layout and specifically defines each field in that layout.

Please note that the *Basic Data Files* do not contain data from non-quantitative areas of the Form R or Form A, such as “Chemical Activities and Uses,” “Treatment Methods and Efficiency,” “Recycling Processes” and “Energy Recovery Processes.” To see these and other non-quantitative data from the Form R and Form A, refer to the *TRI Basic Plus Data Files* on the TRI website.

Please note that in addition to downloadable data files, users can also access TRI data via multiple online tools and applications, including TRI Explorer, Envirofacts, and TRI.NET. These can be found at <http://www2.epa.gov/toxics-release-inventory-tri-program/tri-data-and-tools>.

## File Content Types

There are four different types of *TRI Basic Data Files*.

The first type, known as the “State Data File,” contains data for one state, district or U.S. territory for each calendar year. For example, the 2013 “Alabama” state data file has all of the data for Alabama-located facilities that submitted TRI data for calendar year 2013.

The second type, known as the “National Data File,” contains all the TRI data for the United States for a specific calendar year. This includes data for all 50 states and the six U.S. districts and territories (i.e., American Samoa, District of Columbia, Guam, Northern Mariana Islands, Puerto Rico and the Virgin Islands).

The third type, known as the “Federal Facility Data File,” contains data for all government-owned federal sites.

The fourth type, known as the “Tribal Data File,” contains data for facilities located on tribal lands.

## File Format Information

Each *Basic Data File* contains 108 data fields, which generally represent these categories:

- Facility Name, Address, Latitude & Longitude Coordinates, SIC or NAICS codes and Industry Sector Codes
- Chemical Identification and Classification Information
- On-site Release Quantities

- Publicly Owned Treatment Works (POTW) Transfer Quantities
- Off-site Transfer Quantities for Release/Disposal and Further Waste Management
- Summary Pollution Prevention Quantities (Section 8 of the Form R)

Data are presented in simple comma-delimited ASCII text. This format loads easily into many desktop products such as spreadsheets and database software.

The record layout for the *Basic Data File* is illustrated in Appendix A. There are seven columns in the layout format. The first column (identified by the column heading ‘#’) is a sequential field number identifier. The second column, “Field” is the name of the data field as it will appear in the header of the data file. Many of the field names begin with a section reference, such as “5.1 - Fugitive Air,” which indicates where on the Form R the data came from.

The third and fourth columns, “Maximum Length” and “Data Type” specify the maximum length and the data type of the field. The “Maximum Length” column also indicates the format of numeric data. Comma notation is used for numbers that may contain decimals. For example, a “Maximum Length” value of “22,7” indicates that the number can be 22 digits long with 7 digits to the right of the decimal point. There are two possible values for the “Data Type.” They are ‘C’ for Character/Text data and ‘N’ for numeric data.

The fifth and sixth columns under the “Form R Reference” heading indicate the “Part” and “Section” of the Form R or A where the data originate from. Refer to <http://www2.epa.gov/toxics-release-inventory-tri-program/tri-reporting-forms-and-instructions> for more information on the parts of the Form R and Form A.

The “Definition” column gives a description of each data element and provides notes about its origin and use. In each *Basic Data File*, there are several data fields that contain totals. The “Definition” column tells which data fields are added together to obtain these totals.

## File Naming Conventions and Version Numbers

Each file type (as mentioned in the “File Content Types” above) has a slightly different naming convention. However, all file names will follow this standard pattern:

File Name = “TRI” + Reporting Year + File Content

The text string “TRI” identifies the file as a TRI data file. The “Reporting Year” indicates which reporting year’s data are contained in the file. The “File Content” indicates which of the four file types (state, national, tribal or federal ) the file is. It will be either...

- |                           |                                      |
|---------------------------|--------------------------------------|
| • A state abbreviation    | ... for a State Data File            |
| • The abbreviation “U.S.” | ... for a National Data File         |
| • The letters “FED”       | ... for a Federal Facility Data File |
| • The letters “TBL”       | ...for a Tribal Data File            |

Here are some examples and explanations of each file type:

State File:

TRI\_2013\_AL.csv

This is a “State” file. It contains facility and chemical identification information as well as quantity data from all reporting forms submitted by facilities in Alabama (AL) for reporting year 2013.

