TOXICS RELEASE INVENTORY (TRI)

DIOXIN AND DIOXIN-LIKE COMPOUNDS

DATA FILES DOCUMENTATION

Updated for RY 2018

January 2020

Table of Contents

Introduction

On May 10, 2007, the Toxics Release Inventory (TRI) Program issued a final rule expanding reporting requirements for the dioxin and dioxin-like compounds category. There are 17 distinct members included in this chemical category. The final rule requires that, in addition to the total grams released for the entire category, facilities must report the quantity for each individual member of the category on the TRI Form R Schedule 1. EPA will then use the individual mass quantity data to calculate TEQ values to be published along with the mass data.

Although useful, the total quantity of releases is not the best measure of the actual toxicity of dioxin and dioxin- like compounds because each compound varies in toxicity. To account for how dioxin and dioxin-like compounds vary in toxicity, EPA uses Toxic Equivalency Factors (TEFs) that have been established and agreed upon internationally. TEFs reflect how toxic each dioxin and dioxin-like compound is compared to the most toxic members of the category: 2,3,7,8-tetrachlorodibenzo-p-dioxin and 1,2,3,7,8-pentachlorodibenzo-p-dioxin. Multiplying the gram quantities of each member of the category by its TEF produces a grams TEQ value that reflects the relative toxicity of the members of the category.

Expressing data for dioxin and dioxin-like compounds as TEQs allows the public to better understand the toxicity of releases and waste management at facilities that report under the TRI Program. For example, a facility releasing 3 grams of some combination of dioxin and dioxin-like compounds may or may not be of greater concern than a facility releasing 1 gram of a different combination. However, a facility releasing 3 grams TEQ of dioxins is of greater environmental concern than one releasing 1 gram TEQ to the same environmental medium (e.g., air, land, water).

Expressing dioxin releases and waste management information in grams TEQs will allow the public to make more informed environmental decisions within their communities. Using TEQs will also permit easier comparisons between TRI data and other EPA and international data.

In addition to the downloadable data files, users can find dioxin and dioxin-like compounds congener data and TEQ data in some of the TRI searches within Envirofacts (https://www.epa.gov/enviro), including the EZ Query search.

Data Files

Dioxin and dioxin-like compound TEQ and individually reported mass quantity data are found in six different files. The individual mass quantity data or congener data are taken directly from the TRI Reporting Form R Schedule 1. The TEQ data are calculated from the individual mass quantity data and associated TEFs. These data are complex; by breaking them out into six files, EPA intends to make the data more understandable and the process of calculating the TEQ values transparent and reproducible. In addition, to provide context and the ability to relate these data to other TRI data elements, some of the files contain data from parts of the TRI Reporting Form R.

Users should note that the dioxin and dioxin-like compounds data and the resulting TEQ data are available in one set of files that represent the entire country, instead of in individual state files. The national-level data easily fit within a standard spreadsheet application, where users can delete any unwanted data at their discretion.

The files being provided are:

Number	File	File Name
1	The Toxic Equivalency Factors File	TEF_2017.txt
2	The Schedule One Congener Data	Congener_2017.txt
3	The TEQ Data File	TEQ_2017.txt
4	The Water Congener Data File	Water_Congener_2017.txt
5	The Water TEQ Data File	Water_TEQ_2017.txt
6	The Transfer Detail Data File	Transfers_2017.txt

The File Descriptions section below describes the contents of each file. The Record Layouts section below lists the detailed data fields, their data type and specific definition.

File Descriptions

1. The Toxic Equivalency Factors File

File Name: TEF_2017.txt
Format: ASCII Text, Comma Delimited

Description: This file lists the 17 individual chemicals or congeners that are included in the dioxin or dioxin-like compounds category along, with the TEFs used to calculate the TEQ values. This is an ASCII tab-delimited text file. See the record layout in the "Record Layout" section below. This file contains the TEFs values as of reporting year 2010.

2. The Schedule One Congener Data File

File Name: Congener_2017.txt
Format: ASCII Text, Comma Delimited

Description: This file lists the individual mass quantity or congener data reported on the Form R Schedule 1. All quantities are reported in grams. Each row is identified by a unique TRI Facility ID, a Document Control Number and a Congener Number. The file includes data elements in the following categories:

- Facility Name, Address, Latitude & Longitude Coordinates and NAICS Code
- Chemical Identification and Classification Information
- On-site Release Quantities
- The Publicly Owned Treatment Works (POTW) Transfer Quantity
- Summed Off-site Transfer quantity totals for release/disposal and further waste management
- Summary Pollution Prevention Quantities

This file only lists an on-site water release total (Form R, Section 5.3) for each congener. The individual mass quantity amounts for specific water bodies that make up the water release total are listed in the Water Congener Data file. The off-site transfer data are summed by type of waste management (i.e. M66 - RCRA Subtitle C Surface Impoundment). The individual/detailed transfer amounts along with the off-site transfer locations are found in Basic Plus files 3A, 3B and 3C.

3. The TEQ Data File

File Name: TEQ_2017.txt
Format: ASCII Text, Comma Delimited

Description: This file has the same format as the Schedule 1 Congener Data file described above. All quantities are reported in grams. It lists the TEQ data that EPA calculated from the Schedule 1 congener data and the TEF values. Each row is identified by a unique TRI Facility ID and a Document Control Number. There is only one TEQ value per medium (i.e., one on-site Fugitive Air Release value) as opposed to the 17 congener values per medium in the Congener Data File. The file includes data elements in the following categories:

- Facility Name, Address, Latitude & Longitude Coordinates and NAICS Code
- Chemical Identification and Classification Information
- On-site Release Quantities
- The Publicly Owned Treatment Works (POTW) Transfer Quantity
- Summed Off-site Transfer Quantity Totals for Release/Disposal and Further Waste Management
- Summary Pollution Prevention Quantities

This file only lists the TEQ value for Total On-Site Surface Water Discharges; the individual TEQ amounts for specific water bodies that make up this total are listed in the Water TEQ Data file. The off-site transfer data is summed by type of waste management (e.g., M66 - RCRA Subtitle C Surface Impoundment). The individual/detailed transfer TEQ amounts along with the off-site transfer location are listed in Basic Plus files 3A, 3B and 3C.

4. The Water Congener Data File

File Name: Water_Congener_2018.txt
Format: ASCII Text, Comma Delimited

Description: The Water Congener Data file lists the individually reported mass grams for each congener of on-site water releases to each water body as reported on the Reporting Form R. Each row is identified by a unique TRI Facility ID, a Document Control Number and Congener Number. A maximum of 10 water bodies are displayed.

In addition to the individually reported mass quantity data for each congener, the file also lists the total amount of each congener reported to all water bodies. The file also shows (from the Schedule 1 Congener data) the total transfers of each congener to all Publicly Owed Treatment Works (POTWs) as well as the names, addresses and quantity transferred to each individual POTW location for up to four POTWs.

All quantities are reported in grams. The file includes data elements in the following categories:

- Facility Name, Address, Latitude & Longitude Coordinates and NAICS Code
- Chemical Identification and Classification Information
- On-site Water Releases to Individual Water Bodies
- Total On-site Water Releases for Each Congener
- Publicly Owned Treatment Works (POTW) Total Transfer Quantity
- POTW Names, Addresses and quantity transferred to each POTW location

5. The Water TEQ Data File

File Name: Water_TEQ_2018.txt

Format: ASCII Text, Comma Delimited

Description: The Water TEQ Data file lists the calculated TEQ values for each on-site water release to each water body reported on the Form R. Each row is identified by a unique TRI Facility ID and a Document Control Number. A maximum of 10 water bodies are displayed.

In addition to the TEQ values related to each water body, the file also lists the total TEQ amount that was released to all water bodies. The file also shows (from the TEQ Data) the total TEQ transfer amount to all Publicly Owned Treatment Works (POTWs) as well as the names, addresses and the quantity transferred to each individual POTW location for up to four POTWs.

All quantities are reported in grams. The file includes data elements in the following categories:

- Facility Name, Address, Latitude & Longitude Coordinates and NAICS Code
- Chemical Identification and Classification Information
- On-site Water Release TEQ Values for Individual Water Bodies
- The Total On-site Water Release TEQ to All Water Bodies
- The Total POTW TEQ Transfer Amount
- POTW Names, Addresses and quantity transferred to each POTW location

6. The Transfer Details Data File

File Name: Transfers_2015_v15.txt
Format: ASCII Text, Comma Delimited

Description: The Transfer Detail Data File lists the congener amounts, TEQ value and location details of all Off-site Dioxin Transfers for the reporting year. It displays each individual transfer of dioxin and dioxin-like compounds from the reporting facility to an off-site location for disposal or further waste management. It includes the waste transfer code and description of the transfer (e.g., M66 - RCRA Subtitle C Surface Impoundment). It also lists the individually reported congener amounts for each transfer, the calculated TEQ value and the total transfer amount as reported on the TRI Form R. Finally, it lists the name, address and RCRA number of the off-site location that received the waste transfer.

Note that there can be multiple transfers to the same off-site location, as well as multiple transfers to the same location for the same purpose. In other words, it's possible to have the same type of transfer (i.e. the same M-code) going to one off-site location listed several times (presumably with different quantities being transferred each time).

All quantities are reported in grams. The file includes data elements in the following categories:

- Facility Name, Address, Latitude & Longitude Coordinates and NAICS Code
- Chemical Identification and Classification Information
- Individually Reported Mass Grams of Each Off-site Transfer
- TEQ Values for Each Off-Site Transfer
- Total Grams Reported for Each Transfer
- Name, Address and RCRA Number of Each Off-Site Transfer Location

Zeroes in the Data

The *TRI Dioxin and Dioxin-like Compounds Toxic Equivalency (TEQ) 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) for the tool to work correctly. For instance, to calculate a total for a spreadsheet column, all rows in that column must contain a number and not be blank.

