TOXICS RELEASE INVENTORY (TRI)

BASIC DATA FILES DOCUMENTATION

Updated for RY 2022

August 2023

EPA United States Environmental Protection Agency

Changes Basic Data File Format

Added: 10/20/2022

No.	Field Name	Type	Description
44	PBT IND	C	Code indicating whether the chemical is a PBT. Yes = PBT No = Non-PBT See “Appendix B -Chemical Classifications – PBT” for a list of TRI PBT Chemical. Source: TRI_CHEM_INFO.PBT_IND

AN OVERVIEW OF TRI BASIC DATA FILES

Industrial facilities that meet Toxics Release Inventory (TRI) Program reporting requirements submit their data to EPA using either the Reporting Form R or Form A. Each "Basic" data file contains the 100 most-requested data fields from the TRI reporting form, including the quantities of toxic chemicals released into the environment on site at facilities; the quantities transferred off site to other facilities; and summary data concerning releases, recycling, energy recovery and treatment.

There are four different types of basic data files:

1) The “state data files” contain data for one state, district or U.S. territory for each calendar year. For example, the 2016 Alabama state data file has all the data for Alabama-located facilities that submitted TRI data for calendar year 2016.
2) The “national data files” contain all the TRI data for the United States for a specific calendar year. This includes data for all 50 states and the six U.S. districts and territories (i.e., American Samoa, District of Columbia, Guam, Northern Mariana Islands, Puerto Rico and the Virgin Islands).
3) The “federal facility data files” contain data for all government-owned federal sites for a specific calendar year.
4) The “tribal data files” contain data for all facilities located on tribal lands that submitted TRI data for a specific calendar year.

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 data 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 description of what the data element represents and where on the TRI reporting form it is reported (i.e., *reference*). Also included is an indication of the maximum length of the data element. For 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.

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

	YEAR	TRI_FACILITY_ID	FRS_ID	FACILITY_NAME
2	2016	32206PRTCN151TA	110031019083	PORT CONSOLIDATED INC
3	2016	32218SMCXX1181I	110009078425	SEMCO
4	2016	33605CTGPT801MC	110027973263	CITGO PETROLEUM CORP
5	2016	33411CNSLD1782S	110000493029	PORT CONSOLIDATED INC
6	2016	33430SGRSP1281S	110000917624	SUGAR SUPPLY INC

Example of the first columns and rows of a Basic 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 B - 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.

ZEROES IN THE DATA

The TRI Basic Data Files are intended to be loaded into spreadsheets, databases and statistical applications. Some of these tools require that numeric data fields be populated with a number (and not a blank) 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 Basic Data Files in places where numeric data fields were blank. There are three reasons why a numeric data field on a TRI reporting form may be blank. 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 towater. Therefore, in section 5.3 of the Reporting Form R, the facility would enter "NA" for on-site waterreleases. 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."

The third case occurs when facilities submit a Form A Certification Statement (also referred to as a Form A). Form A allows facilities otherwise meeting EPCRA Section 313 reporting thresholds the option to certify that, for a particular chemical, they do not exceed 500 pounds for the total annual reportable amount and that their amounts manufactured, processed or otherwise used do not exceed one million pounds. Form A only requires facilities to identify themselves and list the qualified chemicals(s) they are reporting. Facilities do not have to report any release or other waste management information (normally reported in Part II of the Form R) for the chemical(s). The Basic Data file record will contain zeroes for all release and other management quantities from a Form A. Field 38, "Form Type" indicates if a form is a Form A or a Form R. See the TRI Reporting Forms and Instructions for more information on the Form A.

BASIC FILE CONTENTS

No.	Field Name	Type	Description
1	YEAR	C	The calendar year in which the reported activities occurred. *Reference:* Part I, Section 1 *Maximum Length:* 4
2	TRIFD	C	TRI facility identification in the format zzzzznnnnnsssss, where usually zzzzz = facility zip code, nnnnn = first five consonants of the name, and sssss = first five non-specific characters in the street address. *Reference:* Part I, Section 4.1 *Maximum Length:* 15 **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.*
3	FRS 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. *Source:* **TRI_FACILITY.**EPA_REGISTRY_ID *Maximum Length:* 12
4	FACILITY NAME	C	Name of the reporting facility. *Reference:* Part I, Section 4.1 *Maximum Length:* 62
5	STREET ADDRESS	C	Street address of the reporting facility. *Reference:* Part I, Section 4.1 *Maximum Length:* 62
6	CITY	C	City in which the reporting facility is located. *Reference:* Part I, Section 4.1 *Maximum Length:* 28
7	COUNTY	C	County in which the reporting facility is located. *Reference:* Part I, Section 4.1 *Maximum Length:* 50
8	ST	C	Two-letter state code of the reporting facility. *Reference:* Part I, Section 4.1 *Maximum Length:* 2
9	ZIP	C	ZIP code of the reporting facility. *Reference:* Part I, Section 4.1 *Maximum Length:* 9
10	BIA	C	Three-letter Bureau of Indian Affairs (BIA) code indicating the tribal land the facility is on. *Maximum Length:* 3
11	TRIBE	C	The name of the Tribe. *Maximum Length:* 350

