# TOXICS RELEASE INVENTORY BASIC PLUS DATA FILES DOCUMENTATION

FILE TYPE 3A: DETAILS OF OFF-SITE TRANSFERS

Updated for RY 2023

August 2024



#### **OVERVIEW OF TRI BASIC PLUS DATA FILES**

The TRI "Basic Plus" data files include 10 file types that collectively contain all the data fields from the TRI Reporting Form R and Form A (except Form R Schedule 1). The 10 file types are tab-delimited text (.txt) files packaged into a .zip file.

<u>File</u>	<u>Example</u>	Description of Contents	Form R/Form A Reference
Type 1A	CA_1A_2017.txt	Facility data, chemical identification, chemical uses, on- site releases and management, off- site transfers, summary information	Part I (all), Part II (section 1, 3, 4, 5, 6.1.A, 6.2ABC, 7B, 7C, 8.2.B, 8.4.B, 8.6.

The Basic Plus Data Files are identified (named) by state, file type, and reporting year:

File Name = State + File Type + Reporting Year

For example, the file "CA\_1A\_2017.txt" contains facility, chemical identification, chemical use, on-site release and waste management, off-site transfer, and summary information (File Type 1A) for all facilities located in California (CA) for reporting year 2017.

In addition to the set of data files for each state, there are two other Basic Plus file sets: Federal and National. The Federal files (FED\_1A\_2017.txt, FED\_2A\_2017.txt, etc.) contain TRI data for all government-owned-and-operated federal sites. The National files (US\_1A\_2017.txt, US\_2A\_2017.txt, etc.) contain TRI data for all U.S. states and territories for a specific year.

#### **DESCRIPTION OF FILE TYPE 3A CONTENTS**

File Type 3A contains off-site transfer data from Section 6.2 of the TRI Reporting Form R, as shown in the table below. Each record in File Type 3A represents data from a single chemical reporting form (i.e., Form R) submitted by a facility.

All Type 3A files contain data from the following parts and sections of the Form R:

Part	Section	Description
1	1	Reporting Year
I	1	Revision Codes
I	4	Facility Identification Information
I	5	Parent Company Information
I	1	Chemical Identification Data
II	6.2	Off-site Location Name, Address and RCRA number
Ш	6.2.A	Transfer Totals
II	6.2.B	Basis of Estimate
П	6.2.C	Type of Waste Treatment/Disposal/Recycling/Energy Recovery

*Note:* In 2005, the TRI Program stopped collecting underground injection control (UIC) identification numbers from facilities on the TRI reporting forms. UIC IDs identify facilities that received permits from state governments to dispose of or release chemical waste into Class I through Class V underground injection wells.

The TRI Program does have some historical UIC IDs that were collected prior to 2005. Many of these, however, are outdated and inaccurate. The TRI Program is also missing UIC IDs for facilities that began reporting to TRI in or after 2005. EPA does not store nor have access to current UIC IDs. Because of this lack of current, accurate and complete data, the TRI Program removed the UIC ID data fields from the TRI Basic Data Files in 2019.

To learn more about UIC permits and underground injection wells see the "Protecting Underground Source of Drinking Water from Underground Injection (UIC)" website at <a href="https://www.epa.gov/uic">https://www.epa.gov/uic</a>

#### WHAT'S IN THIS DOCUMENT

The rest of this document is organized as a four-column data table. It describes what information you will find when you download and open any of the "TRI Basic Plus Data: File Type 3A" files.

Column	Description
Number (No.)	The sequential number of the data element in the record
Field Name	The name of the data element (Note: these names correspond to the various column headings in the data files themselves.)
Data Type	'C' for character data (alphanumeric) 'N' for numeric data 'D' for date
Description	A brief statement of what the data element represents, plus its TRI System Source (in <b>Table Name</b> . Field Name format) and where on the TRI Reporting Form R the data element is reported (i.e., reference). TRI System Source refers to the data element's physical location within EPA's Envirofacts online data warehouse.

When you open any of the Basic Plus data files, you'll see that the contents are delimited by tabs, meaning a tab is placed between each data element. The first row of each file contains column headers, which correspond to the "field names" in this document.

1	Α	В	C	D	3
1	REPORTING YEAR	TRADE SECRET INDICATOR	TRIFID	FACILITY NAME	
2	2016	NO	37087TSHBM1420T	NOVAMET SPECIALTY PRODUCTS	
3	2016	NO	2740WNVRNM837TR	ENVIRONMENTAL AIR SYSTEMS INC-TRIAD	8
4	2016	NO	7585WSNDRS485HI	SANDERSON FARMS OAKWOOD FEED MILL	4

Example of the first four rows of a Basic Plus data file

*REMINDER:* Quantities of dioxin and dioxin-like compounds are in grams. Quantities of all other TRI chemicals are reported in pounds. Facilities cannot use range codes to report quantities for dioxin and dioxin-like

compounds and other Persistent Bioaccumulative Toxics (PBTs). For a list of PBT chemicals see Appendix C - Persistent Bioaccumulative Toxics (PBTs).

#### HELPFUL RESOURCES FOR USERS OF DOWNLOADABLE DATA FILES

When using any of the downloadable TRI data files, it will be helpful for users to refer to the TRI Reporting Form R, the TRI Reporting Forms & Instructions document, and the Envirofacts TRI data model. The Reporting Forms & Instructions document and sample reporting forms are available online in the GuideME application at <a href="https://www.epa.gov/tri/guideme">www.epa.gov/tri/guideme</a>. The Envirofacts TRI data model is found at <a href="https://www.epa.gov/enviro/tri-model">https://www.epa.gov/enviro/tri-model</a>. These resources provide useful context and have additional details about certain data elements.

#### **FILE TYPE 3A CONTENTS**

No.	Field Name	Туре	Description
1	FORM TYPE	С	Indicates whether the Reporting Form R or Form A Certification Statement was submitted. R = Form R A = Form A Certification Statement Source: TRI_REPORTING_FORM.FORM_TYPE_IND Reference: Type of Form Used
2	TRIFD	С	The unique TRI facility identification (TRIFID) number assigned to each facility for TRI reporting purposes Note: The content of this field is <u>not</u> changed to match facility ownership, or zip code changes. Rather, the TRIFD identifies a specific geographical location (also identified by the latitude and longitude of that location).  Source: TRI_FACILITY.TRI_FACILITY_ID Reference: Part I, Section 4.1
3	DOCUMENT CONTROL NUMBER	С	Unique identification number assigned to each TRI form submission. Format: TTYYNNNNNNNN, where: TT = document type YY = reporting year NNNNNNNNN = assigned number Source: TRI_REPORTING_FORM.DOC_CTRL_NUM Reference: Assigned by EPA
4	CAS NUMBER	С	Unique numerical identifier assigned by the Chemical Abstracts Service to every chemical substance. Note: CAS number 99999999999 is for sanitized trade secret submissions.  Source: TRI_CHEM_INFO.CAS_REGISTRY_NUMBER Reference: Part II, Section 1.1