Considering this, the TRI Program has inserted zeroes into the *TRI Dioxin and Dioxin-like Compounds Toxic Equivalency (TEQ) Data Files* in places where numeric data fields were blank. There are two reasons why a numeric data field on a TRI reporting form may be blank. The first is facilities that 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 Reporting 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 second case where zeroes appear instead of blanks occurs when facilities do not respond to quantity questions on the Form R, leaving them blank. This was primarily an issue prior to the TRI Electronic Reporting Rule, when the TRI Program still accepted paper reporting forms. The TRI-MEweb reporting software, however, doesn't allow blanks in the reporting of quantity data; facilities are required to enter a number or indicate "NA."

Leading Zeroes in Data Fields

Some data fields in the files, like the ZIP code and the Parent Company DB Number fields, may contain leading zeroes. When, loading a comma separated value (.CSV) file into some applications, leading zeroes for some data fields may be removed. To remedy this, rename (or copy) the .CSV file to another filename without a .CSV file extension. Once you do this, the file may not load automatically into some applications. Instead, you'll have to load the file manually and answer a few prompts about its contents. However, this will allow you to define the fields or columns with leading zeroes in them as text fields and be able to see their full content.

For an example using MS Excel, see "Appendix B - Example of Resolving Missing Leading Zeroes in MS Excel"

Record Layouts

The record layouts for the TRI Dioxin and Dioxin-like Compounds Toxic Equivalency (TEQ) Data appear in the next section. There are eight 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 data file. Many of the field names begin with a section reference, such as "5.1 - Fugitive Air". The "5 .1" represents the section of the Form R where the data came from. Many users find the data fields easier to use when they are prefaced with the section number.

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 "Data Type": 'C' for Character/Text data and 'N' for numeric data.

The fifth, sixth and seventh columns under the "Reference" heading indicate the "Form," "Part" and "Section" where the data originate from. There are three possible values for the "Form" column. They are:

Value	Description
R	Data Element taken from the Form R
S	Data Element taken from the Form R Schedule 1
Blank	Data Element obtained from another source other than the Form R or Schedule 1

The "Definition" column gives a description of each data element and provides notes about its origin and use. There are several data fields that represent totals in the data file. The "Definition" column tells which data fields are added together to obtain the totals.

1. The Toxic Equivalency Factors File

	Field Documentation for the "Toxic Equivalency Factors" File					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
1	Year	4	C	R, I	1	The Reporting Year - Year the chemical was released or managed as waste.
2	Congener Number	2	C			The congener sequence or sort number. Range of values {1 to 17}.
3	Congener CAS#	9	C			The Chemical Abstract Service Number of the chemical or chemical compound category.
4	Congener Name	70	C			Name of the congener or dioxin compound.
5	Congener Abbreviation	70	C			Abbreviation of the congener.
6	Toxic Equivalency Factor (TEF)	10, 7	N			"TEF" denotes a dioxin compound's toxicity relative to 2,3,7,8- TCDD which is assigned the maximum toxicity designation of 1. Other dioxin compounds are given equal or lower numbers, with each number roughly proportional to its toxicity relative to that of 2,3,7,8-TCDD. TEFs, developed by the World Health Organization (WHO), are used to calculate the Toxic Equivalency (TEQ) of the dioxin and dioxin-like compounds reported to TRI. TEQs are calculated by multiplying the grams data for each reported member of the category by its TEF value and then summing the results.
7	TEF Year	4	C			The year the World Health Organization (WHO) issued the TEF value.

2. The Schedule One Congener Data File

Note: Each row is identified uniquely by a TRI Facility Id, a Document Control Number and a Congener number.

	Field Documentation for the "Schedule One Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
1	Year	4	C	R, I	1	The Reporting Year - Year the chemical was released or waste managed
2	TRI Facility ID	15	C	R, I	4.1	The TRI Facility Identification Number assigned by EPA/TRI
3	Facility Name	62	C	R, I	4.1	Name of the facility
4	Street Address	62	C	R, I	4.1	Street address where the facility is located
5	City	28	C	R, I	4.1	Name of the city in which the facility is located
6	County	25	C	R, I	4.1	Name of the county in which the facility is located
7	ST	2	C	R, I	4.1	Abbreviation of the state in which the facility is located
8	ZIP	9	C	R, I	4.1	ZIP code in which the facility is located. Either 5 or 9 characters. No hyphens.
9	Latitude	9,6	N			Facility Latitude represented as decimal data
10	Longitude	10,6	N			Facility Longitude represented as decimal data
11	Primary NAICS	6	C	R, I	4.5	Primary North American Industry Code System (NAICS) code that represents the facility's primary business activity.
12	NAICS 2	6	C	R, I	4.5	Supplemental NAICS code representing other business activities of the facility
13	NAICS 3	6	C	R, I	4.5	Supplemental NAICS code representing other business activities of the facility
14	NAICS 4	6	C	R, I	4.5	Supplemental NAICS code representing other business activities of the facility
15	NAICS 5	6	C	R, I	4.5	Supplemental NAICS code representing other business activities of the facility
16	NAICS 6	6	C	R, I	4.5	Supplemental NAICS code representing other business activities of the facility
17	Parent CO Name	60	C	R, I	5.1	Name of Parent Company.
18	Parent CO DB NUM	9	C	R, I	5.2	Parent Company's Dun & Bradstreet Number.
19	Doc_Ctrl_Num	13	C			The Document Control Number, a unique ID assigned to each reporting form.
20	Chemical	70	C	R, II	1.2	Name of the chemical
21	CAS # / Compound ID	9	C	R, II	1.1	The Chemical Abstract Service Number of the chemical or chemical compound category
22	Congener Number	2	C			The congener sequence or sort number. Range of values {1 to 17}.

	Field Documentation for the "Schedule One Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
23	Congener CAS#	9	C			The Chemical Abstract Service Number of the congener or dioxin compound
24	Congener	70	C			Name of the Congener or Dioxin Compound
25	Clean Air Act Chemical	3	C			Indication if the chemical is a Clean Air Act Chemical (Yes or No)
26	Classification	6	C			Classification of the chemical. Values are as follows: TRI: Standard TRI Chemical PBT: Persistent Bioaccumulatvie Toxic Dioxin: Dioxin or Dioxin-like Compound
27	Metal	3	C			Indication if the chemical is a metal (Yes or No)
28	Metal Category	1	C			Category of Metal. Values are either 1, 2, 3, or 4 for metals. See Appendix A for definitions and lists of chemicals that belong to each category
29	Carcinogen	3	C			Indication if the chemical is a carcinogen (Yes or No)
30	Form Type	1	C			The form the data was submitted on. Values are: A – Form A R – Form R
31	Unit of Measure	6	C			The unit of measure the chemical is displayed in (grams or pounds)
32	5.1 - Fugitive Air	22,7	N	S	5.1	On-site Fugitive Air Releases
33	5.2 - Stack Air	22,7	N	S	5.2	On-site Stack Air Releases
34	5.3 - Water	22,7	N	S	5.3	On-site Water Releases
35	5.4.1 - Underground Class I	22,7	N	S	5.4.1	On-site Underground Injection Releases to Class I Wells
36	5.4.2 - Underground Class II-V	22,7	N	S	5.4.2	On-site Underground Injection Releases to Class II-V Wells
37	5.5.1A - RCRA C Landfills	22,7	N	S	5.5.1A	On-site RCRA C Landfills Releases
38	5.5.1B - Other Landfills	22,7	N	S	5.5.1B	On-site Other Landfills Releases
39	5.5.2 - Land Treatment	22,7	N	S	5.5.2	On-site Land Treatment Releases
40	5.5.3A - RCRA Surface Impoundment	22,7	N	S	5.5.3A	On-site RCRA Surface Impoundment Releases.
41	5.5.3B - Other Surface Impoundment	22,7	N	S	5.5.3B	On-site NON-RCRA/Other Surface Impoundment Releases.
42	5.5.4 - Other Disposal	22,7	N	S	5.5.4	On-site Other Disposal Releases
43	On-site Release Total	22,7	N			Total Releases On-site for a chemical at a facility. This is a summation of all releases in section 5 (fields #32 through #42).