No.	Field Name	Type	Description
12	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). Represented as decimal data. *Reference:* NA *Maximum Length:* 9,6
13	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). *Reference:* NA *Maximum Length:* 10,6
14	Horizontal Datum	C	The horizontal datum used in determining the latitude and longitude coordinates. Allowed values include: NAD27, NAD83 and WGS84 *Reference:* NA *Maximum Length:* 5
15	PARENT CO NAME	C	Name of the corporation or other business entity that controls the reporting facility. *Reference:* Part I, Section 5.1 *Maximum Length:* 60
16	PARENT CO DB NUM	C	Unique identification number assigned by Dun and Bradstreet to the parent company of the reporting facility. *Reference:* Part I, Section 5.2 *Maximum Length:* 9
17	STANDARDIZED PARENT COMPANY NAME	C	Standardized Parent Company Name assigned by TRI. *Source:* **TRI_FACILITY.**STANDARDIZED_PARENT_COMPANY
18	FEDERAL FACILITY	C	Code indicating whether a facility is a federal facility or not. Reported by the facility. Yes = Federal No = non-Federal Value *Reference:* Part I, Section 4.2c *Maximum Length:* 3
19	INDUSTRY SECTOR CODE	C	North American Industry Classification System (NAICS) code used to identify the facility's sector. This categorization is primarily used to classify, analyze, and show industrial trends within TRI data. *Maximum Length:* 4
20	INDUSTRY SECTOR	C	The industry or sector (e.g., Coal Mining, Metal Mining, Electrical Utilities, etc.) a facility belongs to. This categorization is primarily used to classify, analyze, and show industrial trends within TRI data *Maximum Length:* 120

No.	Field Name	Type	Description
21	PRIMARY SIC	C	Primary four-digit Standard Industrial Classification (SIC) code. SIC codes reported by facilities from RY 1987 through 2005. *Reference:* Part I, Section 4.5a *Maximum Length:* 4
22	SIC 2	C	Second four-digit Standard Industrial Classification (SIC) code entered by facility. SIC codes reported by facilities from RY 1987 through 2005. *Reference:* Part I, Section 4.5b *Maximum Length:* 4
23	SIC 3	C	Third four-digit Standard Industrial Classification (SIC) code entered by facility. SIC codes reported by facilities from RY 1987 through 2005. *Reference:* Part I, Section 4.5c *Maximum Length:* 4
24	SIC 4	C	Fourth four-digit Standard Industrial Classification (SIC) code entered by facility. SIC codes reported by facilities from RY 1987 through 2005. *Reference:* Part I, Section 4.5d *Maximum Length:* 4
25	SIC 5	C	Fifth four-digit Standard Industrial Classification (SIC) code entered byfacility. SIC codes reported by facilities from RY 1987 through 2005. *Reference:* Part I, Section 4.5d *Maximum Length:* 4
26	SIC 6	C	Six four-digit Standard Industrial Classification (SIC) code entered by facility. SIC codes reported by facilities from RY 1987 through 2005. *Reference:* Part I, Section 4.5d *Maximum Length:* 4
27	PRIMARY NAICS	C	Primary six-digit North American Standard Industry Classification System (NAICS) code. NAICS codes reported by facilities from RY 2006 to present. NAICS codes in prior years were assigned by EPA. See Appendix D: “NAICS Codes Assignments” for more details. *Reference:* Part I, Section 4.5a *Maximum Length:* 6
28	NAICS 2	C	Second six-digit North American Standard Industry Classification System (NAICS) code entered by facility. NAICS codes reported by facilities from RY 2006 to present. NAICS codes in prior years were assigned by EPA. *Reference:* Part I, Section 4.5b *Maximum Length:* 6
29	NAICS 3	C	Third six-digit North American Standard Industry Classification System (NAICS) code entered by facility. NAICS codes reported by facilities from RY 2006 to present. NAICS codes in prior years were assigned by EPA. *Reference:* Part I, Section 4.5b *Maximum Length:* 6