National File:

TRI\_2000\_US.csv

This is a “National” file. It contains facility and chemical identification information as well as quantity data from all reporting forms submitted by TRI facilities for reporting year 2010.

Federal Facility File:

TRI\_2005\_FED.csv

This is a “Federal Facility” file. It contains facility and chemical identification information as well as quantity data from all reporting forms submitted by federal facilities for reporting year 2005.

Tribal Facility File:

TRI\_2014\_TBL.csv

This is a “Tribal” file. It contains facility and chemical identification information as well as quantity data from all reporting forms submitted by facilities located on tribal lands in reporting year 2014.

## **File Usage – Limiting Factors**

Note that for versions of Microsoft Excel prior to and including Excel 2003, only 65,535 rows can be loaded into a worksheet. Because of this limitation, users will not be able to load any of the “National” files containing 85,000 or more records. Users of Excel 2007 and later, however, will not have this problem as the row limit is 1,048,576.

Microsoft Access, a desktop database tool, doesn’t limit the number of records that can be loaded into a table. Check the limitations of any other tool to be sure that the *TRI Basic Data Files* can be loaded in full.

## **Zeros in the Data**

The *TRI Basic Data Files* are intended to be loaded into spreadsheets, databases and statistical applications. Some of these tools require that numeric data fields be populated with a number (and not a blank) in order for the tool to work

correctly. For instance, to calculate a total for a particular spreadsheet column, all rows in that column must contain a number and not be blank.

In light of this, the TRI Program has inserted zeroes into the *TRI Basic Data Files* in places where numeric data fields were blank. There are three reasons why a numeric data field on a TRI reporting form may be blank. First, if a facility's chemical releases and other waste management quantities are below certain thresholds, the facility may submit a reporting Form A, which doesn't require any actual quantity data. For chemicals submitted on the Form A, all the quantity data is represented as zeroes. See the TRI Reporting Forms and Instructions at <http://www2.epa.gov/toxics-release-inventory-tri-program/tri-reporting-forms-and-instructions> for more information on the Form A and reporting thresholds.

The second case where the TRI Program has substituted zeroes for blanks occurs when facilities report "NA" or "Not Applicable" for a quantity on the Form R. Reporting "NA" means that the release or waste management quantity is not possible for that facility. For example, if a facility is not located near a water body, it will not have the ability to release any of the chemical to water. Therefore, in section 5.3 of the Form R, the facility would enter "NA" for on-site water releases. The TRI Reporting Forms and Instructions contain more information on the use of "NA" in TRI reporting.

The third case where zeroes appear instead of blanks occurs when facilities do not respond to quantity questions on the Form R, leaving them blank. This occurs most often with the submission of paper forms. Data submitted via the electronic TRI reporting applications (i.e., *TRI-ME desktop* and *TRI-MEweb*) do not allow for blanks in quantity data reporting. They require the submitter to enter a number or indicate "NA".

## Appendix A: Record Layout

Field Documentation for the "Basic Data" File

#	Field	Maximum Length	Data Type	Form R Reference		Definition
				Part	Section	
1	Year	4	C	I	1	The Reporting Year - Year the chemical was released or managed as waste
2	TRI Facility ID	15	C	I	4.1	The TRI Facility Identification Number assigned by EPA/TRI
3	FRS ID	12	C	None	None	The Facility Identification Number from EPA's Facility Registry System (FRS). See <a href="https://www.epa.gov/enviro/facility-registry-service-frs">https://www.epa.gov/enviro/facility-registry-service-frs</a>
4	Facility Name	62	C	I	4.1	Facility Name
5	Street Address	62	C	I	4.1	Street Address where facility is located
6	City	28	C	I	4.1	Name of city where facility is located
7	County	25	C	I	4.1	Name of county where facility is located
8	ST	2	C	I	4.1	Abbreviation of state where the facility is located
9	ZIP	9	C	I	4.1	ZIP code where facility is located. Either 5 or 9 characters. No hyphens.
10	BIA	3	C	I	4.1	Code indicating the tribal land a facility is on
11	Tribe	350	C	I	4.1	The name of the Tribe
12	Latitude	9,6	N	None	None	Facility Latitude represented as decimal data
13	Longitude	10,6	N	None	None	Facility Longitude represented as decimal data
14	Federal Facility	3	C	I		Indication if the facility is a Federal Facility (Yes or No)
15	Industry Sector Code	4	C	None	None	A code that identifies what industry or sector (i.e. 212: Coal Mining, 2122: Metal Mining, 2211: Electrical Utilities, etc.) a facility belongs to. This categorization is primarily used to classify, analyze, and show industrial trends within TRI data.
16	Industry Sector	120	C	None	None	The industry or sector (e.g., Coal Mining, Metal Mining, Electrical Utilities, etc.) a facility belongs to. This categorization is primarily used to classify, analyze, and show industrial trends within TRI data.
17	Primary SIC	4	C	I	4.5	Primary Standard Industrial Code (SIC) Code that represents the facility's primary business activity. SIC codes were discontinued in 2006 when NAICS codes became the new business activity indicator for TRI.
18	SIC 2	4	C	I	4.5	Supplemental SIC code representing other business activities of the facility.
19	SIC 3	4	C	I	4.5	Supplemental SIC code representing other business activities of the facility.