	Field Documentation for the "Schedule One Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
44	6.1 - POTW	22,7	N	S	6.1	The total amount of transfers to a Publicly Owned Treatment Works (POTW).
45	6.2 - M10	22,7	N	S	6.2	Off-site Storage
46	6.2 - M41	22,7	N	S	6.2	Off-site Solidification/Stabilization for Metals and Metal Compounds Only
47	6.2 - M62	22,7	N	S	6.2	Off-site Wastewater Treatment (Excluding POTWs) for Metals and Metal Compounds Only
48	6.2 - M81	22,7	N	S	6.2	Off-site Underground Injection to Class I Wells.
49	6.2 - M82	22,7	N	S	6.2	Off-site Underground Injection to Class II-V Wells.
50	6.2 - M66	22,7	N	S	6.2	Off-site Subtitle C Surface Impoundment.
51	6.2 - M67	22,7	N	S	6.2	Off-site Other Surface Impoundment.
52	6.2 - M64	22,7	N	S	6.2	Off-site Other Landfills.
53	6.2 - M65	22,7	N	S	6.2	Off-site RCRA Subtitle C Landfill.
54	6.2 - M73	22,7	N	S	6.2	Off-site Land Treatment
55	6.2 - M79	22,7	N	S	6.2	Off-site Other Land Disposal
56	6.2 - M90	22,7	N	S	6.2	Off-site Other Off-site Management
57	6.2 - M94	22,7	N	S	6.2	Off-site Transfer to Waste Broker – Disposal
58	6.2 - M99	22,7	N	S	6.2	Off-site Unknown
59	Off-Site Release Total	22,7	N			The Off-site Release Total equals the sum of M10 + M41 + M62 + M64 + M65 + M73 + M79 + M90 + M94 + M99 + M40 (if the chemical is a category 1,3 or 4metal) + M61 (if the chemical is a category 1,3 or 4 metal) + (6.1 POTW - Metals and Metal Compounds Only)
60	6.2 - M20	22,7	N	S	6.2	Off-site Solvents/Organics Recovery
61	6.2 - M24	22,7	N	S	6.2	Off-site Metals Recovery
62	6.2 - M26	22,7	N	S	6.2	Off-site Other Reuse or Recovery
63	6.2 - M28	22,7	N	S	6.2	Off-site Acid Regeneration
64	6.2 - M93	22,7	N	S	6.2	Off-site Transfer to Waste Broker – Recycling
65	Off-Site Recycled Total	22,7	N			The sum of M20 + M24 + M26 + M28 + M93
66	6.2 - M56	22,7	N	S	6.2	Off-site Energy Recovery
67	6.2 - M92	22,7	N	S	6.2	Off-site Transfer to Waste Broker for Energy Recovery
68	Off-Site Recovery Total	22,7	N			The sum of M56 + M92
69	6.2 - M40	22,7	N	S	6.2	Off-site Solidification/Stabilization
70	6.2 - M50	22,7	N	S	6.2	Off-site Incineration/Thermal Treatment
71	6.2 - M54	22,7	N	S	6.2	Off-site Incineration/Insignificant fuel value
72	6.2 - M61	22,7	N	S	6.2	Off-site Waster Treatment (Excluding POTW)
73	6.2 - M69	22,7	N	S	6.2	Off-site Other Waste Treatment
74	6.2 - M95	22,7	N	S	6.2	Off-site Transfer to Waste Broker - Waste Treatment
75	Off-Site Treated Total	22,7	N			The sum of M40 + M50 + M54 + M61 + M69 + M95

	Field Documentation for the "Schedule One Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
76	Total Off-site Managed	22,7	N			The sum of Off-site Recycled, Recovery and Treated totals
77	Total Releases	22,7	N			The total on and off-site releases from sections 5 and 6
78	8.1a - On-site Contained Releases	22,7	N	S	8.1a	The total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills and other landfills MINUS any on-site release or disposal due to catastrophic events
79	8.1b - On-site Other Releases	22,7	N	S	8.1b	The total other on-site disposal via Air Fugitive, Air Stack, Water, Class II-V Underground Injection Wells, Land Treatment, RCRA Subtitle C Surface Impoundments, Other Surface Impoundments and Other On-site Disposal MINUS any on-site release or disposal due to catastrophic events
80	8.1c - Off-site Contained Releases	22,7	N	S	8.1c	The total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills and other landfills MINUS any on-site release or disposal due to catastrophic events
81	8.1d - Off-site Other Releases	22,7	N	S	8.1d	The total other on-site disposal via Air Fugitive, Air Stack, Water, Class II-V Underground Injection Wells, Land Treatment, RCRA Subtitle C Surface Impoundments, Other Surface Impoundments and Other On-site Disposal MINUS any on-site release or disposal due to catastrophic events
82	8.2 - Energy Recovery On-site	22,7	N	S	8.2	Amount of Energy Recovery On-site
83	8.3 - Energy Recovery Off-site	22,7	N	S	8.3	Amount of Energy Recovery Off-site
84	8.4 - Recycling On-Site	22,7	N	S	8.4	Amount of Recycling On-site
85	8.5 - Recycling Off-Site	22,7	N	S	8.5	Amount of Recycling Off-site
86	8.6 - Treatment On-site	22,7	N	S	8.6	Amount of Treatment On-site
87	8.7 - Treatment Off-site	22,7	N	S	8.7	Amount of Treatment Off-site
88	8.8 - One-time Release	22,7	N	S	8.8	Quantity released to the environment due to remedial actions, catastrophic events, or one-time events not associated with production processing.
89	Data Extracted On	11	C	NA	NA	Date the data were extracted. Format MM/DD/YYYY

3. The TEQ Data File

Each row is identified by a unique TRI Facility ID and Document Control Number.

	Field Documentation for the "TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
1	Year	4	C	R I	1	The Reporting Year - Year the chemical was released or waste managed
2	TRI Facility ID	15	C	R I	4.1	The TRI Facility Identification Number assigned by EPA/TRI
3	Facility Name	62	C	R I	4.1	Name of the facility
4	Street Address	62	C	R I	4.1	Street address at which the facility is located
5	City	28	C	R I	4.1	Name of the city in which the facility is located
6	County	25	C	R I	4.1	Name of the county in which the facility is located
7	ST	2	C	R I	4.1	Abbreviation of the state in which the facility is located
8	ZIP	9	C	R I	4.1	ZIP code in which the facility is located. Either 5 or 9 characters. No hyphens.
9	Latitude	9,6	N			Facility Latitude represented as decimal data
10	Longitude	10,6	N			Facility Longitude represented as decimal data
11	Primary NAICS	6	C	R I	4.5	Primary North American Industry Code System (NAICS) code that represents the facility's primary business activity.
12	NAICS 2	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
13	NAICS 3	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
14	NAICS 4	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
15	NAICS 5	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
16	NAICS 6	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
17	Parent CO Name	60	C	R I	5.1	Name of Parent Company.
18	Parent CO DB NUM	9	C	R I	5.2	Parent Company's Dun & Bradstreet Number.
19	Doc_Ctrl_Num	13	C			The Document Control Number is a unique ID that is assigned to each reporting form.
20	Chemical	70	C	R II	1.2	Name of Chemical
21	CAS # / Compound ID	9	C	R II	1.1	The Chemical Abstract Service Number of the chemical or chemical compound category
22	Congener Number	2	C			The value of this data element for TEQ data will be "TEQ"
23	Congener CAS#	9	C			The value of this data element for TEQ data will be "N150". N150 is the general CAS number of Dioxins and Dioxin- like Compounds

	Field Documentation for the "TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
24	Congener	70	C			The value of this data element for TEQ data will be "Dioxin - Toxic Equivalency (TEQ)"
25	Clean Air Act Chemical	3	C			Indication if the chemical is a Clean Air Act Chemical (Yes or No)
26	Classification	6	C			Classification of the chemical. Values are as follows: TRI - Standard TRI Chemical PBT - Persistent Bioaccumulatvie Toxic Dioxin - Dioxin or Dioxin-like Compound
27	Metal	3	C			Indication if the chemical is a metal (Yes or No)
28	Metal Category	1	C			Category of Metal. Values are either 1, 2, 3, or 4 for metals. See Appendix A for definitions and lists of chemicals that belong to each category.
29	Carcinogen	3	C			Indication if the chemical is a carcinogen (Yes or No)
30	Form Type	1	C			The form the data was submitted on. Values are: A – Form A R – Form R
31	Unit of Measure	6	C			The units of measure the chemical is displayed in (Grams or Pounds)
32	5.1 - Fugitive Air	22,7	N	S	5.1	On-site Fugitive Air Releases
33	5.2 - Stack Air	22,7	N	S	5.2	On-site Stack Air Releases
34	5.3 - Water	22,7	N	S	5.3	On-site Water Releases
35	5.4.1 - Underground Class I	22,7	N	S	5.4.1	On-site Underground Injection Releases to Class I Wells
36	5.4.2 - Underground Class II-V	22,7	N	S	5.4.2	On-site Underground Injection Releases to Class II-V Wells
37	5.5.1A - RCRA C Landfills	22,7	N	S	5.5.1A	On-site RCRA C Landfills Releases
38	5.5.1B - Other Landfills	22,7	N	S	5.5.1B	On-site Other Landfills Releases
39	5.5.2 - Land Treatment	22,7	N	S	5.5.2	On-site Land Treatment Releases
40	5.5.3A - RCRA Surface Impoundment	22,7	N	S	5.5.3A	On-site RCRA Surface Impoundment Releases.
41	5.5.3B - Other Surface Impoundment	22,7	N	S	5.5.3B	On-site NON-RCRA/Other Surface Impoundment Releases.
42	5.5.4 - Other Disposal	22,7	N	S	5.5.4	On-site Other Disposal Releases
43	On-site Release Total	22,7	N			Total Releases On-site for a chemical at a facility. This is a summation of all releases in section 5 (fields #32 through #42).