5	TRI_CHEM_ID	С	TRI Chemical ID is an internal program number that uniquely identifies chemical or category codes (for compounds). The number is the same as the CAS number but with a different format (no dashes and left padded with zeroes for non-compounds). Format: 9999999999 (Chemicals) N999 (Compounds)  Note: I_CHEM_ID 99999999999 is sanitized for trade secret submissions.  Source: TRI_REPORTING_FORM.TRI_CHEM_ID  Reference: Part II, Section 1.1
6	CHEMICAL NAME	С	Name of the chemical as listed on the TRI chemical list, or generic name, if the chemical is claimed as a trade secret.  Source: TRI_REPORTING_FORM.CAS_CHEM_NAME  Reference: Part II, Section 1.2 or Part II, Section 1.3
7	MIXTURE NAME	С	The generic term used in place of the chemical name when the supplier of the chemical is withholding the name of the TRI chemical or claiming that the chemical is a trade secret. This is generally used when the supplier of a chemical formulation wishes to keep the identity of a particular ingredient in the formulation a secret. It is only used when the supplier, not the reporting facility, is claiming the trade secret. The reporting facility will enter the chemical name as "Mixture", then supply this generic name to describe it.  Source: TRI_REPORTING_FORM.MIXTURE_NAME Reference: Part II, Section 2.1
8	ELEMENTAL METAL INCLUDED	С	Flag indicating whether the facility submitted a combined reporting form for a metal compound and the corresponding elemental metal. TRI started collecting this data element beginning with RY 2018. VALUES: YES = combined form for both an elemental metal and a metal compound containing the same elemental metal NO = only metal compound reported <i>Source:</i> TRI_REPORTING_FORM.ELEMENTAL_METAL_INCLUDED Reference: Part II, Section 1.2
9	CLASSIFICATION	С	Indicates the classification of the chemical. Chemicals can be classified as either a dioxin or dioxin-like compound, a Persistent, Bioaccumulative and Toxic chemical, or a general EPCRA Section 313 chemical.  Values: {TRI, PBT, DIOXIN} where: TRI = General EPCRA Section 313 Chem. PBT = Bioaccumulative and Toxic DIOXIN = Dioxin or Dioxin-like compound Source: TRI_CHEM_INFO.CLASSIFICATION Reference: NONE

10	UNIT OF MEASURE	С	Indicates the unit of measure used to quantify the chemical. Dioxin and dioxin-like compounds are measured in grams, while all other TRI chemicals are measured in pounds. Values: {Pounds, Grams}  Source: TRI_CHEM_INFO.UNIT_OF_MEASURE  Reference: NONE
11	HAZARDOUS AIR POLLUTANT - HAPS	С	Flag indicating whether the chemical is listed as a hazardous air pollutant under the Clean Air Act (CAA).  Yes = CAAC  No =non-CAAC  See Appendix B: Chemical Classifications — CAAC for a list of TRI chemicals that are designated as hazardous air pollutants under the CAA.  Source: TRI_CHEM_INFO.CAAC_IND
12	CARCINOGEN	С	Flag indicating whether the chemical is classified as a carcinogen by the Occupational Safety and Health Administration (OSHA).  Yes = CARC; No = non-CARC  See Appendix B: Chemical Classifications – Carcinogens for a list of TRI chemicals classified as OSHA carcinogens.  Source: TRI_CHEM_INFO.CARC_IND
13	PFAS_IND	С	Flag indicating whether the chemical is a per- and polyfluoroalkyl substance (PFAS).  Yes = PFAS; No = Not a PFAS.  See Appendix B: Chemical Classifications — PFAS for a list of PFAS on the TRI chemical list.  Source: TRI_CHEM_INFO.PFAS_IND
14	METAL_IND	С	Flag indicating whether the chemical is a metal with TRI reporting restrictions.  Yes = Metal with reporting restrictions  No = TRI chemical without reporting restrictions  See Appendix B: Chemical Classifications – Metals for a list of metals on the TRI chemical list.  Source: TRI_CHEM_INFO.Metal_Ind
15	REVISION CODE 1	С	If the facility revises its original TRI reporting form for a chemical, the facility indicates the reason using revision codes. This is an 'RR' followed by a single digit. This data element was collected beginning in RY 2007.  Values:  RR 1 = New Monitoring Data RR2 = New Emission Factors RR3 = New Chemical Concentration Data RR4 = Recalculation(s) RR5 = Other Reasons(s)  Source: TRI_REPORTING_FORM.Revision_Code

16	REVISION CODE 2	С	If the facility revises its original TRI reporting form for a chemical, the facility indicates the reason using revision codes. This is an 'RR' followed by a single digit. This data element was collected beginning in RY 2007.  Values:  RR 1 = New Monitoring Data RR2 = New Emission Factors RR3 = New Chemical Concentration Data RR4 = Recalculation(s) RR5 = Other Reasons(s)  Source: TRI_REPORTING_FORM.Revision_Code_
17	DIOXIN DISTRIBUTION 1	N	Indicates the percentage of 1,2,3,4,6,7,8 Heptachlorodibenzofuran (CAS # 67562-39-4) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_1 Reference: Part II, Section 1.4
18	DIOXIN DISTRIBUTION 2	N	Indicates the percentage of 1,2,3,4,7,8,9 Heptachlorodibenzofuran (CAS # 55673-89-7) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_2 Reference: Part II, Section 1.4
19	DIOXIN DISTRIBUTION 3	N	Indicates the percentage of 1,2,3,4,7,8 Hexachlorodibenzofuran (CAS # 70648-26-9) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_3 Reference: Part II, Section 1.4
20	DIOXIN DISTRIBUTION 4	N	Indicates the percentage of 1,2,3,6,7,8 Hexachlorodibenzofuran (CAS # 57117-44-9) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_4 Reference: Part II, Section 1.4

21	DIOXIN DISTRIBUTION 5	N	Indicates the percentage of 1,2,3,7,8,9 Hexachlorodibenzofuran (CAS # 72918-21-9) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_5 Reference: Part II, Section 1.4
22	DIOXIN DISTRIBUTION 6	N	Indicates the percentage of 2,3,4,6,7,8 Hexachlorodibenzofuran (CAS # 60851-34-5) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_6 Reference: Part II, Section 1.4
23	DIOXIN DISTRIBUTION 7	N	Indicates the percentage of 1,2,3,4,7,8  Hexachlorodibenzo-p-dioxin (CAS # 39227-28-6) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source:  TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_7  Reference: Part II, Section 1.4
24	DIOXIN DISTRIBUTION 8	N	Indicates the percentage of 1,2,3,6,7,8 Hexachlorodibenzo- p-dioxin (CAS # 5765385-7) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0. and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_8 Reference: Part II, Section 1.4
25	DIOXIN DISTRIBUTION 9	N	Indicates the percentage of 1,2,3,7,8,9 Hexachlorodibenzo-p-dioxin (CAS # 19408-74-3) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_9 Reference: Part II, Section 1.4

