TOXICS RELEASE INVENTORY

BASIC PLUS DATA FILES DOCUMENTATION

FILE TYPE 3C: DETAILS OF TRANSFERS TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

For RY 2011 and Future Years

Updated for RY 2019

September 2020

EPA United States Environmental Protection Agency

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.

File	Example	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 3C CONTENTS

File Type 3C contains data about transfers of wastewater containing TRI chemicals to Publicly Owned Treatment Works (POTWs) for Reporting Year (RY) 2011 and onward. These data come from the TRI Reporting Form R, as shown in the table below. Each record in File Type 3C represents a single chemical transfer from the originating facility to one POTW, as listed on the originating facility's Form R. The identity of the POTW is listed, along with the amount of the transfer and a breakdown of how much of the transfer was released and treated. Beginning with RY 2018, each transfer quantity is broken down even further to show the quantity of the chemical released and treated via specific methods (referred to as "P codes").

Part	Section	Description
I	1	Reporting Year
I	1	Revision Codes
I	4	Facility Identification Information
I	5	Parent Company Information
I	1	Chemical Identification Data
II	6.1.A.1	Total Transfers (to POTWs)
II	6.1.A.2	Basis of Estimate
II	6.1.B	POTW Name and Address
II	6.1.C	Disposal/Treatment

For RY 1987 to 2010, EPA only required that facilities report a total POTW transfer amount and a list of POTW locations that received the chemical waste. The data for these years are found in the Basic Plus File 3B. File 3B has a different format that better fits the data from that time.

Range Codes

For transfers of non-Persistent Bio-accumulative chemicals (see "Appendix C: Persistent Bio-accumulative Toxics (PBTs))" under 1,000 pounds, facilities can report the amount of the transfer as either a numeric amount or a range code. The range codes are defined as follows:

Code	Range (Pounds)	Mid-Point (Pounds)
A	0 – 10	5
B	11-499	250
C	500-999	750

For this file, if a range code is reported, the midpoint of the range is used as the amount of the transfer. The actual range code is not listed in this file. Instead, its value, the midpoint of the range, is displayed and/or used in calculations.

New Data Elements Added for Reporting Year 2018

Beginning with RY 2018 (reporting forms due July 1, 2019), the TRI Program requires facilities to report more details about off-site chemical transfers to POTWs. Instead of just reporting a POTW transfer amount, facilities now report the details of how that transfer is managed (released or treated) at the POTW. To specify how the chemical will be managed, the TRI Program added nine new POTW transfer codes, called "P codes." (This is similar to how facilities report off-site transfers of chemicals to non-POTW sites (Part II, Section 6.2 of the Form R)).

The P codes are listed in the table below. The Total Release/Disposal, Total Treatment and Total Transfer amounts that appear in this file (3C) will be calculated from the amounts reported in these categories. The Total Release/Disposal amount will be the sum of amounts reported using P codes P30 to P36. The Total Treatment amount will be the sum of the amounts reported using P37, P38 and P39. The Total Transfer amount will be the sum of the amounts reported using all the P codes.

New Release/Disposal Codes:

Code	Description
P30	Discharged to Water Stream
P31	Discharged to Other Activities
P32	Released to Air
P33	Sludge to disposal
P34	Metals and metal compounds only – Sludge to incineration
P35	Sludge to agricultural applications
P36	Other or Unknown Disposal

New Treatment Codes:

Code	Description
P37	Other or Unknown treatment
P38	Sludge to incineration
P39	Experimental and Estimated Treatment Data (TRI Provided)

For RY 2012 to 2017, facilities only had to report one POTW transfer amount. This amount will appear in the Total Transfer field. Total Release and Total Treatment amounts will also appear for these years. For the details of how these amounts are calculated, see “Appendix D: POTW Release and Treatment Calculations.” For years prior to RY 2018, there won’t be any data in the P code fields (fields #81-94 and #98-103).

File 3C was designed to capture all information regarding POTW transfers, but not necessarily all the data. This file and its format are intended to make analysis of the POTW transfer data easier, while still capturing the relevant details.

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 https://www.epa.gov/uic

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 3C" 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 **Table Name**. 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.

	A	B	C	D
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
4	2016	NO	7585WSNDRS485HI	SANDERSON FARMS OAKWOOD FEED MILL

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 www.epa.gov/tri/guideme. The Envirofacts TRI data model is found at https://www.epa.gov/enviro/tri-model. These resources provide useful context and have additional details about certain data elements.

FILE TYPE 3C CONTENTS

No.	Field Name	Type	Description
1	FORM TYPE	C	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	C	Facility identification in the format zzzzznnnnnssssss, where usually zzzzz = facility zip code, nnnnn = first five consonants of the name, and sssss = first five non-specific characters in the street address. The three sections of the format were separated by hyphens prior to RY 2006. **NOTE:** *The content of this field is **not** changed to match facility ownership, or zip code changes. Rather, the TRI Facility ID identifies a specific geographical location which is 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	C	Unique identification number assigned to each submission by EPA. Format: TTYYMMMNNNNNC, where TT = document type YY = reporting year MMM = document type NNNNN= sequential number C = check digit *Source:* **TRI_REPORTING_FORM.**DOC_CTRL_NUM *Reference:* NA (System-generated)
4	CAS NUMBER	C	Chemical Abstracts Service (CAS) Registry Number for unique chemical, or category code (for compounds). **NOTE:** *CAS number 999999999 is for sanitized trade secret submissions; CHEM_NAME displays the reported generic chemical name.* *Source:* **TRI_REPORTING_FORM.**TRI_CHEM_ID *Reference:* Part II, Section 1.1
5	CHEMICAL NAME		Name of the chemical (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
6	MIXTURE NAME	C	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. 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

No.	Field Name	Type	Description
			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
7	ELEMENTAL METAL INCLUDED	C	Indicates whether the facility submitted a combined reporting form for a metal compound and the corresponding elemental metal. This data element collected beginning with RY 2018. VALUES: YES = combined reporting form submitted for both an elemental metal and a metal compound containing the same elemental metal; NO = only metal compound reported *Source:* **TRI_REPORTING_FORM.**ELEMENTAL_METAL_INCLUDED *Reference:* Part II, Section 1.2
8	CLASSIFICATION	C	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 chemical PBT = Persistent, Bioaccumulative and Toxic DIOXIN = Dioxin or dioxin-like compound *Source:* **TRI_CHEM_INFO.**CLASSIFICATION *Reference:* NONE
9	UNIT OF MEASURE	C	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 and reported in pounds. Values: {Pounds, Grams} *Source:* **TRI_CHEM_INFO.**UNIT_OF_MEASURE *Reference:* NONE
10	METAL_IND	C	Code indicating whether the is a metal or not. Yes = Metal No = Non-Metal See “Appendix B – Chemical Classifications – Metals” for a list of metals on the TRI chemical list. *Source:* **TRI_CHEM_INFO.**Metal_Ind
11	REVISION CODE 1	C	If the facility revised its original TRI reporting form for this chemical, this code indicates the reason for the revision. Values: RR1 = New Monitoring Data RR2 = New Emission Factors RR3 = New Chemical Concentration Data RR4 = Recalculation(s) RR5 = Other Reason(s) *Source:* **TRI_REPORTING_FORM.**Revision_Code
12	REVISION CODE 2	C	If the facility revised its original TRI reporting form for this chemical, this code indicates the reason for the revision. Values: RR1 = New Monitoring Data RR2 = New Emission Factors

No.	Field Name	Type	Description
			RR3 = New Chemical Concentration Data RR4 = Recalculation(s) RR5 = Other Reason(s) *Source:* **TRI_REPORTING_FORM.**Revision_Code
13	REPORTING YEAR	C	The calendar year in which the reported activities occurred. *Source:* **TRI_REPORTING_FORM.**REPORTING_YEAR *Reference:* Part I, Section 1
14	TRADE SECRET INDICATOR	C	Indicates 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
15	FACILITY NAME	C	Name of the reporting facility. *Source:* **TRI_FACILITY.**FACILITY_NAME *Reference:* Part I, Section 4.1
16	FACILITY STREET	C	Street address of the reporting facility. *Source:* **TRI_FACILITY.**STREET_ADDRESS *Reference:* Part I, Section 4.1
17	FACILITY CITY	C	City in which the reporting facility is located. *Source:* **TRI_FACILITY.**CITY_NAME *Reference:* Part I, Section 4.1
18	FACILITY COUNTY	C	County in which the reporting facility is located. *Source:* **TRI_FACILITY.**COUNTY_NAME *Reference:* Part I, Section 4.1
19	FACILITY STATE	C	Two-letter state code of the reporting facility. *Source:* **TRI_FACILITY.**STATE_ABBR *Reference:* Part I, Section 4.1
20	FACILITY ZIP CODE	C	ZIP code of the reporting facility. *Source:* **TRI_FACILITY.**ZIP_CODE *Reference:* Part I, Section 4.1
21	ASSIGNED FED. FACILITY FLAG	C	Code indicating whether the Facility is federal or not. Assigned by TRI. Yes = Federal No = Non-Federal *Source:* **TRI_FACILITY.**ASGN_FEDERAL
22	ASSIGNED PARTIAL FACILITY FLAG	C	Code indicating whether the facility is a multi-establishment and reports by part. Assigned by TRI. 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
23	BIA CODE	C	Three-letter Bureau of Indian Affairs (BIA) code indicating the tribal land the facility is on. *Source:* **FACILITY.**BIA_TRIBAL_CODE