	Field Documentation for the "TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
44	6.1 - POTW	22,7	N	S	6.1	The total amount of transfers to a Publicly Owned Treatment Works (POTW).
45	6.2 - M10	22,7	N	S	6.2	Off-site Storage
46	6.2 - M41	22,7	N	S	6.2	Off-site Solidification/Stabilization for Metals and Metal Compounds Only
47	6.2 - M62	22,7	N	S	6.2	Off-site Wastewater Treatment (Excluding POTWs) for Metals and Metal Compounds Only
48	6.2 - M81	22,7	N	S	6.2	Off-site Underground Injection to Class I Wells.
49	6.2 - M82	22,7	N	S	6.2	Off-site Underground Injection to Class II-V Wells.
50	6.2 - M66	22,7	N	S	6.2	Off-site Subtitle C Surface Impoundment.
51	6.2 - M67	22,7	N	S	6.2	Off-site Other Surface Impoundment.
52	6.2 - M64	22,7	N	S	6.2	Off-site Other Landfills.
53	6.2 - M65	22,7	N	S	6.2	Off-site RCRA Subtitle C Landfill.
54	6.2 - M73	22,7	N	S	6.2	Off-site Land Treatment
55	6.2 - M79	22,7	N	S	6.2	Off-site Other Land Disposal
56	6.2 - M90	22,7	N	S	6.2	Off-site Other Off-site Management
57	6.2 - M94	22,7	N	S	6.2	Off-site Transfer to Waste Broker – Disposal
58	6.2 - M99	22,7	N	S	6.2	Off-site Unknown
59	Off-Site Release Total	22,7	N			The Off-site Release Total equals the sum of M10 + M41 + M62 + M64 + M65 + M73 + M79 + M90 + M94 + M99 + M40 (if the chemical is a category 1,3 or 4metal) + M61 (if the chemical is a category 1,3 or 4 metal) + (6.1 POTW - Metals and Metal Compounds Only)
60	6.2 - M20	22,7	N	S	6.2	Off-site Solvents/Organics Recovery
61	6.2 - M24	22,7	N	S	6.2	Off-site Metals Recovery
62	6.2 - M26	22,7	N	S	6.2	Off-site Other Reuse or Recovery
63	6.2 - M28	22,7	N	S	6.2	Off-site Acid Regeneration
64	6.2 - M93	22,7	N	S	6.2	Off-site Transfer to Waste Broker – Recycling
65	Off-Site Recycled Total	22,7	N			The sum of M20 + M24 + M26 + M28 + M93
66	6.2 - M56	22,7	N	S	6.2	Off-site Energy Recovery
67	6.2 - M92	22,7	N	S	6.2	Off-site Transfer to Waste Broker for Energy Recovery
68	Off-Site Recovery Total	22,7	N			The sum of M56 + M92
69	6.2 - M40	22,7	N	S	6.2	Off-site Solidification/Stabilization
70	6.2 - M50	22,7	N	S	6.2	Off-site Incineration/Thermal Treatment
71	6.2 - M54	22,7	N	S	6.2	Off-site Incineration/Insignificant fuel value
72	6.2 - M61	22,7	N	S	6.2	Off-site Waster Treatment (Excluding POTW)
73	6.2 - M69	22,7	N	S	6.2	Off-site Other Waste Treatment
74	6.2 - M95	22,7	N	S	6.2	Off-site Transfer to Waste Broker - Waste Treatment
75	Off-Site Treated Total	22,7	N			The sum of M40 + M50 + M54 + M61 + M69 + M95

	Field Documentation for the "TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
76	Total Off-site Managed	22,7	N			The sum of Off-site Recycled, Recovery and Treated totals
77	Total Releases	22,7	N			The total on and off-site releases from sections 5 and 6
78	8.1a - On-site Contained Releases	22,7	N	S	8.1a	The total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills and other landfills MINUS any on-site release or disposal due to catastrophic events
79	8.1b - On-site Other Releases	22,7	N	S	8.1b	The total other on-site disposal via Air Fugitive, Air Stack, Water, Class II-V Underground Injection Wells, Land Treatment, RCRA Subtitle C Surface Impoundments,Other Surface Impoundments and Other On-site Disposal MINUS any on-site release or disposal due to catastrophic events
80	8.1c - Off-site Contained Releases	22,7	N	S	8.1c	The total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills and other landfills MINUS any on-site release or disposal due to catastrophic events
81	8.1d - Off-site Other Releases	22,7	N	S	8.1d	The total other on-site disposal via Air Fugitive, Air Stack, Water, Class II-V Underground Injection Wells, Land Treatment, RCRA Subtitle C Surface Impoundments,Other Surface Impoundments and Other On-site Disposal MINUS any on-site release or disposal due to catastrophic events
82	8.2 - Energy Recovery On-site	22,7	N	S	8.2	Amount of Energy Recovery On-site
83	8.3 - Energy Recovery Off-site	22,7	N	S	8.3	Amount of Energy Recovery Off-site
84	8.4 - Recycling On-Site	22,7	N	S	8.4	Amount of Recycling On-site
85	8.5 - Recycling Off-Site	22,7	N	S	8.5	Amount of Recycling Off-site
86	8.6 - Treatment On-site	22,7	N	S	8.6	Amount of Treatment On-site
87	8.7 - Treatment Off-site	22,7	N	S	8.7	Amount of Treatment Off-site
88	8.8 - One-time Release	22,7	N	S	8.8	Quantity released to the environment due to remedial actions, catastrophic events, or one-time events not associated with production processing.
89	Data Extracted On	11	C			Date the data were extracted. Format MM/DD/YYYY

4. The Water Congener Data File

Each row is identified by a unique TRI Facility ID, a Document Control Number and Congener Number.

	Field Documentation for the "Water Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
1	Year	4	C	R I	1	The Reporting Year - Year the chemical was released or waste managed
2	TRI Facility ID	15	C	R I	4.1	The TRI Facility Identification Number assigned by EPA/TRI
3	Facility Name	62	C	R I	4.1	Name of the facility.
4	Street Address	62	C	R I	4.1	Street address at which the facility is located
5	City	28	C	R I	4.1	Name of the city in which the facility is located
6	County	25	C	R I	4.1	Name of the county in which the facility is located
7	ST	2	C	R I	4.1	Abbreviation of the state in which the facility is located
8	ZIP	9	C	R I	4.1	ZIP code in which the facility is located. Either 5 or 9 characters. No hyphens.
9	Latitude	9,6	N			Facility Latitude represented as decimal data
10	Longitude	10,6	N			Facility Longitude represented as decimal data
11	Primary NAICS	6	C	R I	4.5	Primary North American Industry Code System (NAICs) code that represents the facility's primary business activity.
12	NAICS 2	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
13	NAICS 3	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
14	NAICS 4	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
15	NAICS 5	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
16	NAICS 6	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
17	Parent Company Name	60	C	R I	5.1	Name of Parent Company.
18	Parent Company DB Number	9	C	R I	5.2	Parent Company's Dun & Bradstreet Number.
19	Doc_Ctrl_Num	13	C			The Document Control Number is a unique ID that is assigned to each reporting form.
20	Chemical	70	C	R II	1.2	Name of Chemical
21	CAS #/Compound ID	9	C	R II	1.1	The Chemical Abstract Service Number of the chemical or chemical compound category
22	Congener No.	2	C			The congener sequence or sort number. Range of values {1 to 17}.

	Field Documentation for the "Water Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
23	Congener CAS#	9	C			The Chemical Abstract Service Number of the congener or dioxin compound
24	Congener	70	C			Name of the Congener or Dioxin Compound
25	Unit of Measure	6	C			The units of measure the chemical is displayed in (Grams or Pounds)
26	5.3 Total Onsite Water Release	21,7	N	S II	5.3	The total onsite water release to all streams and water bodies.
27	5.3.1 Stream 1 Name	70	C	R II	5.3.1	The name of the first receiving stream or water body
28	5.3.1 Stream 1 Release	21,7	N	S II	5.3.1	Releases to the first receiving stream or water body
29	5.3.2 Stream 2 Name	70	C	R II	5.3.2	The name of the second receiving stream or water body
30	5.3.2 Stream 2 Release	21,7	N	S II	5.3.2	Releases to the second receiving stream or water body
31	5.3.3 Stream 3 Name	70	C	R II	5.3.3	The name of the third receiving stream or water body
32	5.3.3 Stream 3 Release	21,7	N	S II	5.3.3	Releases to the third receiving stream or water body
33	5.3.4 Stream 4 Name	70	C	R II	5.3.4	The name of the fourth receiving stream/water body
34	5.3.4 Stream 4 Release	21,7	N	S II	5.3.4	Releases to the fourth receiving stream or water body
35	5.3.5 Stream 5 Name	70	C	R II	5.3.5	The name of the fifth receiving stream or water body
36	5.3.5 Stream 5 Release	21,7	N	S II	5.3.5	Releases to the fifth receiving stream or water body
37	5.3.6 Stream 6 Name	70	C	R II	5.3.6	The name of the sixth receiving stream or water body
38	5.3.6 Stream 6 Release	21,7	N	S II	5.3.6	Releases to the sixth receiving stream/water body
39	5.3.7 Stream 7 Name	70	C	R II	5.3.7	The name of the seventh receiving stream/water body
40	5.3.7 Stream 7 Release	21,7	N	S II	5.3.7	Releases to the seventh receiving stream or water body

	Field Documentation for the "Water Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
41	5.3.8 Stream 8 Name	70	C	R II	5.3.8	The name of the eighth receiving stream or water body
42	5.3.8 Stream 8 Release	21,7	N	S II	5.3.8	Releases to the eighth receiving stream or water body
43	5.3.9 Stream 9 Name	70	C	R II	5.3.9	The name of the ninth receiving stream or water body
44	5.3.9 Stream 9 Release	21,7	N	S II	5.3.9	Releases to the ninth receiving stream or water body
45	5.3.10 Stream 10 Name	70	C	R II	5.3.10	The name of the tenth receiving stream or water body
46	5.3.10 Stream 10 Release	21,7	N	S II	5.3.10	Releases to the tenth receiving stream or water body
47	6.1 Total POTW Transfer Amount	21,7	N	R II	6.1	Total amount transferred to all Publicly Owned Treatment Works
48	6.1 POTW A NAME	62	C	R II	6.1.B.1	Name of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
49	6.1 POTW A ADDRESS	62	C	R II	6.1.B.1	Address of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
50	6.1 POTW A CITY	28	C	R II	6.1.B.1	City of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
51	6.1 POTW A COUNTY	25	C	R II	6.1.B.1	County of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
52	6.1 POTW A STATE	2	C	R II	6.1.B.1	State of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
53	6.1 POTW A ZIP	14	C	R II	6.1.B.1	ZIP code of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
54	6.1 POTW A Transfer Amount	21,7	N	S II	6.1.A.1	The amount transferred to the first publicly-owned treatment works facility (POTW) location to which the chemical was sent. In reporting years 2008-2010 this field will be blank because transfer amounts to specific locations were not collected in these reporting years.
55	6.1 POTW B NAME	62	C	R II	6.1.B.2	Name of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.