26	DIOXIN DISTRIBUTION 10	N	Indicates the percentage of 1,2,3,4,6,7,8 Heptachlorodibenzo-p-dioxin (CAS # 35822-46-9) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_10 Reference: Part II, Section 1.4
27	DIOXIN DISTRIBUTION 11	N	Indicates the percentage of 1,2,3,4,6,7,8,9 Octachlorodibenzofuran (CAS # 39001-02-0) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_11 Reference: Part II, Section 1.4
28	DIOXIN DISTRIBUTION 12	N	Indicates the percentage of 1,2,3,4,6,7,8,9 Octachlorodibenzo-p-dioxin (CAS # 03268-87-9) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_12  Reference: Part II, Section 1.4
29	DIOXIN DISTRIBUTION 13	N	Indicates the percentage of 1,2,3,7,8 Pentachlorodibenzofuran (CAS # 57117-41-6) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_13 Reference: Part II, Section 1.4
30	DIOXIN DISTRIBUTION 14	N	Indicates the percentage of 2,3,4,7,8 Pentachlorodibenzofuran (CAS # 57117-31-4) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_14 Reference: Part II, Section 1.4

31	DIOXIN DISTRIBUTION 15	N	
			Indicates the percentage of 1,2,3,7,8 Pentachlorodibenzop-dioxin (CAS # 40321-76-4) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details. <i>Note: This data element was collected from RY 2000 through 2007. Source:</i> TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_15  Reference: Part II, Section 1.4
32	DIOXIN DISTRIBUTION 16	N	Indicates the percentage of 2,3,7,8 Tetrachlorodibenzofuran (CAS # 51207-31-9) in the reported dioxin or dioxin-like compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details.  Note: This data element was collected from RY 2000 through 2007.  Source: TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_16 Reference: Part II, Section 1.4
33	DIOXIN DISTRIBUTION 17	N	Indicates the percentage of 2,3,78 Tetrachlorodibenzo-pdioxin (CAS # 01746-01-6) in the reported dioxin or dioxinlike compound. Values are either 0 or a number between 0 and 100 (inclusive). See Appendix C for details. Note: This data element was collected from RY 2000 through 2007.  Source:  TRI_REPORTING_FORM.DIOXIN_DISTRIBUTION_17  Reference: Part II, Section 1.4
34	REPORTING YEAR		The calendar year in which the reported activities occurred.  Source: TRI_REPORTING_FORM.REPORTING_YEAR Reference: Part I, Section 1
35	TRADE SECRET INDICATOR	С	Flag indicating whether the reporting facility claims the identity of the chemical or chemical category as a trade secret.  Yes = Checked (Trade Secret)  No = Not checked  Note: Only sanitized trade secret submissions are stored in the TRI database.  Source: TRI_REPORTING_FORM.TRADE_SECRET_IND  Reference: Part I, Section 2.1
36	FACILITY NAME	С	Name of the reporting facility.  Source: TRI_FACILITY.FACILITY_NAME  Reference: Part I, Section 4.1
37	FACILITY STREET	С	Street address of the reporting facility.  Source: TRI_FACILITY.STREET_ADDRESS  Reference: Part I, Section 4.1
38	FACILITY CITY	С	City in which the reporting facility is located.  Source: TRI_FACILITY.CITY_NAME  Reference: Part I, Section 4.1

39	FACILITY COUNTY	С	County in which the reporting facility is located.  Source: TRI_FACILITY.COUNTY_NAME  Reference: Part I, Section 4.1
40	FACILITY STATE	С	Two-letter state code of the reporting facility.  Source: TRI_FACILITY.STATE_ABBR  Reference: Part I, Section 4.1
41	FACILITY ZIP CODE	С	ZIP code of the reporting facility.  Source: TRI_FACILITY.ZIP_CODE  Reference: Part I, Section 4.1
42	BIA CODE	С	Three-letter Bureau of Indian Affairs (BIA) code indicating the tribal land on which the facility is located.  Source: FACILITY.BIA_TRIBAL_CODE
43	TRIBE NAME	С	Name of the tribe on whose land the reporting facility is located.  Source: TRI_TRIBE_DESC.TRIBE
44	ENTIRE FACILITY IND	С	Flag indicating whether the information covers an entire facility or part of a facility.  Yes = entire No = partial  Source: TRI_REPORTING_FORM.ENTIRE_FAC  Reference: Part I, Section 4.2a
45	PARTIAL FACILITY IND	С	Flag indicating whether the information covers part of a facility or an entire facility.  Yes = partial  No = entire  Source: TRI_REPORTING_FORM.PARTIAL_FAC  Reference: Part I, Section 4.2b
46	FEDERAL FACILITY IND	С	Flag indicating whether the facility is federally owned and operated. Yes = federal No = non-federal Source: TRI_REPORTING_FORM.FEDERAL_ FAC_IND Reference: Part I Section 4.2c
47	GOCO FACILITY IND	С	Flag indicating whether a facility is Government Owned, Contractor-Operated. Yes = GOCO No = non-GOCO Source: TRI_REPORTING_FORM.GOCO_ FLAG Reference: Part I Section 4.2d
48	ASSIGNED FED. FACILITY FLAG	С	Flag indicating whether the facility is federally owned. Yes = federal No = non-federal Source: TRI_FACILITY.ASGN_FEDERAL Reference: Assigned by the TRI Program.

49	ASSIGNED PARTIAL FACILITY FLAG	С	Flag indicating if the facility is a multi-establishment facility that reports by part. Multi-establishment facilities may have more than one submission for the same chemical in one reporting year.  Yes = partial No = entire  Source: TRI_FACILITY. ASGN_PARTIAL_IND  Reference: Assigned by the TRI Program.
50	PUBLIC CONTACT NAME	С	Name of the designated individual whom the public may contact for clarification of the facility's reported data.  Source: TRI_REPORTING_FORM.PUBLIC_ CONTACT_PERSON Reference: Part I, Section 4.4
51	PUBLIC CONTACT PHONE	С	Area code and telephone number of the public contact.  Source:  TRI_REPORTING_FORM.PUBLIC_ CONTACT_PHONE  Reference: Part I, Section 4.4
52	PUBLIC CONTACT PHONE EXT	С	Phone extension of the public contact.  Source: TRI_REPORTING_FORM.PUBLIC_PHONE_EXT  Reference: Part I, Section 4.4
53	PUBLIC CONTACT EMAIL	С	Email address of the designated individual whom the public may contact for clarification of the facility's reported data is needed.  Source:  TRI_REPORTING_FORM.PUBLIC_CONTACT_PERSON _EMAIL
54	PRIMARY SIC CODE	С	Primary 4-digit Standard Industrial Classification (SIC) code.  Note: SIC codes were reported by facilities from RY 1987 through 2005.  Source: TRI_SUBMISSION_SIC.SIC_CODE Where: primary_ind = '1' Reference: Part I, Section 4.5a
55	SIC CODE 2	С	Second 4-digit Standard Industrial Classification (SIC) code entered by facility.  Note: SIC codes were reported by facilities from RY 1987 through 2005.  Source: TRI_SUBMISSION_SIC.SIC_CODE  Where: sic_sequence_num = '2'  Reference: Part I, Section 4.5b
56	SIC CODE 3	С	Third 4-digit Standard Industrial Classification (SIC) code entered by facility.  Note: SIC codes were reported by facilities from RY 1987 through 2005.  Source: TRI_SUBMISSION_SIC.SIC_CODE  Where: sic_sequence_num = >3'  Reference: Part I, Section 4.5c