No.	Field Name	Type	Description
24	TRIBE NAME	C	The name of the Tribe. *Source:* **V_INDIAN_COUNTRY.**
25	ENTIRE FACILITY IND	C	Indicates 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
26	PARTIAL FACILITY IND	C	Indicates whether the information covers an entire facility or part of a facility. Yes = partial No = entire *Source:* **TRI_REPORTING_FORM.**PARTIAL_FAC *Reference:* Part I, Section 4.2b
27	FEDERAL FACILITY IND	C	Code indicating whether a facility is a federal facility or not. Reported by facility. Yes = Federal No = non-Federal Value *Source:* **TRI_REPORTING_FORM.**FEDERAL_ FAC_IND *Reference:* Part I Section 4.2c
28	GOCO FACILITY IND	C	Code indicating whether a facility is a GOCO (Government Owned, Contractor-Operated) facility or not: Yes = GOCO No = non-GOCO *Source:* **TRI_REPORTING_FORM.**GOCO_ FLAG *Reference:* Part I Section 4.2d
29	PUBLIC CONTACT NAME	C	Name of the individual whom the public may contact if clarification of data is needed. Source: TRI_REPORTING_FORM.PUBLIC_ CONTACT_PERSON Reference: Part I, Section 4.4
30	PUBLIC CONTACT PHONE	C	Area code and telephone number of the public contact. *Source:* **TRI_REPORTING_FORM**.PUBLIC_ CONTACT_PHONE *Reference*: Part I, Section 4.4
31	PUBLIC CONTACT PHONE EXT	C	Phone extension of the public contact *Source:* **TRI_REPORTING_FORM**.PUBLIC_PHONE_EXT *Reference:* Part I, Section 4.4
32	PUBLIC CONTACT EMAIL	C	Email address of the designated individual whom the public may contact if clarification of the facility's reported data is needed. *Source:* **TRI_REPORTING_FORM**.PUBLIC_CONTACT_PERSON_EMAIL *Reference:* Part I, Section 4.4
33	PRIMARY SIC CODE	C	Primary four-digit Standard Industrial Classification (SIC) code. *Source:* **TRI_SUBMISSION_SIC.**SIC_CODE *Where:* primary_ind = >1' *Reference:* Part I, Section 4.5a
34	SIC CODE 2	C	Second four-digit Standard Industrial Classification (SIC) code entered by facility. *Source:* **TRI_SUBMISSION_SIC.**SIC_CODE

No.	Field Name	Type	Description
			Where: sic_sequence_num = >2' *Reference:* Part I, Section 4.5b
35	SIC CODE 3	C	Third four-digit Standard Industrial Classification (SIC) code entered by facility. *Source:* **TRI_SUBMISSION_SIC.**SIC_CODE *Where:* sic_sequence_num = >3' *Reference:* Part I, Section 4.5c
36	SIC CODE 4	C	Fourth four-digit Standard Industrial Classification (SIC) code entered by facility. *Source:* **TRI_SUBMISSION_SIC.**SIC_CODE *Where:* sic_sequence_num = >4' *Reference:* Part I, Section 4.5d
37	SIC CODE 5	C	Fifth four-digit Standard Industrial Classification (SIC) code entered by facility. *Source:* **TRI_SUBMISSION_SIC.** SIC_CODE *Where:* sic_sequence_num = >5' *Reference:* Part I, Section 4.5e
38	SIC CODE 6	C	Sixth four-digit Standard Industrial Classification (SIC) code entered by facility. *Source:* **TRI_SUBMISSION_SIC.** SIC_CODE *Where:* sic_sequence_num = >6' *Reference:* Part I, Section 4.5f
39	NAICS ORIGIN	C	Indicates whether NAICS codes were reported or assigned. R = Reported A = Assigned
40	PRIMARY NAICS CODE	C	Primary six-digit North American Standard Industry Classification System (NAICS) code. *Source:* **TRI_SUBMISSION_NAICS.**NAICS_CODE *Where:* primary_ind => 1 *Reference:* Part I, Section 4.5a
41	NAICS CODE 2	C	Second six-digit North American Standard Industry Classification System (NAICS) code entered by facility *Source:* **TRI_SUBMISSION_NAICS.**NAICS_CODE *Where:* naics_sequence_num = 2 *Reference:* Part I, Section 4.5b
42	NAICS CODE 3	C	Third six-digit North American Standard Industry Classification System (NAICS) code entered by facility. *Source:* **TRI_SUBMISSION_NAICS.**NAICS_CODE *Where:* naics_sequence_num = 3 *Reference:* Part I, Section 4.5b
43	NAICS CODE 4	C	Forth six-digit North American Standard Industry Classification System (NAICS) code entered by facility *Source:* **TRI_SUBMISSION_NAICS.**NAICS_CODE *Where:* naics_sequence_num = 4 *Reference:* Part I, Section 4.5b
44	NAICS CODE 5	C	Fifth six-digit North American Standard Industry Classification System (NAICS) code entered by facility *Source:* **TRI_SUBMISSION_NAICS.**NAICS_CODE

No.	Field Name	Type	Description
			Where: naics_sequence_num = 5 *Reference:* Part I, Section 4.5b
45	NAICS CODE 6	C	Sixth six-digit North American Standard Industry Classification System (NAICS) code entered by facility *Source:* **TRI_SUBMISSION_NAICS.**NAICS_CODE *Where:* naics_sequence_num = 6 *Reference:* Part I, Section 4.5b
46	LATITUDE	N	The latitude value that best represents the facility according to EPA's Facility Registry System (FRS). In RY 2005, EPA stopped collecting the latitude value and began obtaining it from FRS. Format: signed 2-digit whole number, 6 digit decimal positions (+nn.nnnnnn). *Source:* **EPA's Facility Registry System**
47	LONGITUDE	N	The longitude value that best represents the facility according to EPA's Facility Registry System (FRS). In 2005, TRI stopped collecting the longitude value and began obtaining it from FRS. Format: signed 3-digit whole number, 6-digit decimal positions (+nnn.nnnnnn). *Source:* **EPA's Facility Registry System**
48	D&B NR A	C	Unique identification number assigned by Dun and Bradstreet to the reporting facility. *Source:* **TRI_FACILITY_DB.**DB_NUM *Reference:* Part I, Section 4.7a
49	D&B NR B	C	Unique identification number assigned by Dun and Bradstreet to the reporting facility. *Source:* **TRI_FACILITY_DB.**DB_NUM *Reference:* Part I, Section 4.7b
50	RCRA NR A	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
51	RCRA NR B	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
52	RCRA NR C	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
53	RCRA NR D	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
54	RCRA NR E	C	Twelve-digit alphanumeric identifier assigned by EPA per the

No.	Field Name	Type	Description
			Resource Conservation and Recovery Act (RCRA). 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**
55	RCRA NR F	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
56	RCRA NR G	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
57	RCRA NR H	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
58	RCRA NR I	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
59	RCRA NR J	C	Twelve-digit alphanumeric identifier assigned by EPA per the Resource Conservation and Recovery Act (RCRA). 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**
60	NPDES NR A	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
61	NPDES NR B	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
62	NPDES NR C	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
63	NPDES NR D	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS).

No.	Field Name	Type	Description
			Source: **EPA's Facility Registry System**
64	NPDES NR E	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
65	NPDES NR F	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
66	NPDES NR G	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
67	NPDES NR H	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
68	NPDES NR I	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
69	NPDES NR J	C	Nine-digit alphanumeric identifier assigned to a facility in EPA's National Pollutant Discharge Elimination System (NPDES). In RY 2005, TRI stopped collecting NPDES IDs and began obtaining them from EPA's Facility Registry System (FRS). *Source:* **EPA's Facility Registry System**
70	PARENT COMPANY NAME	C	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
71	PARENT COMPANY D&B NR	C	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
72	STANDARDIZED PARENT COMPANY NAME	C	Standardized Parent Company Name assigned by TRI. Source: **TRI_FACILITY.**STANDARDIZED_PARENT_COMPANY
73	FRS FACILITY ID	C	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.