	Field Documentation for the "Water Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
56	6.1 POTW B ADDRESS	62	C	R II	6.1.B.2	Address of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
57	6.1 POTW B CITY	28	C	R II	6.1.B.2	City of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
58	6.1 POTW B COUNTY	25	C	R II	6.1.B.2	County of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
59	6.1 POTW B STATE	2	C	R II	6.1.B.2	State of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
60	6.1 POTW B ZIP	14	C	R II	6.1.B.2	ZIP code of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
61	6.1 POTW B Transfer Amount	21,7	N	S II	6.1.A.2	The amount transferred to the second publicly-owned treatment works facility (POTW) location to which the chemical was sent. In reporting years 2008-2010 this field will be blank because transfer amounts to specific locations were not collected in these reporting years.
62	6.1 POTW C NAME	62	C	R II	6.1.B.3	Name of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
63	6.1 POTW C ADDRESS	62	C	R II	6.1.B.3	Address of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
64	6.1 POTW C CITY	28	C	R II	6.1.B.3	City of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
65	6.1 POTW C COUNTY	25	C	R II	6.1.B.3	County of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
66	6.1 POTW C STATE	2	C	R II	6.1.B.3	State of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
67	6.1 POTW C ZIP	14	C	R II	6.1.B.3	ZIP code of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
68	6.1 POTW C Transfer Amount	21,7	N	S II	6.1.A.3	The amount transferred to the third publicly-owned treatment works facility (POTW) location to which the chemical was sent. In reporting years 2008-2010 this field will be blank because transfer amounts to specific locations were not collected in these reporting years.
69	6.1 POTW D NAME	62	C	R II	6.1.B.4	Name of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
70	6.1 POTW D ADDRESS	62	C	R II	6.1.B.4	Address of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
71	6.1 POTW D CITY	28	C	R II	6.1.B.4	City of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
72	6.1 POTW D COUNTY	25	C	R II	6.1.B.4	County of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.

	Field Documentation for the "Water Congener Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
73	6.1 POTW D STATE	2	C	R II	6.1.B.4	State of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
74	6.1 POTW D ZIP	14	C	R II	6.1.B.4	ZIP code of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
75	6.1 POTW D Transfer Amount	21,7	N	S II	6.1.A.4	The amount transferred to the fourth publicly-owned treatmentworks facility (POTW) location to which the chemicalwas sent. In reporting years 2008-2010 this field will be blank because transfer amounts to specific locations were not collected in these reporting years.
76	Data Extracted On	11	C			Date the data was extracted. Format MM/DD/YYYY

5. The Water TEQ Data File

Each row is identified uniquely by a TRI Facility ID and a Document Control Number.

	Field Documentation for the "Water TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
1	Year	4	C	R I	1	The Reporting Year - Year the chemical was released or waste managed
2	TRI Facility ID	15	C	R I	4.1	The TRI Facility Identification Number assigned by EPA/TRI
3	Facility Name	62	C	R I	4.1	Name of the facility.
4	Street Address	62	C	R I	4.1	Street address at which the facility is located
5	City	28	C	R I	4.1	Name of the city in which the facility is located
6	County	25	C	R I	4.1	Name of the county in which the facility is located
7	ST	2	C	R I	4.1	Abbreviation of the state in which the facility is located
8	ZIP	9	C	R I	4.1	ZIP code in which the facility is located. Either 5 or 9 characters. No hyphens.
9	Latitude	9,6	N			Facility Latitude represented as decimal data
10	Longitude	10,6	N			Facility Longitude represented as decimal data
11	Primary NAICS	6	C	R I	4.5	Primary North American Industry Code System (NAICs) code that represents the facility's primary business activity.
12	NAICS 2	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
13	NAICS 3	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
14	NAICS 4	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
15	NAICS 5	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
16	NAICS 6	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
17	Parent Company Name	60	C	R I	5.1	Name of Parent Company.
18	Parent Company DB Number	9	C	R I	5.2	Parent Company's Dun & Bradstreet Number.
19	Doc_Ctrl_Num	13	C			The Document Control Number is a unique ID that is assigned to each reporting form.
20	Chemical	70	C	R II	1.2	Name of Chemical
21	CAS #/Compound ID	9	C	R II	1.1	The Chemical Abstract Service Number of the chemical or chemical compound category
22	Congener No.	2	C			The congener sequence or sort number. Range of values {1 to 17}.

	Field Documentation for the "Water TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
23	Congener CAS#	9	C			The Chemical Abstract Service Number of the congener or dioxin compound
24	Congener	70	C			Name of the Congener or Dioxin Compound
25	Unit of Measure	6	C			The units of measure the chemical is displayed in (Grams or Pounds)
26	5.3 Total Onsite Water Release	21,7	N	S II	5.3	The total onsite water release to all streams and water bodies.
27	5.3.1 Stream 1 Name	70	C	R II	5.3.1	The name of the first receiving stream or water body
28	5.3.1 Stream 1 Release	21,7	N	S II	5.3.1	Releases to the first receiving stream or water body
29	5.3.2 Stream 2 Name	70	C	R II	5.3.2	The name of the second receiving stream or water body
30	5.3.2 Stream 2 Release	21,7	N	S II	5.3.2	Releases to the second receiving stream or water body
31	5.3.3 Stream 3 Name	70	C	R II	5.3.3	The name of the third receiving stream or water body
32	5.3.3 Stream 3 Release	21,7	N	S II	5.3.3	Releases to the third receiving stream or water body
33	5.3.4 Stream 4 Name	70	C	R II	5.3.4	The name of the fourth receiving stream/water body
34	5.3.4 Stream 4 Release	21,7	N	S II	5.3.4	Releases to the fourth receiving stream or water body
35	5.3.5 Stream 5 Name	70	C	R II	5.3.5	The name of the fifth receiving stream or water body
36	5.3.5 Stream 5 Release	21,7	N	S II	5.3.5	Releases to the fifth receiving stream or water body
37	5.3.6 Stream 6 Name	70	C	R II	5.3.6	The name of the sixth receiving stream or water body
38	5.3.6 Stream 6 Release	21,7	N	S II	5.3.6	Releases to the sixth receiving stream/water body
39	5.3.7 Stream 7 Name	70	C	R II	5.3.7	The name of the seventh receiving stream/water body
40	5.3.7 Stream 7 Release	21,7	N	S II	5.3.7	Releases to the seventh receiving stream or water body

	Field Documentation for the "Water TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
41	5.3.8 Stream 8 Name	70	C	R II	5.3.8	The name of the eighth receiving stream or water body
42	5.3.8 Stream 8 Release	21,7	N	S II	5.3.8	Releases to the eighth receiving stream or water body
43	5.3.9 Stream 9 Name	70	C	R II	5.3.9	The name of the ninth receiving stream or water body
44	5.3.9 Stream 9 Release	21,7	N	S II	5.3.9	Releases to the ninth receiving stream or water body
45	5.3.10 Stream 10 Name	70	C	R II	5.3.10	The name of the tenth receiving stream or water body
46	5.3.10 Stream 10 Release	21,7	N	S II	5.3.10	Releases to the tenth receiving stream or water body
47	6.1 Total POTW Transfer Amount	21,7	N	R II	6.1	Total amount transferred to all Publicly Owned Treatment Works
48	6.1 POTW A NAME	62	C	R II	6.1.B.1	Name of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
49	6.1 POTW A ADDRESS	62	C	R II	6.1.B.1	Address of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
50	6.1 POTW A CITY	28	C	R II	6.1.B.1	City of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
51	6.1 POTW A COUNTY	25	C	R II	6.1.B.1	County of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
52	6.1 POTW A STATE	2	C	R II	6.1.B.1	State of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
53	6.1 POTW A ZIP	14	C	R II	6.1.B.1	ZIP code of the first publicly-owned treatment works facility (POTW) location to which the chemical was sent.
54	6.1 POTW A Transfer Amount	21,7	N	S II	6.1.A.1	The amount transferred to the first publicly-owned treatment works facility (POTW) location to which the chemical was sent. In reporting years 2008-2010 this field will be blank because transfer amounts to specific locations were not collected in these reporting years.
55	6.1 POTW B NAME	62	C	R II	6.1.B.2	Name of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.