57	SIC CODE 4	С	Fourth 4-digit Standard Industrial Classification (SIC) code entered by facility.  Note: SIC codes were reported by facilities from RY 1987 through 2005.  Source: TRI_SUBMISSION_SIC.SIC_CODE  Where: sic_sequence_num = >4'  Reference: Part I, Section 4.5d
58	SIC CODE 5	С	Fifth 4-digit Standard Industrial Classification (SIC) code entered by facility.  Note: SIC codes were reported by facilities from RY 1987 through 2005.  Source: TRI_SUBMISSION_SIC. SIC_CODE  Where: sic_sequence_num = >5'  Reference: Part I, Section 4.5e
59	SIC CODE 6	С	Sixth 4-digit Standard Industrial Classification (SIC) code entered by facility.  Note: SIC codes were reported by facilities from RY 1987 through 2005.  Source: TRI_SUBMISSION_SIC. SIC_CODE  Where: sic_sequence_num = >6'  Reference: Part I, Section 4.5f
60	NAICS ORIGIN	С	Indicates whether North American Industry Classification System (NAICS) codes were reported or assigned. R = Reported A = Assigned Source: TRI_SUBMISSION_NAICS.SOURCE Reference: TRI system-generated
61	PRIMARY NAICS CODE	C	Primary 6-digit North American Standard Industry Classification System (NAICS) code. This represents the main business activity at the facility. See Appendix A: "NAICS Codes Assignments" for details. Note: From RY 2006 to the present, NAICS codes reported by facilities from RY 2006 to present. Prior to RY 2006, NAICS codes were assigned by EPA. Source: TRI_SUBMISSION_NAICS.NAICS_CODE Where: primary_ind => 1 Reference: Part I, Section 4.5a
62	NAICS CODE 2	С	Second 6-digit North American Standard Industry Classification System (NAICS) code entered by facility. Note: NAICS codes reported by facilities from RY 2006 to present. Prior to RY 2006, NAICS codes were assigned by EPA. Source: TRI_SUBMISSION_NAICS.NAICS_CODE Where: naics_sequence_num = 2 Reference: Part I, Section 4.5b

63	NAICS CODE 3	С	Third 6-digit North American Standard Industry Classification System (NAICS) code entered by facility. Note: NAICS codes reported by facilities from RY 2006 to present. Prior to RY 2006, NAICS codes were assigned by EPA. Source: TRI_SUBMISSION_NAICS.NAICS_CODE Where: naics_sequence_num = 3 Reference: Part I, Section 4.5b
64	NAICS CODE 4	С	Fourth 6-digit North American Standard Industry Classification System (NAICS) code entered by facility. Note: NAICS codes reported by facilities from RY 2006 to present. Prior to RY 2006, NAICS codes were assigned by EPA. Source: TRI_SUBMISSION_NAICS.NAICS_CODE Where: naics_sequence_num = 4 Reference: Part I, Section 4.5b
65	NAICS CODE 5	С	Fifth 6-digit North American Standard Industry Classification System (NAICS) code entered by facility. Note: NAICS codes reported by facilities from RY 2006 to present. Prior to RY 2006, NAICS codes were assigned by EPA. Source: TRI_SUBMISSION_NAICS.NAICS_CODE Where: naics_sequence_num = 5 Reference: Part I, Section 4.5b
66	NAICS CODE 6	C	Sixth 6-digit North American Standard Industry Classification System (NAICS) code entered by facility. Note: NAICS codes reported by facilities from RY 2006 to present. Prior to RY 2006, NAICS codes were assigned by EPA. Source: TRI_SUBMISSION_NAICS.NAICS_CODE Where: naics_sequence_num = 6 Reference: Part I, Section 4.5b
67	LATITUDE	N	The latitude value that best represents the facility according to EPA's Facility Registry System (FRS). Format: 2-digit whole number followed by a decimal point and 6 digits (+nn.nnnnnn).  Note: In RY 2005, EPA stopped collecting the latitude value and began obtaining it from FRS.  Source: EPA's Facility Registry System
68	LONGITUDE	N	The longitude value that best represents the facility according to EPA's Facility Registry System (FRS). Format: 3-digit whole number followed by 6 digits (+nnn.nnnnnn). Note: In RY 2005, EPA stopped collecting the longitude value and began obtaining it from FRS.  Source: EPA's Facility Registry System
69	D&B NR A	С	Unique identification number assigned by Dun and Bradstreet to the reporting facility. Dun & Bradstreet is a private financial tracking and accounting firm.  Source: TRI_FACILITY_DB.DB_NUM Reference: Part I, Section 4.7a

70	D&B NR B	С	Unique identification number assigned by Dun and Bradstreet to the reporting facility. Dun & Bradstreet is a private financial tracking and accounting firm.  Source: TRI_FACILITY_DB.DB_NUM Reference: Part I, Section 4.7b
71	RCRA NR A	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
72	RCRA NR B	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
73	RCRA NR C	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
74	RCRA NR D	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
75	RCRA NR E	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
76	RCRA NR F	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
77	RCRA NR G	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System

78	RCRA NR H	С	Twelve-digit alphanumeric identifier assigned by EPA per
			the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
79	RCRA NR I	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
80	RCRA NR J	С	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA).  Note: In RY 2005, TRI stopped collecting RCRA IDs and began obtaining them from EPA's Facility Registry System (FRS).  Source: EPA's Facility Registry System
81	NPDES NR A	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
82	NPDES NR B	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
83	NPDES NR C	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
84	NPDES NR D	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
85	NPDES NR E	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System

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86	NPDES NR F	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
87	NPDES NR G	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
88	NPDES NR H	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
89	NPDES NR I	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
90	NPDES NR J	С	Nine-digit alphanumeric identifier assigned to a facility by EPA's National Pollutant Discharge Elimination System (NPDES) permit program.  Note: In RY 2005, TRI stopped collecting RCRA IDs on the Reporting Form R.  Source: EPA's Facility Registry System
91	PARENT COMPANY NAME	С	Name of the corporation or other business entity that controls the reporting facility.  Source: TRI_FACILITY.PARENT_CO_NAME  Reference: Part I, Section 5.1
92	PARENT COMPANY D&B NR	С	Unique identification number assigned by Dun and Bradstreet to the parent company of the reporting facility.  Source: TRI_FACILITY.PARENT_CO_DB_NUM Reference: Part I, Section 5.2
93	STANDARDIZED PARENT COMPANY NAME	С	A data field developed by EPA that is intended to best reflect the current ultimate U.S. parent company for the facility.  Source: TRI_FACILITY.STANDARDIZED_PARENT_COMPANY Reference: Assigned by EPA