No.	Field Name	Type	Description
30	NAICS 4	C	Fourth six-digit North American Standard Industry Classification System (NAICS) code entered by facility. NAICS codes reported by facilities from RY 2006 to present. NAICS codes in prior years were assigned by EPA.*Reference:* Part I, Section 4.5b *Maximum Length:* 6
31	NAICS 5	C	Fifth six-digit North American Standard Industry Classification System (NAICS) code entered by facility. NAICS codes reported by facilities from RY 2006 to present. NAICS codes in prior years were assigned by EPA. *Reference:* Part I, Section 4.5b *Maximum Length:* 6
32	NAICS 6	C	Sixth six-digit North American Standard Industry Classification System (NAICS) code entered by facility. NAICS codes reported by facilities from RY 2006 to present. NAICS codes in prior years were assigned by EPA. *Reference:* Part I, Section 4.5b *Maximum Length:* 6
33	DOCUMENT CONTROL NUMBER	C	Unique identification number assigned to each TRI submission by EPA. Format: TTYYMMMNNNNNC, where: TT = document type YY = reporting year MMM = document type NNNNN= sequential number C = check digit *Reference:* NA (System-generated) *Maximum Length:* 13
34	CHEMICAL		Name of the chemical or (generic name, if the chemical is claimed as a trade secret). *Reference:* Part II, Section 1.2 *or* Part II, Section 1.3 *Maximum Length:* 70
35	ELEMENTAL METAL INCLUDED INDICATOR	N	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 Maximum Length: 3
36	TRI CHEMICAL/COMPOUND ID	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. *Reference:* Part II, Section 1.1 *Maximum Length:* 9

No.	Field Name	Type	Description
37	CAS #	C	TRI Chemical Id is an internal program number that uniquely identifies chemicals, or category code (for compounds). The number is the same as the CAS number, however, it has different formatting (no dashes and left padded with Zeroes for non-compounds). NOTE: TRI_CHEM_ID 9999999999 is sanitized for trade secretsubmissions. Format: 9999999999 (Chemicals) N999 (Compounds) Source: TRI_CHEM_INFO.CAS_REGISTRY_NUMBER Reference: Part II, Section 1.1
38	SRS ID	C	The Substance Registry System (SRS) identification number. This is a unique identifier assigned to a substance for internal tracking within EPA systems. See https://iaspub.epa.gov/sor_internet/registry/substreg/home for more information. *Reference:* NA *Maximum Length:* 9
39	CLEAN AIR ACT CHEMICAL	C	Indicates if the chemical is covered by the Clean Air Act. Values = Yes, No *Reference:* NA *Maximum Length:* 3
40	CLASSIFICATION	C	Indicates if the chemical is classified as 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 *Reference:* NONE *Maximum Length:* 6
41	METAL	C	Code indicating if the chemical is a metal or not. VALUES: Yes = Metal; NO= Non-Metal. See “Appendix A: Chemical Classifications – Metals” for a list of TRI chemicals classified as metals. *Reference:* NA *Maximum Length:* 3
42	METAL CATEGORY	C	Category of Metal. Values are either 1, 2, 3, or 4. See “Appendix A: Chemical Classifications: Metals” for a list of metals in each of the four categories. *Reference:* NA *Maximum Length:* 1
43	CARCINOGEN	C	Indicates if the chemical is a carcinogen. VALUES: YES = carcinogen; NO = not a carcinogen. *Reference:* NA *Maximum Length:* 3
44	PBT IND	C	Code indicating whether the chemical is a PBT. Yes = PBT No = Non-PBT See “Appendix B -Chemical Classifications – PBT” for a list of TRI PBT Chemical. Source: TRI_CHEM_INFO.PBT_IND