	Field Documentation for the "Water TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
56	6.1 POTW B ADDRESS	62	C	R II	6.1.B.2	Address of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
57	6.1 POTW B CITY	28	C	R II	6.1.B.2	City of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
58	6.1 POTW B COUNTY	25	C	R II	6.1.B.2	County of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
59	6.1 POTW B STATE	2	C	R II	6.1.B.2	State of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
60	6.1 POTW B ZIP	14	C	R II	6.1.B.2	ZIP code of the second publicly-owned treatment works facility (POTW) location to which the chemical was sent.
61	6.1 POTW B Transfer Amount	21,7	N	S II	6.1.A.2	The amount transferred to the second publicly-owned treatment works facility (POTW) location to which the chemical was sent. In reporting years 2008-2010 this field will be blank because transfer amounts to specific locations were not collected in these reporting years.
62	6.1 POTW C NAME	62	C	R II	6.1.B.3	Name of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
63	6.1 POTW C ADDRESS	62	C	R II	6.1.B.3	Address of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
64	6.1 POTW C CITY	28	C	R II	6.1.B.3	City of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
65	6.1 POTW C COUNTY	25	C	R II	6.1.B.3	County of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
66	6.1 POTW C STATE	2	C	R II	6.1.B.3	State of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
67	6.1 POTW C ZIP	14	C	R II	6.1.B.3	ZIP code of the third publicly-owned treatment works facility (POTW) location to which the chemical was sent.
68	6.1 POTW C Transfer Amount	21,7	N	S II	6.1.A.3	The amount transferred to the third publicly-owned treatment works facility (POTW) location to which the chemical was sent. In reporting years 2008-2010 this field will be blank because transfer amounts to specific locations were not collected in these reporting years.
69	6.1 POTW D NAME	62	C	R II	6.1.B.4	Name of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
70	6.1 POTW D ADDRESS	62	C	R II	6.1.B.4	Address of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
71	6.1 POTW D CITY	28	C	R II	6.1.B.4	City of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
72	6.1 POTW D COUNTY	25	C	R II	6.1.B.4	County of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.

	Field Documentation for the "Water TEQ Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
73	6.1 POTW D STATE	2	C	R II	6.1.B.4	State of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
74	6.1 POTW D ZIP	14	C	R II	6.1.B.4	ZIP code of the fourth publicly-owned treatment works facility (POTW) location to which the chemical was sent.
75	6.1 POTW D Transfer Amount	21,7	N	S II	6.1.A.4	The amount transferred to the fourth publicly-owned treatmentworks facility (POTW) location to which the chemicalwas sent. In reporting years 2008-2010 this field will be blank because transfer amounts to specific locations were not collected in these reporting years.
76	Data Extracted On	11	C			Date the data was extracted. Format MM/DD/YYYY

6. The Transfer Details Data File

Each row is identified uniquely by a TRI Facility ID a Document Control Number, a Sequence No. and an Off-site Amount Sequence.

	Field Documentation for the "Transfer Details Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
1	Year	4	C	R I	1	The Reporting Year - Year the chemical was released or waste managed
2	TRI Facility ID	15	C	R I	4.1	The TRI Facility Identification Number assigned by EPA/TRI
3	Facility Name	62	C	R I	4.1	Facility Name
4	Street Address	62	C	R I	4.1	Street Address where facility is located
5	City	28	C	R I	4.1	City Name where facility is located
6	County	25	C	R I	4.1	County Name where facility is located
7	ST	2	C	R I	4.1	State Abbreviation where the facility is located
8	ZIP	9	C	R I	4.1	ZIP code where facility is located. Either 5 or 9 characters. No hyphens.
9	Latitude	9,6	N			Facility Latitude represented as decimal data
10	Longitude	10,6	N			Facility Longitude represented as decimal data
11	Primary NAICS	6	C	R I	4.5	Primary North American Industry Code System (NAICs) code that represents the facility's primary business activity.
12	NAICS 2	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
13	NAICS 3	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
14	NAICS 4	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
15	NAICS 5	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
16	NAICS 6	6	C	R I	4.5	Supplemental NAICS code representing other business activities of the facility
17	Parent Company Name	60	C	R I	5.1	Name of Parent Company.
18	Parent Company DB Number	9	C	R I	5.2	Parent Company's Dun & Bradstreet Number.
19	Doc_Ctrl_Num	13	C			The Document Control Number is a unique ID that is assigned to each form.
20	Chemical	70	C	R II	1.2	Name of Chemical
21	CAS #/Compound ID	9	C	R II	1.1	The Chemical Abstract Service Number of the chemical or chemical compound category
22	Unit of Measure	6	C			The units of measure the chemical is displayed in (Grams or Pounds)

	Field Documentation for the "Transfer Details Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
23	Waste Management Code	3	C	R II	6.2	A three-character code that identifies the type of Waste Management that was used for the off-site transfer. Matches to field 24, Waste Management Description.
24	Waste Management Description	80	C			Description of the process that was used for the waste management of the chemical
25	Category of Waste Management	16	C			Categories of waste management include: {Energy Recovery, Recycling, Release/Disposal and Treatment}
26	Sequence No.	9	C			A number that represents sequence in which the facility listed the off-site transfer locations on their form R
27	Off-site Amount Sequence					A number that represents the sequence in which the facility listed the individual transfers to a single off-site transfer location.
28	Release NA	3	C			Indicates whether off-site transfers are or are not possible for the facility and chemical. Values = {Yes,No}
29	Dioxin Congener 1	22,7	N	S	6.2	Amount of congener #1, 2,3,7,8-Tetrachlorodibenzo-p-dioxin (CAS# 001746016) transferred off-site
30	Dioxin Congener 2	22,7	N	S	6.2	Amount of congener #2, 1,2,3,7,8-Pentachlorodibenzo-p-dioxin (CAS# 040321764) transferred off-site
31	Dioxin Congener 3	22,7	N	S	6.2	Amount of congener #3, 1,2,3,4,7,8-Hexachlorodibenzo- p-dioxin (CAS# 039227286) transferred off-site Amount of congener #4, 1,2,3,6,7,8-Hexachlorodibenzo- p-dioxin (CAS# 057653857) transferred off-site
32	Dioxin Congener 4	22,7	N	S	6.2	
33	Dioxin Congener 5	22,7	N	S	6.2	Amount of congener #5, 1,2,3,7,8,9-Hexachlorodibenzo- p-dioxin (CAS# 019408743) transferred off-site
34	Dioxin Congener 6	22,7	N	S	6.2	Amount of congener #6, 1,2,3,4,6,7,8-Heptachlorodibenzo- p-dioxin (CAS# 035822469) transferred off-site
35	Dioxin Congener 7	22,7	N	S	6.2	Amount of congener #7, 1,2,3,4,6,7,8,9-Octachlorodibenzo- p-dioxin (CAS# 003268879) transferred off-site
36	Dioxin Congener 8	22,7	N	S	6.2	Amount of congener #8, 2,3,7,8-Tetrachlorodibenzofuran 2,3,7,8-TCDF (CAS# 051207319) transferred off-site
37	Dioxin Congener 9	22,7	N	S	6.2	Amount of congener #9, 1,2,3,7,8-Pentachlorodibenzofuran 1,2,3,7,8-PeCDF (CAS# 057117416) transferred off-site
38	Dioxin Congener 10	22,7	N	S	6.2	Amount of congener #10, 2,3,4,7,8-Pentachlorodibenzofuran 2,3,4,7,8-PeCDF (CAS# 057117314) transferred off-site
39	Dioxin Congener 11	22,7	N	S	6.2	Amount of congener #11, 1,2,3,4,7,8-Hexachlorodibenzofuran 1,2,3,4,7,8-HxCDF

	Field Documentation for the "Transfer Details Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
						(CAS# 070648269) transferred off-site
40	Dioxin Congener 12	22,7	N	S	6.2	Amount of congener #12, 1,2,3,6,7,8-Hexachlorodibenzofuran 1,2,3,6,7,8-HxCDF (CAS# 057117449) transferred off-site
41	Dioxin Congener 13	22,7	N	S	6.2	Amount of congener #13, 1,2,3,7,8,9-Hexachlorodibenzofuran 1,2,3,7,8,9-HxCDF (CAS# 072918219) transferred off-site
42	Dioxin Congener 14	22,7	N	S	6.2	Amount of congener #14, 2,3,4,6,7,8-Hexachlorodibenzofuran 2,3,4,6,7,8-HxCDF (CAS# 060851345) transferred off-site
43	Dioxin Congener 15	22,7	N	S	6.2	Amount of congener #15, 1,2,3,4,6,7,8-Heptachlorodibenzofuran 1,2,3,4,6,7,8-HpCDF (CAS# 067562394) transferred off-site
44	Dioxin Congener 16	22,7	N	S	6.2	Amount of congener #16, 1,2,3,4,7,8,9-Heptachlorodibenzofuran 1,2,3,4,7,8,9-HpCDF (CAS# 055673897) transferred off-site
45	Dioxin Congener 17	22,7	N	S	6.2	Amount of congener #17, 1,2,3,4,6,7,8,9-Octachlorodibenzofuran 1,2,3,4,6,7,8,9-OCDF (CAS# 039001020) transferred off-site
46	Calculated TEQ	22,7	N			The Calculated Toxics Equivalency Value. This value is calculated by summing the product of each reported congener amount by its Toxic Equivalency Factor.
47	Total Transfer	22,7	N	R II	6.2	The total amount of transfers of the chemical off-site as listed on the Form R, in section 6.2. This amount should also be equal the sum of the congeners.
48	Off Site Name	62	C	R II	6.2	Name of the Off-site transfer location
49	Off Site Address	62	C	R II	6.2	Address of the off-site transfer location
50	Off Site City	28	C	R II	6.2	City where the off-site transfer site is located
51	Off Site County	25	C	R II	6.2	County where the off-site transfer site is located
52	Off Site State	2	C	R II	6.2	State where the off-site transfer site is located
53	Off Site Province	25	C	R II	6.2	Province (non-US) where the off-site transfer site is located
54	Off Site ZIP	14	C	R II	6.2	ZIP code of the off-site transfer location
55	Off Site Country Abbr	3	C			3-character abbreviation of the country where the off-site transfer site is located. Examples = {USA, MEX, CAN, etc.}
56	Off Site Country	25	C			Full name of the country where the off-site transfer site is located

	Field Documentation for the "Transfer Details Data" file					
				Reference		
#	Field	Max Length	Data Type	Form and Part	Section	Definition
57	RCRA Num	12	C	R II	6.2	The Resource Conservation and Recovery Act (RCRA) number of the off-site transfer location
58	Controlled Location	12	C	R II	6.2	Indication of whether the off-site transfer location is under the control of the reporting facility. Values = {Yes,No}
59	Data Extracted On	11	C			Date the data was extracted. Format MM/DD/YYYY