94	FOREIGN PARENT COMPANY NAME	С	The current name of the foreign corporation or other business entity that controls the reporting facility. A facility can have both a domestic (see field 13) parent company and foreign parent company. Facilities with sole ownership or controlling interest inside the U.S. will not have a foreign parent company. A value of NA = No Foreign Company Name/Not applicable.  Source: TRI_FACILITY.FOREIGN_PARENT_CO_NAME Reference: Part I, Section 5.3
95	FOREIGN PARENT COMPANY D&B NR	С	The current unique identification number assigned by Dun and Bradstreet to the foreign parent company of the reporting facility.  Source: TRI_FACILITY.FOREIGN_PARENT_CO_DB_NUM Reference: Part I, Section 5.4
96	STANDARDIZED FOREIGN PARENT COMPANY NAME	С	The current standardized Foreign Parent Company Name assigned by TRI. 'Standardized Foreign Parent Company Name' is a data field developed by EPA that is intended to best reflect the current ultimate foreign parent company for the facility. Source: TRI_FACILITY.  STANDARDIZED_FOREIGN_PARENT_CO Reference: Assigned by the TRI Program.
97	FRS FACILITY ID	С	Indicates the Facility Registry Service (FRS) ID for the TRI facility. The FRS is a centrally managed EPA database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. Using the FRS ID, data users can link data from different EPA programs together.  Source: TRI_FACILITY.EPA_REGISTRY_ID
98	OFF-SITE RCRA ID NR	С	The identification number assigned to the off-site facility that receives waste containing the reported chemical, as assigned under the Resource Conservation and Recovery Act (RCRA) and other regulations of the Superfund Act (CERCLA).  Source: TRI_OFF_SITE_TRANSFER_LOCATION.RCRA_NUM Reference: Part II, Section 6.2
99	OFF-SITE TRANSFER SEQUENCE NUMBER	С	This field contains a sequence number assigned to the off-site location.  Source: TRI_OFF_SITE_TRANSFER_LOCATION.  TRANSFER_LOC_NUM  Reference: TRI system generated
100	OFF-SITE NAME	С	The name of the off-site facility to which the waste containing the reported chemical was transferred.  Source: TRI_OFF_SITE_TRANSFER_LOCATION.OFF_SITE_NAME  Reference: Part II, Section 6.2
101	OFF-SITE STREET ADDRESS	С	The address of the off-site facility to which the waste containing the reported chemical was transferred.  Source: TRI_OFF_SITE_TRANSFER_LOCATION.OFF_SITE_STREET  Reference: Part II, Section 6.2

102	OFF-SITE CITY	С	The city in which the off-site facility is located.  Source: TRI_OFF_SITE_TRANSFER_LOCATION.CITY_NAME  Reference: Part II, Section 6.2
103	OFF-SITE COUNTY	С	The county in which the off-site facility is located.  Source:  TRI_OFF_SITE_TRANSFER_LOCATION.COUNTY_NAME  Reference: Part II, Section 6.2
104	OFF-SITE STATE	С	The two-letter abbreviation of the state in which the offsite facility that received the waste is located.  Source: TRI_OFF_SITE_TRANSFER_LOCATION.STATE_ABBR  Reference: Part II, Section 6.2
105	OFF-SITE PROVINCE	С	Province of the off-site facility's mailing address.  Source: TRI_OFF_SITE_TRANSFER_LOCATION.PROVINCE  Reference: Part I, Section 4.1
106	OFF-SITE ZIP CODE	С	The ZIP code used in the address of the off-site facility.  Source:  TRI_OFF_SITE_TRANSFER_LOCATION.ZIP_CODE  Reference: Part II, Section 6.2
107	OFF-SITE COUNTRY ID	С	If the off-site facility is not in the United States, this field contains the name of the country to which the chemical waste was transferred.  Source: TRI_OFF_SITE_TRANSFER_LOCATION.COUNTRY_CODE Reference: Part II, Section 6.2
108	OFF-SITE CONTROL	С	Flag indicating whether the off-site location to which the waste was transferred is owned or controlled by the reporting facility or its parent company.  Values: 1 = 'Yes', 0 = 'No', 2 = blank or not entered.  Source: TRI_OFF_SITE_TRANSFER_LOCATION.  CONTROLLED_LOC  Reference: Part II, Section 6.2
109	FRS ID – TRANSFER LOCATION	С	Indicates the Facility Registry Service (FRS) ID for the offsite location to which the waste containing the reported chemical was transferred. FRS is a centrally managed EPA database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. Using the FRS ID, data users can link data from different EPA programs together.  Source:
110	OFF-SITE – STORAGE ONLY	N	TRI_OFF_SITE_TRANSFER_LOCATION.EPA_REGISTRY_ID  The total quantity of the chemical reported as transferred off site for disposal using code M10: "Storage Only." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A

111	OFF-SITE – STORAGE ONLY – BASIS OF ESTIMATE	С	A code describing the principal method by which the total storage estimate (M10) was calculated. See Appendix E for a list of the codes and corresponding methods. Source:  TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
112	OFF-SITE - SOLIDIFICATION/STABILIZATION (METALS)	N	The total quantity of the chemical reported as transferred off site for disposal using code M41: "Solidification/Stabilization (Metals and Metal Compounds Category Only." Note that this only applies to metals and metal compounds. This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
113	OFF-SITE- SOLIDIFICATION/STABILIZATION (METALS) - BASIS OF ESTIMATE	С	A code describing the principal method by which the total solidification/stabilization (M41) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
114	OFF-SITE - WASTEWATER TRTMT (METALS)	N	The total quantity of the chemical reported as transferred off site for disposal using the code M62: "Wastewater Treatment (Excluding POTWs) – Metals and Metal Compounds Only." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
115	OFF-SITE - WASTEWATER TRTMT (METALS) – BASIS OF ESTIMATE	С	A code describing the principal method by which the total solidification/stabilization (M62 - Metals) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B

116	OFF-SITE - SOLIDIFICATION/ STABILIZATION - METALS AND METAL COMPOUNDS ONLY	N	The total quantity of the chemical reported as transferred off site for disposal using the code M40: "Solidification/Stabilization." This total only includes quantities of chemicals that are Category 1 Metals or Vanadium (except when contained in an alloy) which can't be treated and are instead disposed of or released to the environment. See Appendix B for a list of Category 1 Metals. This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
117	OFF-SITE - SOLIDIFICATION/STABILIZATION - METALS AND METAL COMPOUNDS ONLY – BASIS OF ESTIMATE	С	A code describing the principal method by which the total solidification/stabilization (M40) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
118	OFF-SITE - WASTEWATER TRTMT (EXCLUDING POTWs) — METALS AND METAL COMPOUNDS ONLY	N	The total quantity of the chemical reported as transferred off site for disposal using the code M61: "Wastewater Treatment (Excluding POTWs)." This total only includes quantities of chemical that are Category 1 Metals or Vanadium (except when contained in an alloy), which can't be treated and are instead disposed of or released to the environment. See Appendix B for a list of Category 1 Metals. This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A1
119	OFF-SITE - WASTEWATER TRTMT (EXCLUDING POTWs) – METAL AND METAL COMPOUNDS ONLY – BASIS OF ESTIMATE	С	A code describing the principal method by which the total wastewater treatment (M61 – Metals) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
120	OFF-SITE - UGRND INJ	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M71: Underground Injection." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Note: Effective for RY 2003, code M71 was deleted and replaced with codes M81 (Underground Injection to Class I Wells) and M82 (Underground Injection to Class II-V Wells). Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A