No.	Field Name	Type	Description
			Source: **TRI_FACILITY.**EPA_REGISTRY_ID
74	POTW NAME	C	Name of the Publicly Owned Treatment Works (POTW) location to which the wastewater containing the reported chemical was sent. *Source:* **TRI_POTW_LOCATION.**POTW_NAME *Reference:* Part II, Section 6.1
75	POTW ADDRESS	C	Street address of the POTW location to which the chemical was sent. *Source:* **TRI_POTW_LOCATION.**POTW_STREET *Reference:* Part II, Section 6.1
76	POTW CITY	C	Name of the city in which the POTW site is located. *Source:* **TRI_POTW_LOCATION.**CITY_NAME *Reference:* Part II, Section 6.1
77	POTW STATE	C	The two-letter state abbreviation of the POTW site. *Source:* **TRI_POTW_LOCATION.**STATE_ABBR *Reference:* Part II, Section 6.1
78	POTW COUNTY	C	Name of the county in which the POTW site is located. *Source:* **TRI_POTW_LOCATION.**COUNTY_NAME *Reference:* Part II, Section 6.1
79	POTW ZIP	C	ZIP code used in the address of a POTW site. *Source:* **TRI_POTW_LOCATION.**ZIP_CODE *Reference:* Part II, Section 6.1
80	POTW REGISTRY ID	C	Indicates the Facility Registry Service (FRS) ID for the POTW to which wastewater containing the reported chemical was sent. 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_POTW_LOCATION.**EPA_REGISTRY_ID
81	QUANTITY TRANSFERRED	N	Total quantity of the chemical contained in wastewater transferred off site to the Publicly Owned Treatment Works (POTW). This is the sum of the numeric estimate and the range code reported by the facility. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_TOTAL + **TRI_TRANSFER_QTY.**TRANSFER_ RANGE_CODE *Reference:* Part II, Section 6.1._.A
82	BASIS OF ESTIMATE	C	A code indicating the principal method by which the QUANTITY TRANSFERRED (field #79) was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
83	DISCHARGES TO WATER STREAMS	N	The total quantity of the chemical reported as transferred to the POTW for release using the code **P30**: Discharges to Water Streams. This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018.

No.	Field Name	Type	Description
			Source: **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P30' *Reference:* Part II, Section 6.1._.A
84	DISCHARGES TO WATER STREAMS – BASIS OF ESTIMATE	C	A code indicating the principal method by which "Discharges to Water Streams" was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_EST_CODE *Reference:* Part II, Section 6.1._.2
85	DISCHARGES TO OTHER ACTIVITIES	N	The total quantity of the chemical reported as transferred to the POTW for release using the code **P31:** Discharges to Other Activities (such as watering golf courses, agricultural land, etc.). This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P31' *Reference:* Part II, Section 6.1._.A
86	DISCHARGES TO OTHER ACTIVITIES – BASIS OF ESTIMATE	C	A code indicating the principal method by which "Discharges to Other Activities" was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
87	RELEASED TO AIR	N	The total quantity of the chemical reported as transferred to the POTW for release using the code **P32:** Released to Air. This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P32' *Reference:* Part II, Section 6.1._.A
88	RELEASED TO AIR – BASIS OF ESTIMATE	C	A code indicating the principal method by which "Released to Air" was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
89	SLUDGE TO DISPOSAL	N	The total quantity of the chemical reported as transferred to the POTW for release using the code **P33**. Sludge to Disposal. This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE

No.	Field Name	Type	Description
			Where: **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P33' *Reference:* Part II, Section 6.1._.A
90	SLUDGE TO DISPOSAL – BASIS OF ESTIMATE	C	A code indicating the principal method by which "Sludge to Disposal" was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
91	SLUDGE TO INCINERATION - METALS	N	The total quantity of the chemical reported as transferred to the POTW for release using the code **P34:** Sludge to incineration - Metals. This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P34' *Reference:* Part II, Section 6.1._.A
92	SLUDGE TO INCINERATION - METALS - BASIS OF ESTIMATE	C	A code indicating the principal method by which "Sludge to incineration - Metals" was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
93	SLUDGE TO AGRICULTURAL APPLICATIONS	N	The total quantity of the chemical reported as transferred to the POTW for release using the code **P35:** Sludge to agricultural applications. This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P35' *Reference:* Part II, Section 6.1._.A
94	SLUDGE TO AGRICULTURAL APPLICATIONS – BASIS OF ESTIMATE	C	A code indicating the principal method by which "Sludge to agricultural applications" was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
95	OTHER OR UNKNOWN DISPOSAL	N	The total quantity of the chemical reported as transferred to the POTW for release using the code **P36:** Other or Unknown Disposal. This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P36'

No.	Field Name	Type	Description
			Reference: Part II, Section 6.1._.A
96	OTHER OR UNKNOWN DISPOSAL - BASIS OF ESTIMATE	C	A code indicating the principal method by which "Other or Unknown Disposal" was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
97	OFF-SITE POTW RELEASES – 8.1C	N	The total quantity of the chemical transferred to publicly-owned treatment works (POTWs) that is disposed of or released to Class I Underground Injection Wells, RCRA C Landfills and/or Other (Non RCRA C) Landfills. This amount is one of the quantities added into Section 8.1C: "Total Off-site Disposal to Class I Underground Injection Wells, RCRA Subtitle C Landfills and other Landfills." This field (#95) is the sum of rows #87 and #89. *Source:* **TRI_FORM_TOTALS**.POTW_RELEASE_81C *Reference:* Part II, Section 6.1
98	OFF-SITE POTW RELEASES – 8.1D	N	The total quantity of the chemical transferred to publicly-owned treatment works (POTWs) that is disposed of or released to media other than Class I Underground Injection Wells, RCRA C Landfills and/or Other (Non RCRA C) Landfills. This amount is one of the quantities added into Section 8.1D: "Total Other Off-site Disposal or Other Releases." This field (#96) is the sum of rows #81, #83, #85, #91, and #93. *Source:* **TRI_FORM_TOTALS**.POTW_RELEASE_81D *Reference:* Part II, Section 6.1
99	OFF-SITE - POTW RELEASES	N	The total quantity of the chemical transferred to and released at the POTW. For reporting years 2018 and forward, this is the sum of fields #95 and #96. For reporting years 2012-2017, see "Appendix D – POTW Release and Treatment Calculations" for an explanation of how this total is calculated.
100	OTHER OR UNKNOWN TREATMENT	N	The total quantity of the chemical reported as transferred to the POTW for treatment using the code **P37:** Other or Unknown treatment. This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P37' *Reference:* Part II, Section 6.1._.A
101	OTHER OR UNKNOWN TREATMENT – BASIS OF ESTIMATE	C	A code indicating the principal method by which "Other or Unknown treatment" was calculated. See Appendix A – Basis of Estimate Codes for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
102	SLUDGE TO INCINERATION – NONMETALS	N	The total quantity of the chemical reported as transferred to the POTW for treatment using the code **P38:** Sludge to incineration – Nonmetals. This total includes the sum of all

No.	Field Name	Type	Description
			numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P38' *Reference:* Part II, Section 6.1._.A
103	SLUDGE TO INCINERATION – NONMETALS – BASIS OF ESTIMATE	C	A code indicating the principal method by which "Sludge to incineration – Nonmetals" was calculated. See "Appendix A – Basis of Estimate Codes" for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
104	EXPERIMENTAL AND ESTIMATED TREATMENT DATA (TRI PROVIDED)	N	The total quantity of the chemical reported as transferred to the POTW using the code "**P39:** Experimental and Estimated Treatment Data (TRI Provided)." This total includes the sum of all numeric estimates and range codes reported under this code. This code was added in RY 2018. *Source:* **TRI_TRANSFER_QTY.**TOTAL_TRANSFER + **TRI_TRANSFER_QTY**. TRANSFER_RANGE_CODE *Where:* **TRI_TRANSFER_QTY.**TYPE_OF_WASTE_MANAGEMENT = 'P39' *Reference:* Part II, Section 6.1._.A
105	EXPERIMENTAL AND ESTIMATED TREATMENT DATA (TRI PROVIDED) – BASIS OF ESTIMATE	C	A code indicating the principal method by which "Experimental and Estimated Treatment Data (TRI Provided)" was calculated. See "Appendix A – Basis of Estimate Codes" for a list of codes and their definitions. *Source:* **TRI_TRANSFER_QTY.**TRANSFER_BASIS_ EST_CODE *Reference:* Part II, Section 6.1._.2
106	TOTAL TREATED	N	The total quantity of the chemical transferred to and treated at the POTW. For reporting years 2018 and forward, this is the sum of fields #98 + #100 + #103. For reporting years 2012–2017, see "Appendix D – POTW Release and Treatment Calculations" for an explanation of how this total is calculated.

APPENDIX A – Basis of Estimate Codes

Basis of Estimate Code	Definition	Notes
C	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	
O	Other	
X	Invalid Data	This code represents when a facility reported Basis of Estimate codes not within the defined set of legal codes.
Z	Multiple BOE 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 code. 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.	

APPENDIX B – Chemical Classification - Metals

Category 1 Metals (Metal_Ind = '1')

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 B – Chemical Classification - Metals (cont.)

Category 2 Metals (Metal_Ind = '2')

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 (Metal_Ind = '3')

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

Category 4 Metals (Metal_Ind = '4')

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 C - Persistent Bio-accumulative Toxics (PBTs)

Chemical	CAS#	TRI Chemical ID
ALDRIN	309-00-2	000309002
BENZO(G H I)PERYLENE	191-24-2	000191242
CHLORDANE	57-74-9	000057749
DIOXIN AND DIOXIN-LIKE COMPOUNDS	N150	N150
HEPTACHLOR	76-44-8	000076448
HEXABROMOCYCLODODECANE	N270	N270
HEXACHLOROBENZENE	118-74-1	000118741
ISODRIN	465-73-6	000465736
LEAD	7439-92-1	007439921
LEAD COMPOUNDS	N420	N420
MERCURY	7439-97-6	007439976
MERCURY COMPOUNDS	N458	N458
METHOXYCHLOR	72-43-5	000072435
OCTACHLOROSTYRENE	29082-74-4	029082744
PENDIMETHALIN	40487-42-1	040487421
PENTACHLOROBENZENE	608-93-5	000608935
POLYCHLORINATED BIPHENYLS	1336-36-3	001336363
POLYCYCLIC AROMATIC COMPOUNDS	N590	N590
TETRABROMOBISPHENOL A	79-94-7	000079947
TOXAPHENE	8001-35-2	008001352
TRIFLURALIN	1582-09-8	001582098

APPENDIX D – POTW Release and Treatment Calculations

The calculation of POTW Releases and POTW Treatment is divided into three categories: 1) prior to and including RY 2013, 2) RY 2014-2017, and 3) RY 2018 and after.