**Field Documentation for the "Basic Data" File**

#	Field	Maximum Length	Data Type	Form R Reference		Definition
				Part	Section	
20	SIC 4	4	C	I	4.5	Supplemental SIC code representing other business activities of the facility.
21	SIC 5	4	C	I	4.5	Supplemental SIC code representing other business activities of the facility.
22	SIC 6	4	C	I	4.5	Supplemental SIC code representing other business activities of the facility.
23	Primary NAICS	6	C	I	4.5	Primary North American Industry Code System (NAICS) code that represents the facility's primary business activity. NAICS codes were first reported in 2006. For years prior to 2006, NAICS codes have been assigned.
24	NAICS 2	6	C	I	4.5	Supplemental NAICS code representing other business activities of the facility
25	NAICS 3	6	C	I	4.5	Supplemental NAICS code representing other business activities of the facility
26	NAICS 4	6	C	I	4.5	Supplemental NAICS code representing other business activities of the facility
27	NAICS 5	6	C	I	4.5	Supplemental NAICS code representing other business activities of the facility
28	NAICS 6	6	C	I	4.5	Supplemental NAICS code representing other business activities of the facility
29	Doc_Ctrl_Num	13	C	None	None	The Document Control Number is a unique ID that is assigned to each TRI reporting form.
30	Chemical	70	C	II	1.2	Name of Chemical
31	CAS # / Compound ID	9	C	II	1.1	The Chemical Abstract Service Number of the chemical or chemical compound category
32	SRS Id	9	C	None	None	The Substance Registry System Identification Number. This is a unique identifier assigned to a substance for internal tracking within EPA systems. See <a href="https://iaspub.epa.gov/sor_internet/registry/substreg/home/overview/home.do">https://iaspub.epa.gov/sor_internet/registry/substreg/home/overview/home.do</a>
33	Clean Air Act Chemical	3	C	None	None	Indication if the chemical is a Clean Air Act Chemical (Yes or No)
34	Classification	6	C	None	None	Classification of the chemical. Values are as follows:
						TRI - Standard TRI Chemical
						PBT - Persistent Bioaccumulative Toxic
35	Metal	3	C	None	None	Indication if the chemical is a metal (Yes or No)
36	Metal Category	1	C	None	None	Category of Metal. Values are either 1, 2, 3, or 4 for metals. See Appendix B for definitions and lists of Chemicals that belong to each category
37	Carcinogen	3	C	None	None	Indication if the chemical is a carcinogen (Yes or No)