121	OFF-SITE — UGRND INJ — BASIS OF ESTIMATE	С	A code describing the principal method by which the total underground injection (M71) estimate was calculated. See Appendix E for a list of the codes and corresponding methods. Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B Note: Effective for RY 2003, code M71 was deleted and replaced with codes M81 (Underground Injection to Class I Wells) and M82 (Underground Injection to Class II-V Wells).
122	OFF-SITE - UGRND INJ (CLASS I WELLS)	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M81: Underground Injection (Class I Wells)." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. This code was added in RY 2003. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
123	OFF-SITE UGRND INJ (CLASS I WELLS)  – BASIS OF ESTIMATE	С	A code describing the principal method by which the total underground injection into Class I wells <b>(M81)</b> estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source:  TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE  Reference: Part II, Section 6.2B
124	OFF-SITE - UGRND INJ (CLASS II- V WELLS)	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M82: Underground Injection (Class II-V Wells)." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and mid points. This code was added in RY 2003.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
125	OFF-SITE - UGRND INJ (CLASS II- V WELLS) — BASIS OF ESTIMATE	С	A code describing the principal method by which the total underground injection into Class II-V wells (M82) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B

126	OFF-SITE - LANDFILLS/DISPOSAL SURFACE IMPOUNDMENT	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M72: Landfills/Disposal Surface Impoundment." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Note: Effective for RY 2002, code M72 was deleted and replaced with code M63 (Surface Impoundment), M64 (Other Landfills), and M65 (RCRA Subtitle C Landfills).  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
127	OFF-SITE - LANDFILLS/DISPOSAL SURFACE IMPOUNDMENT — BASIS OF ESTIMATE	С	A code describing the principal method by which the total landfill or surface impoundment disposal (M72) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Note: Effective for RY 2002, code M72 was deleted and replaced with code M63 (Surface Impoundment), M64 (Other Landfills), and M65 (RCRA Subtitle C Landfills). Source:  TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
128	OFF-SITE - SURFACE IMPOUNDMENT	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M63: Surface Impoundment." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Note: Effective for RY 2003, code M63 was deleted and replaced with code M66 (RCRA Subtitle C Surface Impoundment) and code M67 (Other Surface Impoundments).  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
129	OFF-SITE - SURFACE IMPOUNDMENT- BASIS OF ESTIMATE	С	A code describing the principal method by which the total surface impoundment (M63) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Note: Effective for RY 2003, code M63 was deleted and replaced with code M66 (RCRA Subtitle C Surface Impoundment) and code M67 (Other Surface Impoundments).  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B

130	OFF-SITE - RCRA SUBTITLE C SURFACE IMPOUNDMENT	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M66: RCRA Subtitle C Surface Impoundment." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. This code was added in RY 2003. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
131	OFF-SITE - RCRA SUBTITLE C SURFACE IMPOUNDMENT — BASIS OF ESTIMATE	С	A code describing the principal method by which the total RCRA Subtitle C surface impoundment (M66) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
132	OFF-SITE - OTHER SURFACE IMPOUNDMENT	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M67: Other Surface Impoundment." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. This code was added in RY 2003.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
133	OFF-SITE – OTHER SURFACE IMPOUNDMENT – BASIS OF ESTIMATE	С	A code describing the principal method by which the total other surface impoundment (M67) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
134	OFF-SITE - OTHER LANDFILLS	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M64: Other Landfills." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. This code was added in RY 2002.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
135	OFF-SITE - OTHER LANDFILLS — BASIS OF ESTIMATE	С	A code indicating the principal method by which the total other landfills (M64) estimate was calculated. See Appendix E for a list of the codes and corresponding methods. Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B

136	OFF-SITE - RCRA SUBTITLE C LANDFILLS	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M65: RCRA Subtitle C Landfills." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. This code was added in RY 2002.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
137	OFF-SITE – RCRA SUBTITLE C LANDFILLS – BASIS OF ESTIMATE	С	A code indicating the principal method by which the transfers to RCRA subtitle C landfills (M65) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
138	OFF-SITE - LAND TREATMENT	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M73: Land Treatment." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
139	OFF-SITE - LAND TREATMENT – BASIS OF ESTIMATE	С	A code describing the principal method by which the total land treatment (M73) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
140	OFF-SITE - OTHER LAND DISPOSAL	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M79: Other Land Disposal This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
141	OFF-SITE - OTHER LAND DISPOSAL - BASIS OF ESTIMATE	С	A code describing the principal method by which the total other land disposal (M79) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B

142	OFF-SITE - OTHER OFF-SITE MGMT	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M90: Other Off-Site Management." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
143	OFF-SITE - OTHER OFF-SITE MGMT - BASIS OF ESTIMATE	N	A code indicating the principal method by which the total other off-site management (M90) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
144	OFF-SITE - TRANSFER TO WASTE BROKER FOR DISPOSAL	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M94: Transfer to Waste Broker for Disposal." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
145	OFF-SITE - TRANSFER TO WASTE BROKER FOR DISPOSAL – BASIS OF ESTIMATE	С	A code describing the principal method by which the total waste broker disposal (M94) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
146	OFF-SITE — DISPOSAL - UNKNOWN	N	The total quantity of the chemical reported as transferred off site for disposal using the code "M99: Disposal - Unknown." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
147	OFF-SITE – DISPOSAL -UNKNOWN - BASIS OF ESTIMATE	С	A code indicating the principal method by which the total off-site unknown disposal (M99) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B

148	TOTAL AMOUNT TRANSFERRED OFF- SITE FOR DISPOSAL	N	Total, in pounds, of the chemical reported as transferred off site for disposal. This the sum of rows #107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, and 143  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: System generated
149	OFF-SITE - SOLVENTS/ORGANICS RECOVERY	N	The total quantity of the chemical reported as transferred off site for recycling using the code "M20: Solvents/Organics Recovery." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
150	OFF-SITE - SOLVENTS/ORGANICS RECOVERY — BASIS OF ESTIMATE	С	A code describing the principal method by which the total solvents/organics recovery (M20) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
151	OFF-SITE – METALS RECOVERY	N	The total quantity of the chemical reported as transferred off site for recycling using the code "M24: Metals Recovery." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
152	OFF-SITE – METALS RECOVERY – BASIS OF ESTIMATE	С	A code describing the principal method by which the total metals recovery (M24) estimate was calculated.  See Appendix E for a list of the codes and corresponding methods.  Source:  TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE  Reference: Part II, Section 6.2B
153	OFF-SITE – OTHER REUSE OR RECOVERY	N	The total quantity of the chemical reported as transferred off site for recycling using the code "M26: Other Reuse or Recovery." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
154	OFF-SITE – OTHER REUSE OR RECOVERY – BASIS OF ESTIMATE	С	A code describing the principal method by which the total other reuse or recovery (M26) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B