Reporting Years 1987 to 2013:

For RY 2013 and before, to calculate the amount released at a POTW (Row #97 – OFF-SITE - POTW RELEASES), multiply the total POTW transfer reported in section 6.1 of the Form R by 1.00 for all chemicals that are metals. See "Appendix B – Chemical Classification – Metals" for a list of TRI chemicals that are metals. Prior to and including RY 2013, all POTW transfers for chemicals classified as metals are considered 100% released. To calculate the POTW Treatment quantity, subtract the POTW Release from the total POTW transfer.

Reporting Years 2014 to 2017:

For RY 2014 to 2017, the TRI Program required all facilities to submit TRI data to EPA electronically (except for trade secret submissions) using the TRI-MEweb software. For these reporting years, the TRI Program also changed the way it calculated POTW Releases and POTW Treatment as well as Off-site Releases in Section 8.1c and 8.1d of the Form R, and off-site Treatment of a chemical in section 8.7.

The TRI-MEweb software allows facilities to specify how their POTW transfers are managed using three percentages, which correspond to the "Source Reduction and Recycling Activities" in Section 8 of the Form R and are as follows:

Item	Description Form	Form R Section
A	Percentage released to Underground Injection Class I Wells, RCRA C Landfills and/or Other Landfills	8.1c
B	Percentage released to other media not specified in item	8.1d
C	Percentage not released, but treated in some manner	8.7

If a facility does provide these percentages, then the POTW Release quantity is calculated by multiplying the amount of the transfer by the percentages provided in items A and B (above) and adding those two numbers together. Then, to calculate the POTW Treatment amount, subtract the POTW Release from the total POTW transfer.

For example, if a facility reported a POTW transfer of 100 pounds and reported the percentages shown below, the POTW Release would be 90 pounds and the POTW Treatment amount would be 10 pounds.

A	Percentage released to Underground Injection Class I Wells, RCRA C Landfills and/or Other Landfills	60%
B	Percentage released to other media not specific in item A	30%
C	Percentage not released, but treated in some manner	10%

If the facility does not provide the percentages, then the POTW Release amount will be back-calculated using the default percentages for each chemical (provided by EPA's Office of Water) and other data on the form R. See the "Default Chemical Percentages" table below.

The first step in this process is to calculate the Section 8.1c, 8.1d and 8.7 amounts on the Form R. These are done automatically via the TRI-MEweb software. The procedure is as follows:

Section 8.1c: Total Off-site Disposal to Class I Underground Injection Wells, RCRA Subtitle C Landfills, and Other Landfills is calculated as follows:

* Section 6.1 (portion of transfer that is not treated for destruction and is ultimately disposed of in landfills or UIC Class I Wells – This is item A in the table above calculated by multiplying the transfer amount by the default percentage for the chemical for 8.1C) + Section 6.2 (quantities associated with M codes M64, M65 and M81) - Section 8.8 (catastrophic, remedial or one-time releases to off-site disposal to landfills or UIC Class I Wells)

Section 8.1d: Total Other Off-site Disposal or Other Releases

* Section 6.1 (portion of transfer that is not treated for destruction and is ultimately disposed of or otherwise released, other than disposal to landfills or UIC Class I Wells – This is item B in the table above calculated by multiplying the default percentages for the chemical for 8.1D) + Section 6.2 (quantities associated with M codes M10, M41, M62, M66, M67, M73, M79, M82, M90, M94, and M99) - Section 8.8 (catastrophic, remedial or one-time releases for off-site disposal or other releases, other than disposal to landfills or UIC Class I Wells)

Section 8.7: Quantity Treated Off-site

* Section 6.1 (portion of transfer that is ultimately treated – This is item C as referred to in the table above calculated by multiplying the default percentages for the chemical for 8.7) + Section 6.2 (treatment) - Section 8.8 (off-site treatment)

The next step is to check that following equation is true. The equation will be true if there are no data quality errors within the form and no rounding of data was undertaken in Section 8. The equation is:

8.7 + 8.1c + 8.1d = 6.1 + 6.2 (release M codes) + 6.2 (treatment M codes).

* Release M codes are: M10, M40, M41, M61, M62, M71, M81, M82, M72, M63, M66, M67, M64, M65, M73, M79, M90, M91, M94, M99

* Treatment M codes are: M40, M50, M54, M61, M69, and M95.

If the two values on either side of the equation are equal, POTW Release = 8.1c + 8.1d - 6.2 (release M-codes). Then, to calculate the POTW Treatment amount, subtract the POTW Release from the total POTW transfer.

If the two values on either side of the equation are NOT equal, percentages cannot be back-calculated. The POTW Release is equal to the sum of the POTW transfer multiplied by the default release percentages of the chemical for 8.1C and 8.1D (see the “Default Percentages” table below). Then, to calculate the POTW Treatment amount, subtract the POTW Release from the total POTW transfer.

Beginning in Reporting Year 2018:

For RY 2018 and after, to calculate the total amount released at a POTW (Row #97 – Off-site – POTW Releases), add the quantities reported using these P codes:

Description	P Code	Row Above
Discharges to Water Streams	P30	80
Discharges to Other Activities	P31	82
Released to Air	P32	84
Sludge to Disposal	P33	86
Sludge to incineration – Metals	P34	88
Sludge to agricultural applications	P35	90
Other or Unknown Disposal	P36	92

To calculate the total amount treated at the POTW (Row #103 – Total Treated), add the quantities for these reported amounts:

Description	P Code	Row Above
Other or Unknown Treatment	P37	97
Sludge to incineration – Nonmetals	P38	99
Experimental and Estimated Treatment Data (TRI Provided	P39	101

Default Chemical Percentages

8.1C - Releases/disposal to Landfills or UIC Class I Wells
8.1D - All other releases/disposal not classified in 8.1C
8.7 – Treatment

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
000354110	1,1,1,2-TETRACHLORO-2-FLUOROETHANE	3	84	13
000630206	1,1,1,2-TETRACHLOROETHANE	3	82	15
000071556	1,1,1-TRICHLOROETHANE	1	95	4
000354143	1,1,2,2-TETRACHLORO-1-FLUOROETHANE	3	84	13
000079345	1,1,2,2-TETRACHLOROETHANE	2	78	20
000079005	1,1,2-TRICHLOROETHANE	1	82	17
013474889	1,1-DICHLORO-1,2,2,3,3-PENTAFLUOROPROPANE	0	0	100
000812044	1,1-DICHLORO-1,2,2-TRIFLUOROETHANE	0	0	100
111512562	1,1-DICHLORO-1,2,3,3,3-PENTAFLUOROPROPANE	0	0	100
001717006	1,1-DICHLORO-1-FLUOROETHANE	1	96	3
000057147	1,1-DIMETHYL HYDRAZINE	1	25	74
000096184	1,2,3-TRICHLOROPROPANE	2	56	42
000120821	1,2,4-TRICHLOROBENZENE	19	22	59
000095636	1,2,4-TRIMETHYLBENZENE	11	21	68