No.	Field Name	Type	Description
45	PFAS IND	C	Code indicating whether the chemical is a PFAS. Yes = PFAS No = Non-PFAS See "Appendix B -Chemical Classifications – PFAS" for a list of TRI PFAS Chemical. Source: TRI_CHEM_INFO.PFAS_IND
46	FORM TYPE	C	Indicates whether the facility submitted a Reporting Form R or Form A Certification Statement. R = Form R A = Form A Certification Statement *Reference:* Type of Form Used *Maximum Length:* 1
47	UNIT OF MEASURE	C	Indicates the unit of measure used to quantify the chemical. Dioxin and dioxin-like compounds are reported in grams, while all other TRI chemicals are reported in pounds. Values: {Pounds, Grams} *Reference:* NA *Maximum Length:* 6
48	5.1 – FUGITIVE AIR	N	An estimate of the total quantity of the toxic chemical released as fugitive air emissions at the reporting facility. *Reference:* Part II, Section 5.1.A *Maximum Length:* 22,7
49	5.2 – STACK AIR	N	An estimate of the total quantity of the chemical released as stack air emissions at the reporting facility. *Reference:* Part II, Section 5.2.A *Maximum Length:* 22,7
50	5.3 – WATER	N	An estimate of the total quantity of the chemical released on-site as surface water discharges. *Reference:* Part II, Section 5.3 *Maximum Length:* 22,7
51	5.4 – UNDERGROUND	N	An estimate of the total quantity of the chemical injected on site at the facility to underground injection wells. This data element was reported from RY 1987 through 1995. In RY 1996, it was replaced by "UNDERGROUND CLASS I" and "UNDERGROUND CLASS II-V." *Reference:* Part II, Section 5.4.1 *Maximum Length:* 22,7
52	5.4.1 – UNDERGROUND CLASS I	N	An estimate of the total quantity of the chemical injected on site at the facility into Class I wells. *Reference:* Part II, Section 5.4.1A *Maximum Length:* 22,7
53	5.4.2 – UNDERGROUND CLASS II-V	N	An estimate of the total quantity of the chemical injected on site at the facility into Class II-V wells. *Reference:* Part II, Section 5.4.2.A *Maximum Length:* 22,7

No.	Field Name	Type	Description
54	5.5.1 – LANDFILLS	N	An estimate of the total quantity of the chemical released to on-site landfills. This data element was reported from RY 1987 through 1995. In RY 1996, it was replaced by "RCRA C LANDFILLS" and "OTHER LANDFILLS". *Reference:* Part II, Section 5.5.1 *Maximum Length:* 22,7
55	5.5.1A – RCRA C LANDFILLS	N	An estimate of the total quantity of the chemical released on-site to RCRA Subtitle C landfills. *Reference:* Part II, Section 5.5.1A.A *Maximum Length:* 22,7
56	5.5.1B – OTHER LANDFILLS	N	An estimate of the total quantity of the chemical released to other on-site (non-RCRA Subtitle C) landfills. *Reference:* Part II, Section 5.5.1B.A *Maximum Length:* 22,7
57	5.5.2 – LAND TREATMENT	N	An estimate of the quantity of the chemical disposed of through on-site land treatment/application farming. *Reference:* Part II, Section 5.5.2.A *Maximum Length:* 22,7
58	5.5.3 – SURFACE IMPOUNDMENT	N	An estimate of the total quantity of the chemical released on site into surface impoundments. This data element was reported from RY 1987 through 2002. In RY 2003, it was replaced by "RCRA C SURFACE IMPOUNDMENT" and "SURFACE IMPOUNDMENT". *Reference:* Part II, Section 5.5.3. col. A *Maximum Length:* 22,7
59	5.5.3A – RCRA SURFACE IMPOUNDMENT	N	An estimate of the total quantity of the chemical released into on-site RCRA Subtitle C surface impoundments. This field was added in RY 2003. *Reference:* Part II, Section 5.5.3A col. A *Maximum Length:* 22,7
60	5.5.3B – OTHER SURFACE IMPOUNDMENT	N	An estimate of the total quantity of the chemical released into other (non-RCRA Subtitle C) surface impoundments at the facility. This field was added in RY 2003. *Reference:* Part II, Section 5.5.3B col. A *Maximum Length:* 22,7
61	5.5.4 – OTHER DISPOSAL	N	An estimate of the total quantity of the chemical disposed of on site by methods other than landfills, land treatment and surface impoundments. *Reference:* Part II, Section 5.5.4 col. A *Maximum Length:* 22,7
62	ON-SITE RELEASE TOTAL	N	Total quantity of the toxic chemical released to air, water and land on-site at the facility. This is the sum of rows #47 through #60. *Maximum Length:* 22,7