155	OFF-SITE – ACID REGENERATION	N	The total quantity of the chemical reported as transferred off site for recycling using the code "M28: Acid Regeneration." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
156	OFF-SITE — ACID REGENERATION — BASIS OF ESTIMATE	С	A code indicating the principal method by which the total acid regeneration (M28) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
157	OFF-SITE — TRANSFER TO WASTE BROKER FOR RECYCLING	N	The total quantity of the chemical reported as transferred off site for recycling using the code "M93: Transfer to Waste Broker - Recycling This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
158	OFF-SITE – TRANSFER TO WASTE BROKER FOR RECYCLING – BASIS OF ESTIMATE	С	A code describing the principal method by which the total transfer to waste broker for recycling (M93) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
159	TOTAL AMOUNT TRANSFERRED OFF SITE FOR RECYCLING	N	Total, in pounds, of the chemical reported as transferred off-site for recycling. Sum of rows #146, 148, 150, 152 + 154.  Source: TRI_FORM_TOTALS.TOTAL_RECYCLING_TRANSFER Reference: System generated
160	OFF-SITE – ENERGY RECOVERY	N	The total quantity of the chemical reported as transferred off site for energy recovery using the code "M56: Energy Recovery This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
161	OFF-SITE — ENERGY RECOVERY — BASIS OF ESTIMATE	С	A code describing the principal method by which the total transfer to waste broker for recycling (M56) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B

162	OFF-SITE — TRANSFER TO WASTE BROKER FOR ENERGY RECOVERY	N	The total quantity of the chemical reported as transferred off site for energy recovery using the code "M92: Transfer to Waste Broker – Energy Recovery." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
163	OFF-SITE – TRANSFER TO WASTE BROKER FOR ENERGY RECOVERY – BASIS OF ESTIMATE	С	A code describing the principal method by which the total transfer to waste broker for energy recovery (M92) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
164	TOTAL AMOUNT TRANSFERRED OFF- SITE FOR ENERGY RECOVERY	N	Total, in pounds, of the chemical transferred off site for energy recovery. Sum of rows #157 + #159.  Source: TRI_FORM_TOTALS.TOTAL_RECOVERY_TRANSFER  Reference: None
165	OFF-SITE - SOLIDIFICATION/ STABILIZATION — TREATMENT — NON- METALS	N	The total quantity of the chemical reported as transferred off site for treatment using the code M40: "Solidification/Stabilization." This total only includes quantities for chemicals that are NOT Category 1 Metals or Vanadium (except when contained in an alloy) which can be treated. See Appendix B for a list of Category 1 Metals. This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints. Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A
166	OFF-SITE - SOLIDIFICATION/STABILIZATION – TREATMENT – NON-METALS – BASIS OF ESTIMATE	С	A code describing the principal method by which the total solidification/stabilization (M40) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
167	OFF-SITE – INCINERATION/THERMAL TREATMENT	N	The total quantity of the chemical reported as transferred off site for treatment using the code "M50: Incineration/Thermal Treatment." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A

168	OFF-SITE – INCINERATION/THERMAL TREATMENT – BASIS OF ESTIMATE	С	A code indicating the principal method by which the total incineration/thermal treatment estimate ( <b>M50</b> ) was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
169	OFF-SITE – INCINERATION/INSIGNIFICANT FUEL VALUE	N	The total quantity of the chemical reported as transferred off site for treatment using the code "M54: Incineration/Insignificant Fuel Value." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
170	OFF-SITE – INCINERATION/INSIGNIFICANT FUEL VALUE– BASIS OF ESTIMATE	С	A code describing the principal method by which the total incineration/insignificant fuel value (M54) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
171	OFF-SITE - WASTEWATER TRTMT (EXCLUDING POTWs) — NON- METALS	N	The total quantity of the chemical reported as transferred off site for treatment using the code M61: Wastewater Treatment (Excluding POTWs) for non- Metals only. This total only includes quantities for chemicals that are NOT Category 1 Metals or Vanadium (except when contained in an alloy) which can be treated. See Appendix B for a list of Category 1 Metals. This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
172	OFF-SITE - WASTEWATER TRTMT (EXCLUDING POTWs) – NON- METALS– BASIS OF ESTIMATE	С	A code indicating the principal method by which the total Wastewater Treatment (Excluding POTWs) for non-Metals (M61) estimate was calculated. See Appendix E for a list of the codes and corresponding methods. Source:  TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
173	OFF-SITE – OTHER WASTE TREATMENT	N	The total quantity of the chemical reported as transferred off site for treatment using the code "M69: Other Waste Treatment." This total includes the sum of all numeric estimates and range codes reported under this code. For range codes, the mid-points of the ranges are used in the calculation. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER Reference: Part II, Section 6.2A

174	OFF-SITE – OTHER WASTE TREATMENT – TOTAL – BASIS OF ESTIMATE	С	A code indicating the principal method by which the total other waste treatment (M69) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
175	OFF-SITE — TRANSFER TO WASTE BROKER FOR WASTE TREATMENT	N	The total quantity of the chemical reported as transferred off site to a waste broker for waste treatment using the code "M95: Transfer to Broker - Waste Treatment." This total includes the sum of all numeric estimates and range codes reported under this code. Midpoints of ranges are used in calculations. See Appendix D for codes, ranges, and midpoints.  Source: TRI_TRANSFER_QTY.TOTAL_TRANSFER  Reference: Part II, Section 6.2A
176	OFF-SITE – TRANSFER TO WASTE BROKER FOR WASTE TREATMENT – TOTAL – BASIS OF ESTIMATE	С	A code indicating the principal method by which the total "transfer to waste broker for waste treatment" (M95) estimate was calculated. See Appendix E for a list of the codes and corresponding methods.  Source: TRI_TRANSFER_QTY.TRANSFER_BASIS_EST_CODE Reference: Part II, Section 6.2B
177	TOTAL AMOUNT TRANSFERRED OFF- SITE FOR TREATMENT	N	Total, in pounds, of the chemical transferred off site for treatment. Sum of rows #162, 164, 166, 168, 170, 172. Source:  TRI_FORM_TOTALS.TOTAL_TREATMENT_TRANSFER Reference: None

### **APPENDIX A: NAICS Code Assignments**

Until RY 2006, the TRI Program used Standard Industrial Codes (SIC) to identify each reporting facility's industry sector. In RY 2006, the TRI Program began using North American Industry Classification System (NAICS) codes.