**Field Documentation for the "Basic Data" File**

#	Field	Maximum Length	Data Type	Form R Reference		Definition
				Part	Section	
38	Form Type	1	C	None		The form the data were submitted on. Values are:
						A – Form A
						R – Form R
39	Unit of Measure	6	C	None	None	Units of measurement for the chemical (Grams or Pounds)
40	5.1 - Fugitive Air	22,7	N	II	5.1	On-site Fugitive Air Releases
41	5.2 - Stack Air	22,7	N	II	5.2	On-site Stack Air Releases
42	5.3 - Water	22,7	N	II	5.3	On-site Water Releases
43	5.4 – Underground	22,7	N	II	5.4	On-site Underground Injection Releases (1987-95). In reporting years prior to 1996, there was no distinction between Underground Injection Class I wells and Underground Injection Class II-V wells. For those years, this was the only quantity of on-site underground injection releases reported. This field will contain mostly zeroes for years 1996 and after.
44	5.4.1 - Underground Class I	22,7	N	II	5.4.1	On-site Underground Injection Releases to Class I Wells. Reporting for this type of underground injection began in reporting year 1996.
45	5.4.2 - Underground Class II-V	22,7	N	II	5.4.2	On-site Underground Injection Releases to Class II-V Wells. Reporting for this type of underground injection began in reporting year 1996.
46	5.5.1 Landfills	22,7	N	II	5.5.1	On-site Landfill Releases (1987-95). In reporting years prior to 1996, there was no distinction between releases to on-site landfills and on-site RCRA C Landfills. For those years, this was the only quantity of on-site landfill releases reported. This field will contain mostly zeroes for years 1996 and after
47	5.5.1A - RCRA C Landfills	22,7	N	II	5.5.1A	On-site RCRA C Landfills Release. Reporting for this type of on-site landfill release began in reporting year 1996.
48	5.5.1B - Other Landfills	22,7	N	II	5.5.1B	On-site Other Landfills Releases. Reporting for this type of on-site landfill release began in reporting year 1996.
49	5.5.2 - Land Treatment	22,7	N	II	5.5.2	On-site Land Treatment Releases
50	5.5.3 - Surface Impoundment	22,7	N	II	5.5.3	On-site Surface Impoundment. In reporting years prior to 2003, there was no distinction between RCRA and Other Surface impoundments. For those years, this was the only total quantity of on-site surface impoundment reported. This field will contain mostly zeroes for years 2003 and after. To obtain total Surface Impoundment for any year, add fields 50, 51 and 52 together.

**Field Documentation for the "Basic Data" File**

#	Field	Maximum Length	Data Type	Form R Reference		Definition
				Part	Section	
51	5.5.3A - RCRA Surface Impoundment	22,7	N	II	5.5.3A	On-site RCRA Surface Impoundment Releases. This sub category of surface impoundment was created in 2003. Prior to 2003, all on-site surface impoundment data were reported in variable #41, "Surface Impoundment." This field will contain mostly zeroes for years prior to 2003. To obtain total Surface Impoundment for any year, add fields 50, 51 and 52 together.
52	5.5.3B - Other Surface Impoundment	22,7	N	II	5.5.3B	On-site NON-RCRA/Other Surface Impoundment Releases. This sub-category of surface impoundment was created in 2003. Prior to 2003, all on-site surface impoundment was reported in variable #41, "Surface Impoundment." This field will contain mostly zeroes for years prior to 2003. To obtain total Surface Impoundment for any year, add fields 50, 51 and 52 together.
53	5.5.4 - Other Disposal	22,7	N	II	5.5.4	On-site Other Disposal Releases
54	On-site Release Total	22,7	N	II		Total Releases On-site for a chemical at a facility. This is a summation of all releases in section 5 (fields 40 through 53). This field is one of three that are added together to calculate "Total Releases" (field #92)
55	6.1 - POTW – Transfers for Release	22,7	N	II	6.1	If the chemical is a Category 1 metal/metal compound or if it is Vanadium (except when contained in an Alloy) (CAS: 7440-62-2) the amount transferred to a POTW will appear in this field. Category 1 metals/metal compounds and Vanadium (except when contained in an Alloy) cannot be treated by most POTWs. Therefore, when one of these chemicals is transferred to a POTW, TRI considers it an Off-site Release. This field is one of three that are added together to calculate "Total Releases" (field #83). See "Metal Category" (field #36) and Appendix B for metal category definitions.
56	6.1 - POTW – Transfers for Treatment	22,7	N	II	6.1	If a chemical is not a Category 1 metal/metal compound and it is not Vanadium (except when contained in an Alloy) (CAS: 7440-62-2), its POTW transfer amount is listed here. This is the amount of the chemical that is treated at the POTW. See "Metal Category" (field #29) and Appendix B for metal category definitions.
57	6.1 - POTW - Total Transfers	22,7	N	II	6.1	This is the total amount of a chemical that is transferred to a POTW. This amount will be equal to either the summation of "6.1 POTW – Transfers for Release" (field #55) and "6.1 POTW – Transfers for Treatment" (field # 56)
58	6.2 - M10	22,7	N	II	6.2	Off-site Storage