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
000106887	1,2-BUTYLENE OXIDE	0	27	73
000096128	1,2-DIBROMO-3-CHLOROPROPANE	4	72	24
000106934	1,2-DIBROMOETHANE	1	60	39
000422446	1,2-DICHLORO-1,1,2,3,3-PENTAFLUOROPROPANE	0	0	100
000354234	1,2-DICHLORO-1,1,2-TRIFLUOROETHANE	1	98	1
000431867	1,2-DICHLORO-1,1,3,3,3-PENTAFLUOROPROPANE	0	0	100
001649087	1,2-DICHLORO-1,1-DIFLUOROETHANE	1	97	2
000095501	1,2-DICHLOROBENZENE	7	47	46
000107062	1,2-DICHLOROETHANE	1	64	35
000540590	1,2-DICHLOROETHYLENE	1	74	25
000078875	1,2-DICHLOROPROPANE	1	70	29
000122667	1,2-DIPHENYLHYDRAZINE	4	46	50
000095545	1,2-PHENYLENEDIAMINE	1	55	44
000615281	1,2-PHENYLENEDIAMINE DIHYDROCHLORIDE	0	0	100
000106990	1,3-BUTADIENE	1	86	13
000507551	1,3-DICHLORO-1,1,2,2,3-PENTAFLUOROPROPANE	3	96	1
136013791	1,3-DICHLORO-1,1,2,3,3-PENTAFLUOROPROPANE	0	0	100
000541731	1,3-DICHLOROBENZENE	8	47	45
000542756	1,3-DICHLOROPROPYLENE	1	44	55
000108452	1,3-PHENYLENEDIAMINE	1	55	44
000764410	1,4-DICHLORO-2-BUTENE	1	84	15
000106467	1,4-DICHLOROBENZENE	7	49	44
000123911	1,4-DIOXANE	1	55	44
000624180	1,4-PHENYLENEDIAMINE DIHYDROCHLORIDE	0	0	100
004080313	1-(3-CHLOROALLYL)-3,5,7-TRIAZA-1-AZONIAADAMANTANE CHLORIDE	1	55	44
000081492	1-AMINO-2,4-DIBROMOANTHRAQUINONE	0	0	100
000082280	1-AMINO-2-METHYLANTHRAQUINONE	0	0	100
035691657	1-BROMO-1-(BROMOMETHYL)-1,3-PROPANEDICARBONITRILE	0	0	100
000106945	1-BROMOPROPANE			
000354256	1-CHLORO-1,1,2,2-TETRAFLUOROETHANE	0	99	1
000075683	1-CHLORO-1,1-DIFLUOROETHANE	1	98	1
003296900	2,2-BIS(BROMOMETHYL)-1,3-PROPANEDIOL	0	0	100
128903219	2,2-DICHLORO-1,1,1,3,3-PENTAFLUOROPROPANE	0	0	100
000306832	2,2-DICHLORO-1,1,1-TRIFLUOROETHANE	1	98	1
002655154	2,3,5-TRIMETHYLPHENYL METHYLCARBAMATE	0	0	100
000422480	2,3-DICHLORO-1,1,1,2,3-PENTAFLUOROPROPANE	0	0	100
000078886	2,3-DICHLOROPROPENE	1	67	32
000095954	2,4,5-TRICHLOROPHENOL	13	25	62
000088062	2,4,6-TRICHLOROPHENOL	9	9	82
000094757	2,4-D	2	6	92
053404378	2,4-D 2-ETHYL-4-METHYLPENTYL ESTER	21	0	79
001928434	2,4-D 2-ETHYLHEXYL ESTER	22	0	78
001929733	2,4-D BUTOXYETHYL ESTER	12	1	87

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
000094804	2,4-D BUTYL ESTER	15	1	84
002971382	2,4-D CHLOROCROTYL ESTER	16	0	84
000094111	2,4-D ISOPROPYL ESTER	8	2	90
001320189	2,4-D PROPYLENE GLYCOL BUTYL ETHER ESTER	15	0	85
002702729	2,4-D SODIUM SALT	2	6	92
000094826	2,4-DB	0	0	100
000615054	2,4-DIAMINOANISOLE	0	0	100
039156417	2,4-DIAMINOANISOLE SULFATE	0	0	100
000095807	2,4-DIAMINOTOLUENE	1	55	44
000120832	2,4-DICHLOROPHENOL	3	5	92
000105679	2,4-DIMETHYLPHENOL	1	23	76
000051285	2,4-DINITROPHENOL	1	24	75
000121142	2,4-DINITROTOLUENE	1	54	45
000541537	2,4-DITHIOBIURET	1	51	48
000120365	2,4-DP	8	34	58
000576261	2,6-DIMETHYLPHENOL	0	0	100
000606202	2,6-DINITROTOLUENE	2	53	45
000087627	2,6-XYLIDINE	2	53	45
000053963	2-ACETYLAMINOFLUORENE	5	42	53
000117793	2-AMINOANTHRAQUINONE	2	52	46
000052517	2-BROMO-2-NITROPROPANE-1,3-DIOL	0	0	100
002837890	2-CHLORO-1,1,1,2-TETRAFLUOROETHANE	0	99	1
000075887	2-CHLORO-1,1,1-TRIFLUOROETHANE	0	99	1
000532274	2-CHLOROACETOPHENONE	0	0	100
000110805	2-ETHOXYETHANOL	0	8	92
000149304	2-MERCAPTOBENZOTHIAZOLE	2	52	46
000109864	2-METHOXYETHANOL	0	8	92
000075865	2-METHYLLACTONITRILE	0	0	100
000109068	2-METHYLPYRIDINE	0	8	92
000088755	2-NITROPHENOL	1	59	40
000079469	2-NITROPROPANE	1	26	73
000090437	2-PHENYLPHENOL	3	5	92
000091941	3,3'-DICHLOROBENZIDINE	9	32	59
000612839	3,3'-DICHLOROBENZIDINE DIHYDROCHLORIDE	9	32	59
064969342	3,3'-DICHLOROBENZIDINE SULFATE	0	0	100
000119904	3,3'-DIMETHOXYBENZIDINE	1	54	45
020325400	3,3'-DIMETHOXYBENZIDINE DIHYDROCHLORIDE	1	55	44
111984099	3,3'-DIMETHOXYBENZIDINE HYDROCHLORIDE	0	0	100
000119937	3,3'-DIMETHYLBENZIDINE	1	23	76
000612828	3,3'-DIMETHYLBENZIDINE DIHYDROCHLORIDE	0	0	100
041766750	3,3'-DIMETHYLBENZIDINE DIHYDROFLUORIDE	0	0	100
000422560	3,3-DICHLORO-1,1,1,2,2-PENTAFLUOROPROPANE	3	96	1
000460355	3-CHLORO-1,1,1-TRIFLUOROPROPANE	1	98	1

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
000563473	3-CHLORO-2-METHYL-1-PROPENE	1	93	6
000542767	3-CHLOROPROPIONITRILE	1	55	44
055406536	3-IODO-2-PROPYNYL BUTYLCARBAMATE	1	23	76
000101804	4,4'-DIAMINODIPHENYL ETHER	1	24	75
000080057	4,4'-ISOPROPYLIDENEDIPHENOL	5	14	81
000101144	4,4'-METHYLENEBIS(2-CHLOROANILINE)	17	18	65
000101611	4,4'-METHYLENEBIS(N,N-DIMETHYL)BENZENAMINE	0	0	100
000101779	4,4'-METHYLENEDIANILINE	1	24	75
000139651	4,4'-THIODIANILINE	0	0	100
000534521	4,6-DINITRO-O-CRESOL	2	53	45
000060093	4-AMINOAZOBENZENE	8	35	57
000092671	4-AMINOBIPHENYL	3	47	50
000060117	4-DIMETHYLAMINOAZOBENZENE	35	5	60
000092933	4-NITROBIPHENYL	0	0	100
000100027	4-NITROPHENOL	0	93	7
000099592	5-NITRO-O-ANISIDINE	0	0	100
000099558	5-NITRO-O-TOLUIDINE	1	54	45
071751412	ABAMECTIN	44	2	54
030560191	ACEPHATE	1	55	44
000075070	ACETALDEHYDE	0	9	91
000060355	ACETAMIDE	0	8	92
000067641	ACETONE	0	0	100
000075058	ACETONITRILE	1	25	74
000098862	ACETOPHENONE	0	8	92
062476599	ACIFLUORFEN, SODIUM SALT	12	25	63
000107028	ACROLEIN	0	9	91
000079061	ACRYLAMIDE	0	8	92
000079107	ACRYLIC ACID	0	8	92
000107131	ACRYLONITRILE	0	9	91
015972608	ALACHLOR	7	11	82
000116063	ALDICARB	1	54	45
000309002	ALDRIN	62	1	37
000107186	ALLYL ALCOHOL	0	8	92
000107051	ALLYL CHLORIDE	1	85	14
000107119	ALLYLAMINE	1	25	74
000319846	ALPHA-HEXACHLOROCYCLOHEXANE	0	0	100
000134327	ALPHA-NAPHTHYLAMINE	1	24	75
007429905	ALUMINUM (FUME OR DUST)	66	34	0
001344281	ALUMINUM OXIDE (FIBROUS FORMS)	2	98	0
020859738	ALUMINUM PHOSPHIDE	2	98	0
000834128	AMETRYN	4	45	51
033089611	AMITRAZ	0	0	100
000061825	AMITROLE	1	55	44

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
007664417	AMMONIA	0	40	60
006484522	AMMONIUM NITRATE (SOLUTION)	0	0	100
007783202	AMMONIUM SULFATE (SOLUTION)	0	0	100
000101053	ANILAZINE	16	19	65
000062533	ANILINE	0	8	92
000120127	ANTHRACENE	31	8	61
007440360	ANTIMONY	32	68	0
N010	ANTIMONY COMPOUNDS	32	68	0
007440382	ARSENIC	49	51	0
N020	ARSENIC COMPOUNDS	49	51	0
001332214	ASBESTOS (FRIABLE)	0	0	100
001912249	ATRAZINE	3	74	23
007440393	BARIUM	69	31	0
N040	BARIUM COMPOUNDS	69	31	0
022781233	BENDIOCARB	1	23	76
001861401	BENFLURALIN	56	3	41
017804352	BENOMYL	1	49	50
000098873	BENZAL CHLORIDE	0	0	100
000055210	BENZAMIDE	0	0	100
000071432	BENZENE	1	23	76
000092875	BENZIDINE	1	25	74
000191242	BENZO(G,H,I)PERYLENE	0	0	100
000098077	BENZOIC TRICHLORIDE	0	0	100
000098884	BENZOYL CHLORIDE	0	0	100
000094360	BENZOYL PEROXIDE	5	3	92
000100447	BENZYL CHLORIDE	1	27	72
007440417	BERYLLIUM	37	63	0
N050	BERYLLIUM COMPOUNDS	37	63	0
000091598	BETA-NAPHTHYLAMINE	1	23	76
000057578	BETA-PROPIOLACTONE	0	0	100
082657043	BIFENTHRIN	38	0	62
000092524	BIPHENYL	10	2	88
000108601	BIS(2-CHLORO-1-METHYLETHYL) ETHER	2	53	45
000111911	BIS(2-CHLOROETHOXY)METHANE	1	78	21
000111444	BIS(2-CHLOROETHYL) ETHER	2	78	20
000103231	BIS(2-ETHYLHEXYL) ADIPATE	0	0	100
000542881	BIS(CHLOROMETHYL) ETHER	0	0	100
000056359	BIS(TRIBUTYLTIN) OXIDE	0	0	100
010294345	BORON TRICHLORIDE	2	98	0
007637072	BORON TRIFLUORIDE	2	98	0
000314409	BROMACIL	2	53	45
053404196	BROMACIL, LITHIUM SALT	0	0	100
007726956	BROMINE	2	98	0