To allow for analysis of data across years, the TRI Program assigned NAICS codes to each TRI submission from 1987 through 2005. The six methods used to assign NAICS codes and the number and percentages of assignments per method are shown in the table below. The "Order of Precedence" column indicates the order in which the methods were used to make an assignment.

Method	Order of Precedence	Number of NAICS Codes Assigned via Method	Percentage Per Method
		(in Thousands)	
Reported Data Used	1	821K	50%
SIC to NAICS Crosswalk	2	478K	29%
EPA Facility Registry System (FRS)	3	190К	11%
Commercial Sources	4	113K	7%
Statistics	5	51K	3%
Other Methods	6	2K	Less than 1 %

- Reported Data Used: This method was used to assign 50% of all NAICS codes. In this method, the primary NAICS code reported by each facility in RY 2006 was used to make an assignment to chemical submissions (Form Rs and Form As) for years 1987 to 2005. This method was only used under the following conditions:
  - 1. The RY 2006 chemical submitted had only one primary NAICS code reported
  - 2. The prior year submission(s) for the same chemical had only one primary SIC code consistently reported
  - 3. The SIC to NAICS Crosswalk (obtained for the U.S. Census Bureau) showed a one-to-one match between the reported SIC and NAICS codes
- This SIC to NAICS Crosswalk: In this method, the TRI Program used a crosswalk or lookup table that
  translated SIC codes into NAICS codes to assign a primary NAICS code to a pre-2006 TRI chemical submission.
  The primary SIC code reported on the TRI form was used to lookup the corresponding NAICS code. Not all
  SIC codes translated into only one NAICS code, so it was not possible to use this method to assign a NAICS
  code to each chemical submission. However, it was used to make 29% of all the assignments.
- EPA Facility Registry System (FRS): In this method, the TRI Program used NAICS codes found in EPA's Facility
  Registry System (FRS) to assign a primary NAICS code to each TRI chemical submission. This method was only
  used if FRS listed only one primary NAICS code for a facility. 11% of all assignments were made using this
  method.
- Commercial Sources: This method involved using various commercial services to verify NAICS code assignments. 7% of all assignments were made using this method.
- Statistics: For 3% of NAICS code assignments, the TRI Program used various statistical methods based on past and present data.

 Other Methods: Manual research (e.g., using Internet searches and other government agencies' data) and personally contacting facilities helped the TRI Program assign NAICS codes to approximately 2,000 TRI submissions.

## **Appendix B: Chemical Classifications**

#### TRI Chemicals Classified as Hazardous Air Pollutants Under the Clean Air Act:

• https://www.epa.gov/epcra/consolidated-list-lists-under-epcracerclacaa-ss112r-april-2022-version

#### TRI Chemicals Classified as OSHA Carcinogens:

www.epa.gov/sites/default/files/2019-11/documents/osha\_carcinogen\_basis\_november\_2019\_update.pdf

#### TRI Chemicals Classified as Metals:

https://ordspub.epa.gov/ords/guideme ext/f?p=guideme:chemical-list-advanced-search:0

#### TRI Chemicals Classified as per- and polyfluoroalkyl substances (PFAS):

www.epa.gov/toxics-release-inventory-tri-program/list-pfas-added-tri-ndaa

#### TRI Chemicals Classified as Persistent Bioaccumulative Toxic Chemicals (PBTs):

www.epa.gov/toxics-release-inventory-tri-program/persistent-bioaccumulative-toxic-pbt-chemicals-covered-tri

## **APPENDIX C: Dioxin and Dioxin-like Compound Data**

In reporting year (RY) 2000, the TRI Program began collecting congener data for dioxin and dioxin-like compounds to better convey the relative toxicity of these chemicals being released or managed at facilities. From RY 2000 through 2007, Part II, Section 1.4 of the Reporting Form R asked facilities to specify the percentages of the 17 individual chemicals that make up a dioxin or dioxin-like compound for all release types (air, water, and land). The 17 fields labeled "dioxin distribution" in each of the Basic Plus files should contain those reported percentages.

In RY 2008, the TRI Program improved collection of dioxin and dioxin-like compounds data by introducing the Form R Schedule One. This supplemental form allows facilities to report quantities of each of the 17 dioxin congeners.

Although useful, total releases are not the best measure of the actual toxicity of dioxin and dioxin-like compounds because each compound has its own level of toxicity. Both the original reporting of dioxin and dioxin-like congeners and the Form R Schedule One reporting allowed the TRI Program to calculate Toxic Equivalency (TEQ) values for each facility's dioxin releases. TEQs are a weighted quantity measure based on the toxicity of each member of the dioxin and dioxin-like compounds category relative to the most toxic members of the category. The values allow for comparison of the toxicity of different combinations of dioxins and dioxin-like compounds and help explain the relative toxicity of the TRI chemical release information.

For more information about dioxin and dioxin-like chemical reporting and the calculation of TEQs, see <a href="https://www.epa.gov/toxics-release-inventory-tri-program/dioxin-and-dioxin-compounds-toxic-equivalency-information">https://www.epa.gov/toxics-release-inventory-tri-program/dioxin-and-dioxin-compounds-toxic-equivalency-information</a>. To download dioxin data from the Form R Schedule One, visit <a href="https://www.epa.gov/toxics-release-inventory-tri-program/tri-dioxin-and-dioxin-compounds-and-teq-data-files-calendar">https://www.epa.gov/toxics-release-inventory-tri-program/tri-dioxin-and-dioxin-compounds-and-teq-data-files-calendar</a>.

# Appendix D: Codes, Ranges, and Midpoints

Code	Reporting Range (in pounds)	Midpoint
Α	1-10	5
В	11-499	250
С	500-999	750

# **Appendix E: Basis of Estimate Codes**

Basis of Estimate Code	Definition	Notes
С	Mass balance calculations	
E	Published emission factors	This code was retired in RY 2007. It may still appear on some paper submissions submitted after RY 2007.
E1	Published emission factors	This code was added in RY 2007 to replace code 'E' and provide more detail on basis of estimates.
E2	Onsite specific emission factors	This code was added in RY 2007 to replace code 'E' and provide more detail on basis of estimates.
M	Monitoring data	This code was retired in RY 2007. It may still appear on some paper submissions submitted after RY 2007.
M1	Continuous monitoring data	This code was added in RY 2007 to replace code 'M' and provide more detail on basis of estimates.
M2	Periodic/random monitoring data	This code was added in RY 2007 to replace code 'M' and provide more detail on basis of estimates.
NA	Not applicable	
0	Other	
Х	Invalid Data	This code represents when Basis of Estimate codes not within the defined set of legal codes were reported.

Z	Multiple Basis of Estimate Codes reported. A facility can report several transfer amounts or range codes under the same POTW transfer code (P Code) to indicate all the transfers made to the POTW. The quantity listed for any P Code is the sum of those amounts. For each of the amounts, the facility can list a different BOE codes. If there is more than one BOE code listed for all transfers under a P Code, then 'Z' is displayed indicating	
	multiple BOE Codes reported.	