**Field Documentation for the "Basic Data" File**

#	Field	Maximum Length	Data Type	Form R Reference		Definition
				Part	Section	
59	6.2 - M41	22,7	N	II	6.2	Off-site Solidification/Stabilization for Metals and Metal Compounds Only
60	6.2 - M62	22,7	N	II	6.2	Off-site Wastewater Treatment (Excluding POTWs) for Metals and Metal Compounds Only
61	6.2 - M71	22,7	N	II	6.2	Off-site Underground Injection. There was no distinction between off-site underground injections into Class I wells and Class II-V wells prior to 2003. For those years, this was the only quantity for off-site underground injection. In 2003, two sub-categories were added to distinguish between underground injections to Class I wells and Class II-V wells. This field will contain mostly zeroes for years 2003 and after. To obtain total off-site underground injection for any year, add fields 61, 62, and 63 together.
62	6.2 - M81	22,7	N	II	6.2	Off-site Underground Injection to Class I Wells. This subcategory of off-site underground injection was created in 2003. Prior to 2003, all off-site underground injection quantities were reported in variable #61, "M71." This field will contain mostly zeroes for years prior to 2003. To obtain total off-site underground injection for any year, add fields 61, 62 and 63 together.
63	6.2 - M82	22,7	N	II	6.2	Off-site Underground Injection to Class II-V Wells. This subcategory of off-site underground injection was created in 2003. Prior to 2003, all off-site underground injection quantities were reported in variable #61, "M71." This field will contain mostly zeroes for years prior to 2003. To obtain total off-site underground injection for any year, add fields 52, 53 and 54 61, 62, and 63together.
64	6.2 - M72	22,7	N	II	6.2	Off-site Landfill/Disposal Surface Impoundment. Prior to 2002, all Landfill and Surface Impoundment releases were reported as "M72." In 2002, "M72" was split into three subcategories representing Surface Impoundment (M63), Releases to Other Landfills (M64) and Releases to RCRA Subtitle landfills (M65). Subsequently, "M63" was subdivided into Subtitle C Surface Impoundment (M66) and Other Surface Impoundment (M67) in 2003. This field will contain mostly zeroes for years 2002 and after. To obtain total off-site Landfill/Disposal Surface Impoundment for any year, add fields 64 through 69 together.

**Field Documentation for the "Basic Data" File**

#	Field	Maximum Length	Data Type	Form R Reference		Definition
				Part	Section	
65	6.2 - M63	22,7	N	II	6.2	Off-site Surface Impoundment. This sub category of Off-site Landfill/Disposal and Surface Impoundment was established in 2002. Prior to 2002, all off-site landfill/disposal surface impoundment quantities were reported in variable #55, "M72." This field will contain mostly zeroes for years prior to 2002. In 2003, this field was subdivided into Subtitle C Surface Impoundment (M66) and Other Surface Impoundment (M67). To obtain total off-site Surface Impoundment for any year, add field 64 through 69 together.
66	6.2 - M66	22,7	N	II	6.2	Off-site Subtitle C Surface Impoundment. This subcategory of Off-site Surface Impoundment was established in 2003. Prior to 2003, all off-site surface impoundment quantities were reported in variable #56, "M63." This field will contain mostly zeroes for years prior to 2003. To obtain total off-site Surface Impoundment for any year, add field 64 through 69 together.
67	6.2 - M67	22,7	N	II	6.2	Off-site Other Surface Impoundment. This subcategory of Off-site Surface Impoundment was established in 2003. Prior to 2003, all off-site surface impoundment quantities were reported in variable #56, "M63." This field will contain mostly zeroes for years prior to 2003. To obtain total off-site Surface Impoundment for any year, add field 64 through 69 together.
68	6.2 - M64	22,7	N	II	6.2	Off-site Other Landfills. This subcategory of Off-site Landfill/Disposal and Surface Impoundment was established in 2002. Prior to 2002, all off-site landfill/disposal surface impoundment quantities were reported in variable #64, "M72." This field will contain mostly zeroes for years prior to 2002. To obtain total off-site Surface Impoundment for any year, add field 64 through 69 together.
69	6.2 - M65	22,7	N	II	6.2	Off-site RCRA Subtitle C Landfill. This subcategory of Off-site Landfill/Disposal and Surface Impoundment was established in 2002. Prior to 2002, all off-site landfill/disposal surface impoundment quantities were reported in variable #64, "M72." This field will contain mostly zeroes for years prior to 2002. To obtain total off-site Surface Impoundment for any year, add field 64 through 69 together.
70	6.2 - M73	22,7	N	II	6.2	Off-site Land Treatment
71	6.2 - M79	22,7	N	II	6.2	Off-site Other Land Disposal
726	6.2 - M90	22,7	N	II	6.2	Off-site Other Off-site Management