APPENDIX A – Chemical Classification - Metals

Category 1 Metals

Chemical	CAS#	TRI Chemical ID
ANTIMONY	7440-36-0	007440360
ANTIMONY COMPOUNDS	N010	N010
ARSENIC	7440-38-2	007440382
ARSENIC COMPOUNDS	N020	N020
BERYLLIUM	7440-41-7	007440417
BERYLLIUM COMPOUNDS	N050	N050
CADMIUM	7440-43-9	007440439
CADMIUM COMPOUNDS	N078	N078
CHROMIUM	7440-47-3	007440473
CHROMIUM COMPOUNDS (EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)	N090	N090
COBALT	7440-48-4	007440484
COBALT COMPOUNDS	N096	N096
COPPER	7440-50-8	007440508
COPPER COMPOUNDS	N100	N100
LEAD	7439-92-1	007439921
LEAD COMPOUNDS	N420	N420
MANGANESE	7439-96-5	007439965
MANGANESE COMPOUNDS	N450	N450
MERCURY	7439-97-6	007439976
MERCURY COMPOUNDS	N458	N458
NICKEL	7440-02-0	007440020
NICKEL COMPOUNDS	N495	N495
SELENIUM	7782-49-2	007782492
SELENIUM COMPOUNDS	N725	N725
SILVER	7440-22-4	007440224
SILVER COMPOUNDS	N740	N740
THALLIUM	7440-28-0	007440280
THALLIUM COMPOUNDS	N760	N760
VANADIUM COMPOUNDS	N770	N770
ZINC COMPOUNDS	N982	N982

APPENDIX A – Chemical Classification - Metals (cont.)

Category 2 Metals

Chemical	CAS#	TRI Chemical ID
ALUMINUM OXIDE (FIBROUS FORMS)	1344-28-1	001344281
ALUMINUM PHOSPHIDE	20859-73-8	020859738
ASBESTOS (FRIABLE)	1332-21-4	001332214
BIS(TRIBUTYLTIN) OXIDE	56-35-9	000056359
BORON TRICHLORIDE	10294-34-5	010294345
BORON TRIFLUORIDE	7637-07-2	007637072
C.I. DIRECT BLUE 218	28407-37-6	028407376
C.I. DIRECT BROWN 95	16071-86-6	016071866
FENBUTATIN OXIDE	13356-08-6	013356086
FERBAM	14484-64-1	014484641
IRON PENTACARBONYL	13463-40-6	013463406
LITHIUM CARBONATE	554-13-2	000554132
MANEB	12427-38-2	012427382
METIRAM	9006-42-2	009006422
MOLYBDENUM TRIOXIDE	1313-27-5	001313275
OSMIUM TETROXIDE	20816-12-0	020816120
POTASSIUM BROMATE	7758-01-2	007758012
SODIUM NITRITE	7632-00-0	007632000
THORIUM DIOXIDE	1314-20-1	001314201
TITANIUM TETRACHLORIDE	7550-45-0	007550450
TRIBUTYLTIN FLUORIDE	1983-10-4	001983104
TRIBUTYLTIN METHACRYLATE	2155-70-6	002155706
TRIPHENYLTIN CHLORIDE	639-58-7	000639587
TRIPHENYLTIN HYDROXIDE	76-87-9	000076879
ZINEB	12122-67-7	012122677

Category 3 Metals

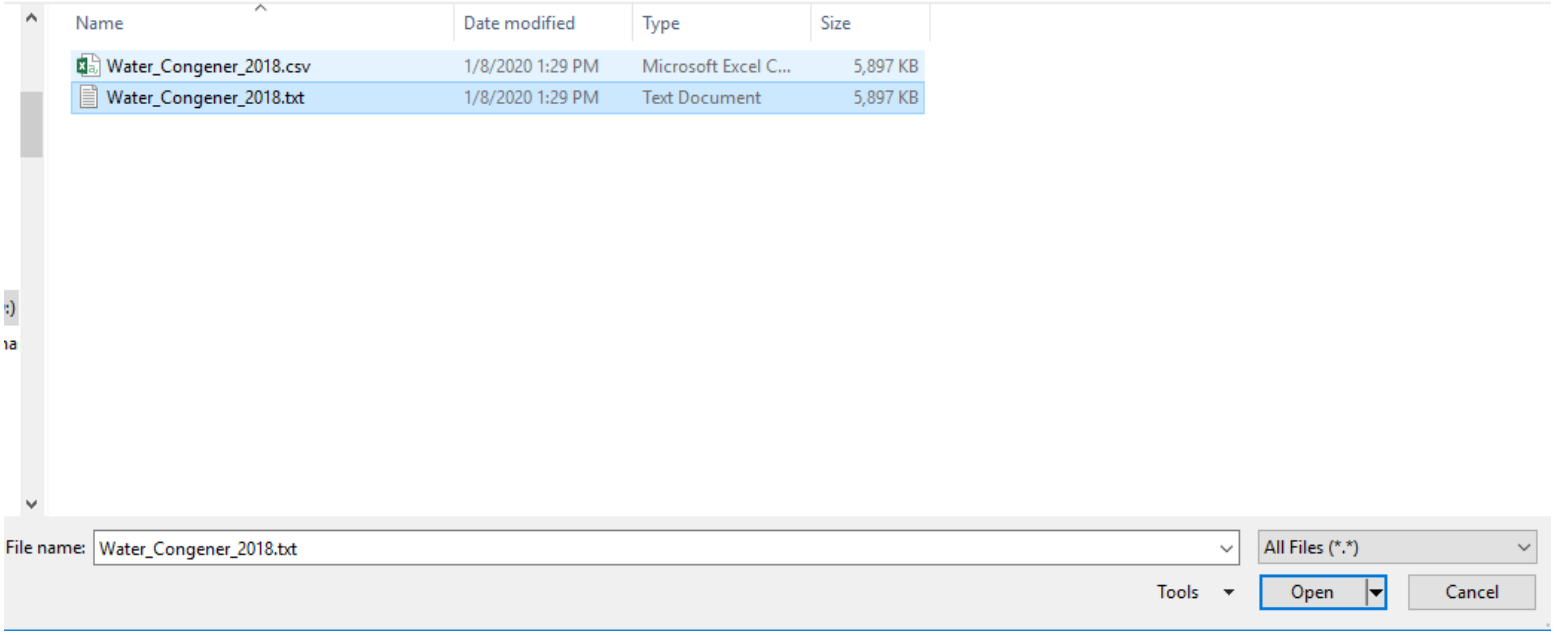
Chemical	CAS#	TRI Chemical ID
BARIUM	7440-39-3	007440393
BARIUM COMPOUNDS	N040	N040

Category 4 Metals

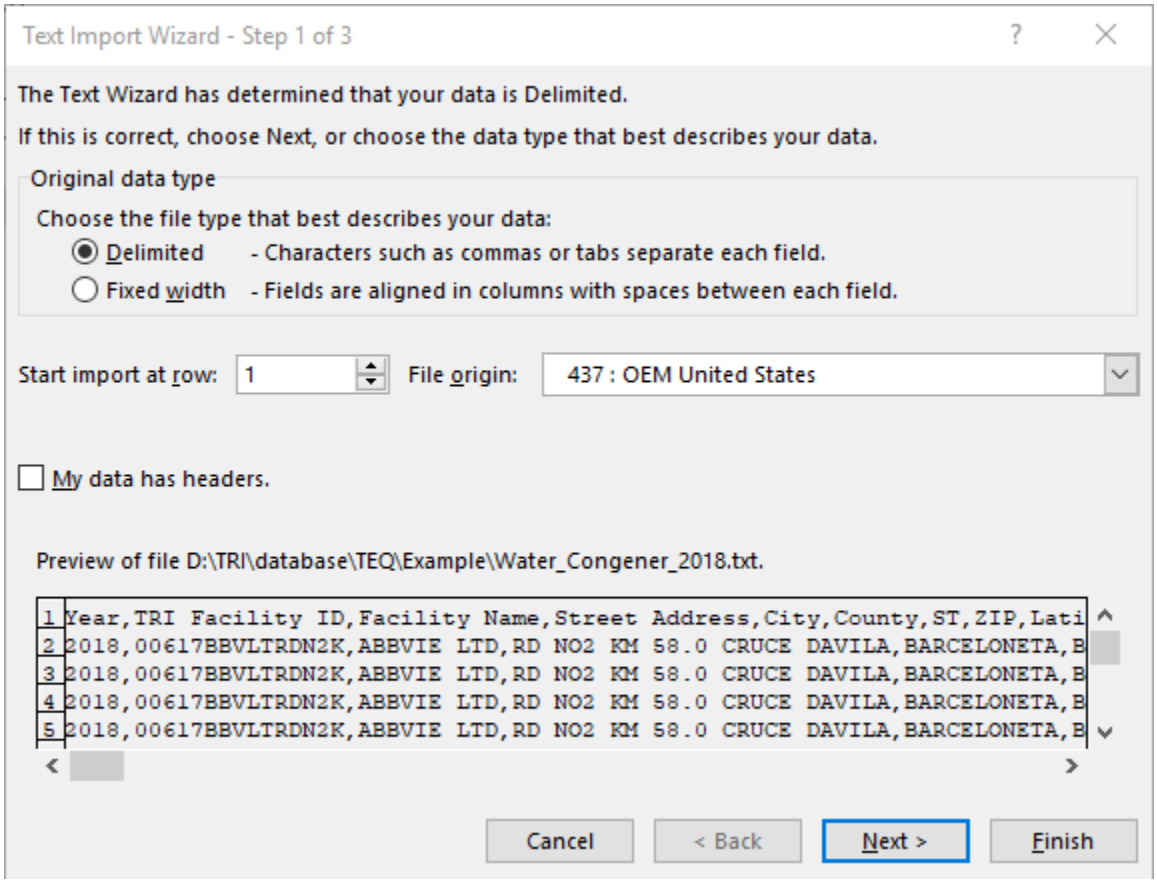
Chemical	CAS#	TRI Chemical ID
ALUMINUM (FUME OR DUST)	7429-90-5	007429905
VANADIUM (EXCEPT WHEN CONTAINED IN AN ALLOY)	7440-62-2	007440622
ZINC (FUME OR DUST)	7440-66-6	007440666