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
000353593	BROMOCHLORODIFLUOROMETHANE	1	98	1
000075252	BROMOFORM	2	57	41
000074839	BROMOMETHANE	0	80	20
000075638	BROMOTRIFLUOROMETHANE	0	99	1
001689845	BROMOXYNIL	6	13	81
001689992	BROMOXYNIL OCTANOATE	38	0	62
000357573	BRUCINE	1	55	44
000141322	BUTYL ACRYLATE	1	9	90
000085687	BUTYL BENZYL PHTHALATE	0	0	100
000123728	BUTYRALDEHYDE	0	9	91
002650182	C.I. ACID BLUE 9, DIAMMONIUM SALT	0	0	100
003844459	C.I. ACID BLUE 9, DISODIUM SALT	0	0	100
004680788	C.I. ACID GREEN 3	0	0	100
006459945	C.I. ACID RED 114	0	0	100
000569642	C.I. BASIC GREEN 4	0	0	100
000989388	C.I. BASIC RED 1	0	0	100
001937377	C.I. DIRECT BLACK 38	0	0	100
028407376	C.I. DIRECT BLUE 218	0	0	100
002602462	C.I. DIRECT BLUE 6	0	0	100
016071866	C.I. DIRECT BROWN 95	0	0	100
002832408	C.I. DISPERSE YELLOW 3	0	0	100
000081889	C.I. FOOD RED 15	0	0	100
003761533	C.I. FOOD RED 5	0	0	100
014302137	C.I. PIGMENT GREEN 36	0	0	100
001328536	C.I. PIGMENT GREEN 7	0	0	100
003118976	C.I. SOLVENT ORANGE 7	0	0	100
000842079	C.I. SOLVENT YELLOW 14	0	0	100
000097563	C.I. SOLVENT YELLOW 3	0	0	100
000492808	C.I. SOLVENT YELLOW 34	2	50	48
000128665	C.I. VAT YELLOW 4	0	0	100
007440439	CADMIUM	68	32	0
N078	CADMIUM COMPOUNDS	68	32	0
000156627	CALCIUM CYANAMIDE	2	98	0
000133062	CAPTAN	1	23	76
000063252	CARBARYL	1	12	87
001563662	CARBOFURAN	1	7	92
000075150	CARBON DISULFIDE	1	87	12
000056235	CARBON TETRACHLORIDE	2	88	10
000463581	CARBONYL SULFIDE	0	84	16
005234684	CARBOXIN	1	24	75
000120809	CATECHOL	0	8	92
N230	CERTAIN GLYCOL ETHERS	0	8	92
002439012	CHINOMETHIONAT	0	0	100

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
000133904	CHLORAMBEN	0	0	100
000057749	CHLORDANE	61	1	38
000115286	CHLORENDIC ACID	0	0	100
090982324	CHLORIMURON ETHYL	1	23	76
007782505	CHLORINE	2	98	0
010049044	CHLORINE DIOXIDE	2	98	0
000079118	CHLOROACETIC ACID	0	8	92
000108907	CHLOROBENZENE	2	39	59
000510156	CHLOROBENZILATE	39	3	58
000075456	CHLORODIFLUOROMETHANE	1	88	11
000075003	CHLOROETHANE	1	85	14
000067663	CHLOROFORM	1	73	26
000074873	CHLOROMETHANE	1	59	40
000107302	CHLOROMETHYL METHYL ETHER	0	0	100
N084	CHLOROPHENOLS	54	4	42
000076062	CHLOROPICRIN	1	88	11
000126998	CHLOROPRENE	1	93	6
063938103	CHLOROTETRAFLUOROETHANE	0	0	100
001897456	CHLOROTHALONIL	3	18	79
000075729	CHLOROTRIFLUOROMETHANE	0	99	1
005598130	CHLORPYRIFOS METHYL	0	0	100
064902723	CHLORSULFURON	1	54	45
007440473	CHROMIUM	76	24	0
N090	CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)	76	24	0
007440484	COBALT	32	68	0
N096	COBALT COMPOUNDS	32	68	0
007440508	COPPER	72	28	0
N100	COPPER COMPOUNDS	72	28	0
008001589	CREOSOTE	0	0	100
001319773	CRESOL (MIXED ISOMERS)	0	8	92
004170303	CROTONALDEHYDE	0	10	90
000098828	CUMENE	7	13	80
000080159	CUMENE HYDROPEROXIDE	1	24	75
000135206	CUPFERRON	0	0	100
021725462	CYANAZINE	2	76	22
N106	CYANIDE COMPOUNDS	2	98	0
001134232	CYCLOATE	0	0	100
000110827	CYCLOHEXANE	6	19	75
000108930	CYCLOHEXANOL	0	9	91
068359375	CYFLUTHRIN	38	0	62
068085858	CYHALOTHRIN	0	0	100
028057489	D-TRANS-ALLETHRIN	0	0	100
000533744	DAZOMET	0	3	97

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
053404607	DAZOMET, SODIUM SALT	0	0	100
001163195	DECABROMODIPHENYL OXIDE	62	1	37
013684565	DESMEDIPHAM	5	9	86
000117817	DI(2-ETHYLHEXYL) PHTHALATE	38	0	62
002303164	DIALLATE	21	14	65
025376458	DIAMINOTOLUENE (MIXED ISOMERS)	1	78	21
000333415	DIAZINON	12	7	81
000334883	DIAZOMETHANE	0	0	100
000132649	DIBENZOFURAN	18	4	78
000124732	DIBROMOTETRAFLUOROETHANE	2	97	1
000084742	DIBUTYL PHTHALATE	29	1	70
001918009	DICAMBA	1	53	46
000099309	DICHLORAN	0	0	100
090454185	DICHLORO-1,1,2-TRIFLUOROETHANE	0	0	100
025321226	DICHLOROBENZENE (MIXED ISOMERS)	8	47	45
000075274	DICHLOROBROMOMETHANE	1	68	31
000075718	DICHLORODIFLUOROMETHANE	0	99	1
000075434	DICHLOROFLUOROMETHANE	1	91	8
000075092	DICHLOROMETHANE	1	44	55
127564925	DICHLOROPENTAFLUOROPROPANE	3	96	1
000097234	DICHLOROPHENE	0	0	100
000076142	DICHLOROTETRAFLUOROETHANE (CFC-114)	2	97	1
034077877	DICHLOROTRIFLUOROETHANE	1	98	1
000062737	DICHLORVOS	1	25	74
051338273	DICLOFOP METHYL	0	0	100
000115322	DICOFOL	44	2	54
000077736	DICYCLOPENTADIENE	7	84	9
001464535	DIEPOXYBUTANE	1	25	74
000111422	DIETHANOLAMINE	0	8	92
038727558	DIETHATYL ETHYL	0	0	100
000084662	DIETHYL PHTHALATE	0	0	100
000064675	DIETHYL SULFATE	0	5	95
035367385	DIFLUBENZURON	13	6	81
000101906	DIGLYCIDYL RESORCINOL ETHER	1	25	74
000094586	DIHYDROSAFROLE	10	30	60
N120	DIISOCYANATES	0	0	100
055290647	DIMETHIPIN	1	55	44
000060515	DIMETHOATE	1	55	44
002524030	DIMETHYL CHLOROTHIOPHOSPHATE	0	0	100
000131113	DIMETHYL PHTHALATE	0	8	92
000077781	DIMETHYL SULFATE	0	3	97
000124403	DIMETHYLAMINE	0	8	92
002300665	DIMETHYLAMINE DICAMBA	1	54	45