**Field Documentation for the "Basic Data" File**

#	Field	Maximum Length	Data Type	Form R Reference		Definition
				Part	Section	
6						
73	6.2 - M94	22,7	N	II	6.2	Off-site Transfer to Waste Broker – Disposal
74	6.2 - M99	22,7	N	II	6.2	Off-site Unknown
75	Off-Site Release Total	22,7	N	None	None	The Off-site Release Total equals the sum of M10 + M41 + M62 + M71 + M72 + M63 + M64 + M65 + M73 + M79 + M90 + M94 + M99 + M40 (if the chemical is a category 1 metal/metal compound or if it is Vanadium (except when contained in an Alloy) (CAS: 7440-62-2)) + M61 (if the chemical is a category 1 metal/metal compound or if it is Vanadium (except when contained in an Alloy) (CAS: 7440-62-2)). This field is one of three that are added together to calculate "Total Releases" (field #92).
76	6.2 - M20	22,7	N	II	6.2	Off-site Solvents/Organics Recovery
77	6.2 - M24	22,7	N	II	6.2	Off-site Metals Recovery
78	6.2 - M26	22,7	N	II	6.2	Off-site Other Reuse or Recovery
79	6.2 - M28	22,7	N	II	6.2	Off-site Acid Regeneration
80	6.2 - M93	22,7	N	II	6.2	Off-site Transfer to Waste Broker - Recycling
81	Off-Site Recycled Total	22,7	N	None	None	The sum of M20 + M24 + M26 + M28 + M93
82	6.2 - M56	22,7	N	II	6.2	Off-site Energy Recovery
83	6.2 - M92	22,7	N	II	6.2	Off-site Transfer to Waste Broker - Energy Recovery
84	Off-Site Recovery Total	22,7	N	None	None	The sum of M56 + M92
85	6.2 - M40	22,7	N	II	6.2	Off-site Solidification/Stabilization
86	6.2 - M50	22,7	N	II	6.2	Off-site Incineration/Thermal Treatment
87	6.2 - M54	22,7	N	II	6.2	Off-site Incineration/Insignificant fuel value
88	6.2 - M61	22,7	N	II	6.2	Off-site Waster Treatment (Excluding POTW)
89	6.2 - M69	22,7	N	II	6.2	Off-site Other Waste Treatment
90	6.2 - M95	22,7	N	II	6.2	Off-site Transfer to Waste Broker - Waste Treatment
91	Off-Site Treated Total	22,7	N	None	None	The sum of M40 + M50 + M54 + M61 + M69 + M95
92	Total Releases	22,7	N	None	None	The total on and off-site releases from sections 5 and 6 of the Form R. This field equals On-site Release Total (field #54) + 6.1 - POTW – Transfers for Release (field #57) + Off-site Release Total (field #75).
93	8.1 - Releases	22,7	N	II	8.1	Amount of Total On- and Off-site Releases as reported in Section 8, Source Reduction and Recycling Activities / Pollution Prevention. Reported from RY 1987 through 2002.
94	8.1a - On-site Contained Releases	22,7	N	II	8.1a	Beginning in RY 2003, the total releases in Section 8 of the Form R were broken up into four subcategories. For this data element, facilities reported Total On-Site Disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills and other landfills.