APPENDIX B – Example of Resolving Missing Leading Zeroes in MS Excel

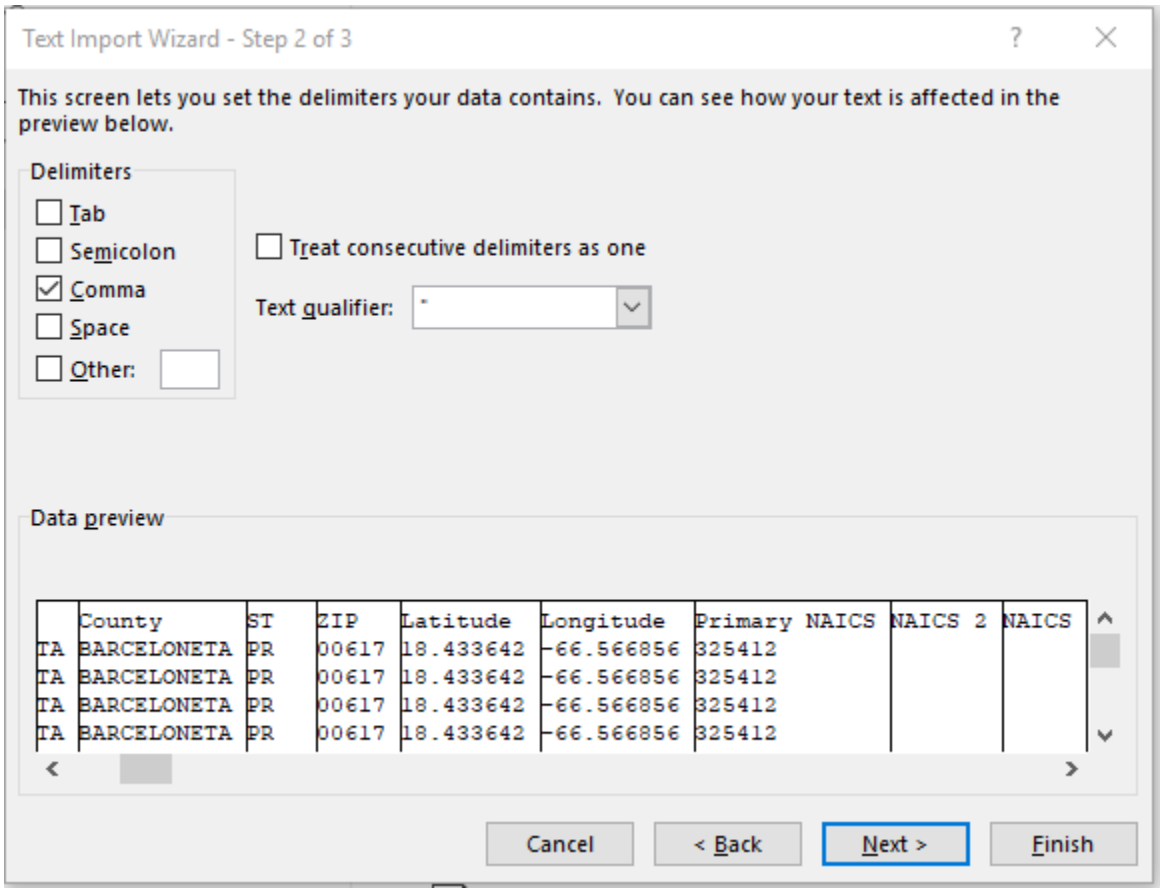
Here's an example of resolving missing leading zeroes in some data fields/columns when using MS Excel. I have downloaded the RY 2018 Water Congener Data file named "Water_Congener_2018.csv". I made a copy of the file and changed the file extension to .TXT. I then opened Excel and accessed the file by clicking FILE | OPEN. Choose the "All Files(*.*)" option when searching for the file. The original .csv file and the copy I made and renamed with the .txt extension are both visible. Highlight the .txt version and click the "Open" button. See image below.



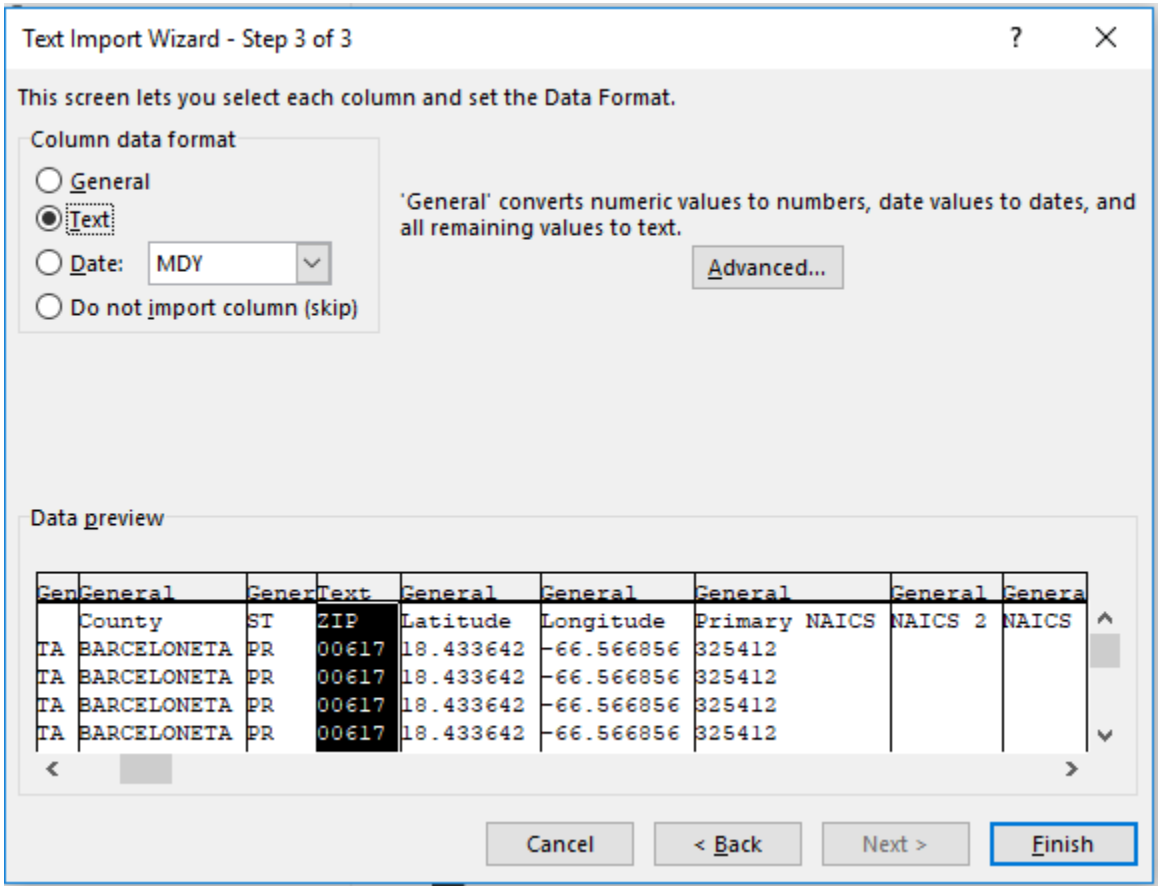
The “Text Import Wizard” will open and ask you if the file is “Delimited” or “Fixed width”. Choose “Delimited”. Then, click the “Next” button. See image below:



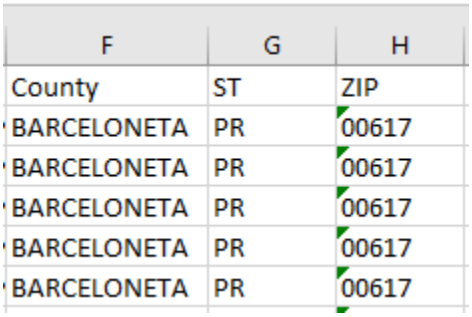
In the next step, uncheck the box in front of the “Tab” option (the default). Then, check the “Comma” option. Leave the “Text Qualifier as a double quote (“). Then, click the “Next” button. See image below:



In the final step of the “Text Import Wizard”, horizontally scroll to each of the columns where leading zeroes exist, highlight them and change their “Column data format” from “General” to “Text. Below, the “ZIP” column of the facility is highlighted (just click on the column to highlight) and the “Column data format” is changed from “General” to “Text”. See the image below. Note you can scroll to additional columns and change the “Column data format” for them before clicking the “Finish” button. Click “Finish” when you’re all done.



The data will appear in the worksheet and you’ll see the leading zeroes in the columns you redefined. See image below showing the facility “ZIP” with leading zeroes.



F	G	H
County	ST	ZIP
BARCELONETA	PR	00617
BARCELONETA	PR	00617
BARCELONETA	PR	00617
BARCELONETA	PR	00617
BARCELONETA	PR	00617