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
000079447	DIMETHYLCARBAMYL CHLORIDE	0	0	100
000088857	DINITROBUTYL PHENOL	12	54	34
025321146	DINITROTOLUENE (MIXED ISOMERS)	1	53	46
039300453	DINOCAP	0	0	100
N150	DIOXIN AND DIOXIN-LIKE COMPOUNDS	0	0	100
000957517	DIPHENAMID	0	0	100
000122394	DIPHENYLAMINE	7	12	81
002164070	DIPOTASSIUM ENDOTHALL	1	24	75
000136458	DIPROPYL ISOCINCHOMERONATE	6	3	91
000138932	DISODIUM CYANODITHIOIMIDOCARBONATE	0	0	100
000330541	DIURON	2	50	48
002439103	DODINE	0	0	100
000106898	EPICHLOROHYDRIN	1	55	44
013194484	ETHOPROP	10	29	61
000140885	ETHYL ACRYLATE	0	10	90
000541413	ETHYL CHLOROFORMATE	1	43	56
000759944	ETHYL DIPROPYLTHIOCARBAMATE	5	41	54
000100414	ETHYLBENZENE	3	45	52
000074851	ETHYLENE	0	92	8
000107211	ETHYLENE GLYCOL	0	8	92
000075218	ETHYLENE OXIDE	0	9	91
000096457	ETHYLENE THIOUREA	1	55	44
N171	ETHYLENEBISDITHIOCARBAMIC ACID, SALTS AND ESTERS	2	98	0
000151564	ETHYLENEIMINE	1	55	44
000075343	ETHYLIDENE DICHLORIDE	1	78	21
000052857	FAMPHUR	0	0	100
060168889	FENARIMOL	0	0	100
013356086	FENBUTATIN OXIDE	0	0	100
066441234	FENOXAPROP ETHYL	0	0	100
072490018	FENOXYCARB	0	0	100
039515418	FENPROPATHRIN	0	0	100
000055389	FENTHION	0	0	100
051630581	FENVALERATE	0	0	100
014484641	FERBAM	0	0	100
069806504	FLUAZIFOP BUTYL	0	0	100
002164172	FLUOMETURON	2	52	46
007782414	FLUORINE	2	98	0
000051218	FLUOROURACIL	1	55	44
069409945	FLUVALINATE	0	0	100
000133073	FOLPET	2	20	78
072178020	FOMESAFEN	3	47	50
000050000	FORMALDEHYDE	0	8	92
000064186	FORMIC ACID	0	8	92

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
000076131	FREON 113	3	96	1
000110009	FURAN	0	0	100
000556525	GLYCIDOL	0	0	100
000076448	HEPTACHLOR	50	1	49
N270	HEXABROMOCYCLODODECANE			
000087683	HEXACHLORO-1,3-BUTADIENE	45	23	32
000118741	HEXACHLOROBENZENE	60	2	38
000077474	HEXACHLOROCYCLOPENTADIENE	44	11	45
000067721	HEXACHLOROETHANE	18	56	26
001335871	HEXACHLORONAPHTHALENE	0	0	100
000070304	HEXACHLOROPHENE	62	1	37
000680319	HEXAMETHYLPHOSPHORAMIDE	0	0	100
051235042	HEXAZINONE	19	16	65
067485294	HYDRAMETHYLNON	53	0	47
000302012	HYDRAZINE	0	15	85
010034932	HYDRAZINE SULFATE	2	98	0
007647010	HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY)	0	0	100
000074908	HYDROGEN CYANIDE	2	98	0
007664393	HYDROGEN FLUORIDE	2	98	0
007783064	HYDROGEN SULFIDE	0	0	100
000123319	HYDROQUINONE	0	8	92
035554440	IMAZALIL	15	21	64
INVALID	INVALID			
013463406	IRON PENTACARBONYL	0	0	100
000078842	ISOBUTYRALDEHYDE	0	9	91
000465736	ISODRIN	62	1	37
025311711	ISOFENPHOS	0	0	100
000078795	ISOPRENE	0	0	100
000067630	ISOPROPYL ALCOHOL (MANUFACTURING, STRONG-ACID PROCESS ONLY, NO SUPPLIER)	0	0	100
000120581	ISOSAFROLE	7	36	57
077501634	LACTOFEN	31	0	69
007439921	LEAD	63	37	0
N420	LEAD COMPOUNDS	63	37	0
000058899	LINDANE	13	24	63
000330552	LINURON	5	41	54
000554132	LITHIUM CARBONATE	2	98	0
000108394	M-CRESOL	0	8	92
000099650	M-DINITROBENZENE	1	54	45
000108383	M-XYLENE	3	18	79
000121755	MALATHION	1	7	92
000108316	MALEIC ANHYDRIDE	0	0	100
000109773	MALONONITRILE	1	55	44
012427382	MANEB	2	98	0

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
007439965	MANGANESE	39	61	0
N450	MANGANESE COMPOUNDS	39	61	0
000093652	MECOPROP	5	42	53
000108781	MELAMINE	0	0	100
007439976	MERCURY	69	31	0
N458	MERCURY COMPOUNDS	69	31	0
000150505	MERPHOS	22	0	78
000126987	METHACRYLONITRILE	1	27	72
000137428	METHAM SODIUM	0	27	73
000067561	METHANOL	0	8	92
020354261	METHAZOLE	0	0	100
002032657	METHIOCARB	0	0	100
000094746	METHOXONE	6	39	55
003653483	METHOXONE SODIUM SALT	1	25	74
000072435	METHOXYCHLOR	45	2	53
000096333	METHYL ACRYLATE	0	9	91
000079221	METHYL CHLOROCARBONATE	0	1	99
000078933	METHYL ETHYL KETONE	0	0	100
000060344	METHYL HYDRAZINE	1	25	74
000074884	METHYL IODIDE	1	78	21
000108101	METHYL ISOBUTYL KETONE	0	9	91
000624839	METHYL ISOCYANATE	0	0	100
000556616	METHYL ISOTHIOCYANATE	0	0	100
000080626	METHYL METHACRYLATE	0	10	90
000298000	METHYL PARATHION	2	6	92
001634044	METHYL TERT-BUTYL ETHER	1	60	39
000074953	METHYLENE BROMIDE	1	61	38
000101688	METHYLENEBIS(PHENYLISOCYANATE)	0	0	100
000093152	METHYLEUGENOL	0	0	100
009006422	METIRAM	0	0	100
021087649	METRIBUZIN	1	54	45
007786347	MEVINPHOS	0	0	100
000090948	MICHLER'S KETONE	0	0	100
MIXTURE	MIXTURE	0	0	100
002212671	MOLINATE	0	0	100
001313275	MOLYBDENUM TRIOXIDE	2	98	0
000076153	MONOCHLOROPENTAFLUOROETHANE	1	98	1
000150685	MONURON	0	0	100
000505602	MUSTARD GAS	0	0	100
088671890	MYCLOBUTANIL	9	32	59
000121697	N,N-DIMETHYLANILINE	2	53	45
000068122	N,N-DIMETHYLFORMAMIDE	0	8	92
000071363	N-BUTYL ALCOHOL	0	8	92

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000117840	N-DIOCTYL PHTHALATE	0	0	100
000110543	N-HEXANE	9	53	38
000872504	N-METHYL-2-PYRROLIDONE	0	8	92
000924425	N-METHYLOLACRYLAMIDE	0	8	92
000759739	N-NITROSO-N-ETHYLUREA	1	55	44
000684935	N-NITROSO-N-METHYLUREA	1	55	44
000924163	N-NITROSODI-N-BUTYLAMINE	0	0	100
000621647	N-NITROSODI-N-PROPYLAMINE	1	54	45
000055185	N-NITROSODIETHYLAMINE	0	0	100
000062759	N-NITROSODIMETHYLAMINE	0	0	100
000086306	N-NITROSODIPHENYLAMINE	5	42	53
004549400	N-NITROSOMETHYLVINYLAMINE	9	51	40
000059892	N-NITROSOMORPHOLINE	0	0	100
016543558	N-NITROSONORNICOTINE	0	0	100
000100754	N-NITROSOPIPERIDINE	1	55	44
NA	NA			
000142596	NABAM	0	10	90
000300765	NALED	1	25	74
000091203	NAPHTHALENE	4	6	90
007440020	NICKEL	38	62	0
N495	NICKEL COMPOUNDS	38	62	0
N503	NICOTINE AND SALTS	2	98	0
001929824	NITRAPYRIN	7	36	57
N511	NITRATE COMPOUNDS	0	10	90
007697372	NITRIC ACID	0	0	100
000139139	NITRILOTRIACETIC ACID	0	8	92
000098953	NITROBENZENE	0	8	92
001836755	NITROFEN	0	0	100
000051752	NITROGEN MUSTARD	0	0	100
000055630	NITROGLYCERIN	1	24	75
000075525	NITROMETHANE	0	0	100
N530	NONYLPHENOL			
027314132	NORFLURAZON	0	0	100
000090040	O-ANISIDINE	1	25	74
000134292	O-ANISIDINE HYDROCHLORIDE	0	0	100
000095487	O-CRESOL	0	8	92
000528290	O-DINITROBENZENE	1	54	45
000091236	O-NITROANISOLE	0	0	100
000088722	O-NITROTOLUENE	0	0	100
000095534	O-TOLUIDINE	0	94	6
000636215	O-TOLUIDINE HYDROCHLORIDE	1	54	45
000095476	O-XYLENE	3	16	81
002234131	OCTACHLORONAPHTHALENE	62	1	37