**Field Documentation for the "Basic Data" File**

#	Field	Maximum Length	Data Type	Form R Reference		Definition
				Part	Section	
95	8.1b - On-site Other Releases	22,7	N	II	8.1b	Beginning in RY 2003, the total releases in Section 8 of the Form R were broken up into four subcategories. For this data element, facilities reported their other on-site disposal or releases not covered in 8.1a.
96	8.1c - Off-site Contained Releases	22,7	N	II	8.1c	Beginning in RY 2003, the total releases in Section 8 of the Form R were broken up into four subcategories. For this data element, facilities reported Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills and other landfills.
97	8.1d - Off-site Other Releases	22,7	N	II	8.1d	Beginning in RY 2003, the total releases in Section 8 of the Form R were broken up into four subcategories. For this data element, facilities reported their other off-site disposal or releases not covered in 8.1c.
98	8.2 - Energy Recovery On-site	22,7	N	II	8.2	Amount of Energy Recovery On-site
99	8.3 - Energy Recovery Off-site	22,7	N	II	8.3	Amount of Energy Recovery Off-site
100	8.4 - Recycling On-Site	22,7	N	II	8.4	Amount of Recycling On-site
101	8.5 - Recycling Off-Site	22,7	N	II	8.5	Amount of Recycling Off-site
102	8.6 - Treatment On-site	22,7	N	II	8.6	Amount of Treatment On-site
103	8.7 - Treatment Off-site	22,7	N	II	8.7	Amount of Treatment Off-site
104	Production Waste (8.1 thru 8.7)	22,7	N	II	8.1-8.7	The Total Production Waste Quantity. This is the summation of the quantities in Section 8.1 through 8.7 (or field numbers 83 through 94).
105	8.8 - One-time Release	22,7	N	II	8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processing.
106	Prod_Ratio_or_Activity	10	C	II	8.9	Indicates whether "8.9 – Production Ratio" (field 106) represents a production index or activity index. Values are "Production" and "Activity"
107	8.9 - Production Ratio	9,2	N	II	8.9	Production Ratio or Activity index.
108	Parent CO Name	60	C	I	5.1	Name of Parent Company.
109	Parent CO DB NUM	9	C	I	5.2	Parent Company's Dun & Bradstreet Number.

## Appendix B: Chemical Classifications

Category 1 Metals
ANTIMONY
ANTIMONY COMPOUNDS
ARSENIC
ARSENIC COMPOUNDS
BERYLLIUM
BERYLLIUM COMPOUNDS
CADMIUM
CADMIUM COMPOUNDS
CHROMIUM
CHROMIUM COMPOUNDS (EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)
COBALT
COBALT COMPOUNDS
COPPER
COPPER COMPOUNDS
LEAD
LEAD COMPOUNDS
MANGANESE
MANGANESE COMPOUNDS
MERCURY
MERCURY COMPOUNDS
NICKEL
NICKEL COMPOUNDS
SELENIUM
SELENIUM COMPOUNDS
SILVER
SILVER COMPOUNDS
THALLIUM
THALLIUM COMPOUNDS
VANADIUM COMPOUNDS
ZINC COMPOUNDS

Category 2 Metals
ALUMINUM OXIDE (FIBROUS FORMS)
ALUMINUM PHOSPHIDE
ASBESTOS (FRIABLE)
BIS(TRIBUTYLTIN) OXIDE
BORON TRICHLORIDE
BORON TRIFLUORIDE
C.I. DIRECT BLUE 218
C.I. DIRECT BROWN 95
FENBUTATIN OXIDE
FERBAM
IRON PENTACARBONYL
LITHIUM CARBONATE
MANEB
METIRAM
MOLYBDENUM TRIOXIDE
OSMIUM TETROXIDE
POTASSIUM BROMATE
SODIUM NITRITE
THORIUM DIOXIDE
TITANIUM TETRACHLORIDE
TRIBUTYLTIN FLUORIDE
TRIBUTYLTIN METHACRYLATE
TRIPHENYLTIN CHLORIDE
TRIPHENYLTIN HYDROXIDE
ZINEB

Category 3 Metals
BARIUM
BARIUM COMPOUNDS

Category 4 Metals
ALUMINUM ( FUME OR DUST )
VANADIUM ( EXEPT WHEN CONTIANED IN AN ALLOY )
ZINC ( FUME OR DUST )