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
029082744	OCTACHLOROSTYRENE	0	0	100
019044883	ORYZALIN	3	49	48
020816120	OSMIUM TETROXIDE	2	98	0
000301122	OXYDEMETON METHYL	0	0	100
019666309	OXYDIAZON	40	3	57
042874033	OXYFLUORFEN	39	3	58
010028156	OZONE	2	98	0
000104949	P-ANISIDINE	0	0	100
000095692	P-CHLORO-O-TOLUIDINE	0	0	100
000106478	P-CHLOROANILINE	1	54	45
000104121	P-CHLOROPHENYL ISOCYANATE	0	0	100
000120718	P-CRESIDINE	1	54	45
000106445	P-CRESOL	0	8	92
000100254	P-DINITROBENZENE	1	54	45
000100016	P-NITROANILINE	1	54	45
000156105	P-NITROSODIPHENYLAMINE	0	0	100
000106503	P-PHENYLENEDIAMINE	1	55	44
000106423	P-XYLENE	3	19	78
000123637	PARALDEHYDE	1	55	44
001910425	PARAQUAT DICHLORIDE	1	55	44
000056382	PARATHION	9	2	89
001114712	PEBULATE	0	0	100
040487421	PENDIMETHALIN	47	1	52
000608935	PENTACHLOROBENZENE	0	0	100
000076017	PENTACHLOROETHANE	6	75	19
000087865	PENTACHLOROPHENOL	54	4	42
000057330	PENTOBARBITAL SODIUM	2	53	45
000079210	PERACETIC ACID	0	8	92
000594423	PERCHLOROMETHYL MERCAPTAN	0	0	100
052645531	PERMETHRIN	38	0	62
000085018	PHENANTHRENE	32	6	62
000108952	PHENOL	0	8	92
000077098	PHENOLPHTHALEIN	0	0	100
026002802	PHENOTHRIN	38	0	62
000057410	PHENYTOIN	2	51	47
000075445	PHOSGENE	0	0	100
007803512	PHOSPHINE	2	98	0
007664382	PHOSPHORIC ACID	0	0	100
007723140	PHOSPHORUS (YELLOW OR WHITE)	60	40	0
000085449	PHTHALIC ANHYDRIDE	0	1	99
001918021	PICLORAM	2	90	8
000088891	PICRIC ACID	1	78	21
000051036	PIPERONYL BUTOXIDE	39	3	58

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
029232937	PIRIMIPHOS METHYL	0	0	100
N575	POLYBROMINATED BIPHENYLS	0	0	100
N583	POLYCHLORINATED ALKANES	0	0	100
001336363	POLYCHLORINATED BIPHENYLS	61	1	38
N590	POLYCYCLIC AROMATIC COMPOUNDS	92	7	1
007758012	POTASSIUM BROMATE	2	98	0
000128030	POTASSIUM DIMETHYLDITHIOCARBAMATE	1	28	71
000137417	POTASSIUM N-METHYLDITHIOCARBAMATE	0	27	73
041198087	PROFENOFOS	0	0	100
007287196	PROMETRYN	11	56	33
023950585	PRONAMIDE	10	30	60
001918167	PROPACHLOR	1	24	75
001120714	PROPANE SULTONE	1	29	70
000709988	PROPANIL	4	44	52
002312358	PROPARGITE	42	44	14
000107197	PROPARGYL ALCOHOL	0	8	92
031218834	PROPETAMPHOS	0	0	100
060207901	PROPICONAZOLE	9	32	59
000123386	PROPIONALDEHYDE	0	9	91
000114261	PROPOXUR	0	8	92
000115071	PROPYLENE	0	91	9
000075569	PROPYLENE OXIDE	0	9	91
000075558	PROPYLENEIMINE	1	25	74
000110861	PYRIDINE	0	8	92
000091225	QUINOLINE	1	24	75
000106514	QUINONE	1	59	40
000082688	QUINTOZENE	43	11	46
076578148	QUIZALOFOP-ETHYL	0	0	100
010453868	RESMETHRIN	0	0	100
000078488	S,S,S-TRIBUTYLTRITHIOPHOSPHATE	37	0	63
000081072	SACCHARIN (MANUFACTURING, NO SUPPLIER NOTIFICATION)	1	25	74
000094597	SAFROLE	8	34	58
000078922	SEC-BUTYL ALCOHOL	0	8	92
007782492	SELENIUM	44	56	0
N725	SELENIUM COMPOUNDS	44	56	0
074051802	SETHOXYDIM	0	0	100
007440224	SILVER	66	34	0
N740	SILVER COMPOUNDS	66	34	0
000122349	SIMAZINE	2	77	21
026628228	SODIUM AZIDE	2	98	0
001982690	SODIUM DICAMBA	1	53	46
000128041	SODIUM DIMETHYLDITHIOCARBAMATE	1	28	71
000062748	SODIUM FLUOROACETATE	1	25	74

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
001310732	SODIUM HYDROXIDE (SOLUTION)	0	0	100
007632000	SODIUM NITRITE	2	98	0
000132274	SODIUM O-PHENYLPHENOXIDE	0	0	100
000131522	SODIUM PENTACHLOROPHENATE	0	0	100
007757826	SODIUM SULFATE (SOLUTION)	0	0	100
N746	STRYCHNINE AND SALTS	2	98	0
000100425	STYRENE	2	13	85
000096093	STYRENE OXIDE	1	25	74
007664939	SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY)	0	0	100
002699798	SULFURYL FLUORIDE	2	98	0
035400432	SULPROFOS	0	0	100
034014181	TEBUTHIURON	2	77	21
003383968	TEMEPHOS	38	0	62
005902512	TERBACIL	0	0	100
000100210	TEREPHTHALIC ACID	0	0	100
000075650	TERT-BUTYL ALCOHOL	1	55	44
000079947	TETRABROMOBISPHENOL A	0	0	100
000127184	TETRACHLOROETHYLENE	6	87	7
000961115	TETRACHLORVINPHOS	7	11	82
000064755	TETRACYCLINE HYDROCHLORIDE	1	55	44
000116143	TETRAFLUOROETHYLENE	0	0	100
007696120	TETRAMETHRIN	0	0	100
000509148	TETRANITROMETHANE	0	0	100
007440280	THALLIUM	54	46	0
N760	THALLIUM COMPOUNDS	54	46	0
000148798	THIABENDAZOLE	2	51	47
000062555	THIOACETAMIDE	1	55	44
028249776	THIOBENCARB	8	35	57
059669260	THIODICARB	1	24	75
023564069	THIOPHANATE ETHYL	0	0	100
023564058	THIOPHANATE-METHYL	1	25	74
000079196	THIOSEMICARBAZIDE	1	55	44
000062566	THIOUREA	1	25	74
000137268	THIRAM	1	24	75
001314201	THORIUM DIOXIDE	90	10	0
013463677	TITANIUM DIOXIDE	0	0	100
007550450	TITANIUM TETRACHLORIDE	2	98	0
000108883	TOLUENE	1	23	76
026471625	TOLUENE DIISOCYANATE (MIXED ISOMERS)	2	1	97
000584849	TOLUENE-2,4-DIISOCYANATE	2	1	97
000091087	TOLUENE-2,6-DIISOCYANATE	2	1	97
008001352	TOXAPHENE	62	1	37
TRD SECRT	TRADE SECRET CHEMICAL	0	0	100

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
010061026	TRANS-1,3-DICHLOROPROPENE	1	31	68
000110576	TRANS-1,4-DICHLORO-2-BUTENE	2	27	71
043121433	TRIADIMEFON	3	48	49
002303175	TRIALLATE	35	5	60
000068768	TRIAZIQUONE	0	0	100
101200480	TRIBENURON METHYL	2	22	76
001983104	TRIBUTYLTIN FLUORIDE	0	0	100
002155706	TRIBUTYLTIN METHACRYLATE	0	0	100
000052686	TRICHLORFON	0	8	92
000076028	TRICHLOROACETYL CHLORIDE	0	0	100
000079016	TRICHLOROETHYLENE	1	93	6
000075694	TRICHLOROFLUOROMETHANE	1	98	1
057213691	TRICLOPYR TRIETHYLAMMONIUM SALT	1	25	74
000121448	TRIETHYLAMINE	1	56	43
001582098	TRIFLURALIN	57	3	40
026644462	TRIFORINE	0	0	100
000639587	TRIPHENYLTIN CHLORIDE	0	0	100
000076879	TRIPHENYLTIN HYDROXIDE	14	86	0
000126727	TRIS(2,3-DIBROMOPROPYL) PHOSPHATE	0	0	100
000072571	TRYPAN BLUE	1	55	44
000051796	URETHANE	1	55	44
007440622	VANADIUM (EXCEPT WHEN CONTAINED IN AN ALLOY)	32	68	0
N770	VANADIUM COMPOUNDS	32	68	0
050471448	VINCLOZOLIN	0	0	100
000108054	VINYL ACETATE	0	11	89
000593602	VINYL BROMIDE	0	0	100
000075014	VINYL CHLORIDE	0	92	8
000075025	VINYL FLUORIDE	0	0	100
000075354	VINYLIDENE CHLORIDE	1	91	8
N874	WARFARIN AND SALTS	3	97	0
001330207	XYLENE (MIXED ISOMERS)	3	17	80
007440666	ZINC (FUME OR DUST)	66	34	0
N982	ZINC COMPOUNDS	66	34	0
012122677	ZINEB	0	2	98