No.	Field Name	Type	Description
63	6.1 – POTW – TRANSFERS FOR RELEASE	N	The total quantity of the chemical reported as transferred off site to a POTW for release or disposal. See "Appendix E: POTW Release and Treatment Calculations" for details regarding this calculation. *Reference:* Part II, Section 6.1 *Maximum Length*: 22,7
64	6.1 – POTW – TRANSFERS FOR TREATMENT	N	The total quantity of the chemical reported as transferred off site to a POTW for further treatment. See "Appendix E: POTW Release and Treatment Calculations" for details regarding this calculation. *Reference:* Part II, Section 6.1 *Maximum Length*: 22,7
65	POTW – TOTAL TRANSFERS	N	This is the total amount of the chemical that is transferred to a POTW. Sum of rows #62 and #63. *Maximum Length*: 22,7
66	6.2 – M10	N	The total quantity of the chemical reported as transferred off site for disposal using code **M10**: "Storage Only." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
67	6.2 – M41	N	The total quantity of the chemical reported as transferred off site for disposal using code **M41**: Solidification/Stabilization." Note this only applies to metals and metal compounds. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
68	6.2 – M62	N	The total quantity of the chemical reported as transferred off site for disposal using code **M62**: "Wastewater Treatment (Excluding POTWs) – Metals and Metal Compounds Only." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
69	6.2 – M40 METAL	N	Total quantity of the chemical reported as transferred off site for disposal using the code **M40**: "Solidification/Stabilization" when the chemical is a type 1 metal (Row #40, METAL CATEGORY = 1) or the chemical is Vanadium (Fume or Dust) or Vanadium (Except when contained in an alloy). NOTE: When a metal is reported under **M40** it's considered a release/disposal because a metal can't be treated. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
70	6.2 – M61 METAL	N	Total quantity of the chemical reported as transferred off site for disposal using the code **M61**: "Wastewater Treatment (Excluding POTWs)" when the chemical is a type 1 metal (Row #40: METAL CATEGORY = 1) or the chemical is Vanadium (Fume or Dust) or Vanadium (Except when contained in an alloy). NOTE: When a metal is reported under **M61** it's considered a release/disposal because a metal can't be treated. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7

No.	Field Name	Type	Description
71	6.2 – M71	N	The total quantity of the chemical reported as transferred off site for disposal using the code **M71**: "Underground Injection." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7 *Note: Effective for RY 2003, code M71 was deleted and replaced with codes M81 (Underground Injection to Class I Wells) and M82 (Underground Injection to Class II-V Wells).*
72	6.2 – M81	N	Total quantity of the chemical reported as transferred off site for disposal using code **M81**: "Underground Injection to Class I Wells." This field was added in RY 2003. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
73	6.2 – M82	N	Total quantity of the chemical reported as transferred off site for disposal using code **M82**: "Underground Injection to Class II-V Wells." This field was added in RY 2003. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
74	6.2 – M72	N	The total quantity of the chemical reported as transferred off site for disposal using the code **M72**: "Landfills/Disposal Surface Impoundments." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7 *Note: Effective for RY 2002, code M72 was deleted and replaced with code M63 (Surface Impoundment), M64 (Other Landfills), and M65 (RCRA Subtitle C Landfills).*
75	6.2 – M63	N	The total quantity of the chemical reported as transferred off site for disposal using the code **M63**: "Surface Impoundment." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7 *Note: Effective for RY 2003, code M63 was deleted and replaced with code M66 (RCRA Subtitle C Surface Impoundment) and code M67 (Other Surface Impoundments).*
76	6.2 – M66	N	Total quantity of the chemical reported as transferred off site for disposal using code **M66**: "RCRA Subtitle C Surface Impoundments." This field was added in RY 2003. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
77	6.2 – M67	N	Total quantity of the chemical reported as transferred off site for disposal using code **M67**: "Other Surface Impoundments." This field was added in RY 2003. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
78	6.2 – M64	N	Total quantity of the chemical reported as transferred off site for disposal using code **M64**: "Other Landfills." This field was added in RY 2002. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7

No.	Field Name	Type	Description
79	6.2 – M65	N	Total quantity of the chemical reported as transferred off site for disposal using code **M65**: "RCRA Subtitle C Landfills." This field was added in RY 2002. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
80	6.2 – M73	N	Total quantity of the chemical reported as transferred off site for disposal using code **M73**: "Land Treatment." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
81	6.2 – M79	N	Total quantity of the chemical reported as transferred off site for disposal using code **M79**: "Other Land Disposal." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
82	6.2 – M90	N	Total quantity of the chemical reported as transferred off site for disposal using code **M90**: "Other Off-Site Management." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
83	6.2 – M94	N	Total quantity of the chemical reported as transferred off site for disposal using code **M94**: "Transfer to Waste Broker for Disposal." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
84	6.2 – M99	N	Total quantity of the chemical reported as transferred off site for disposal using code **M99**: "Unknown." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
85	OFF-SITE RELEASE TOTAL	N	Total quantity of the toxic chemical reported as transferred to off-site locations for release or disposal. Sum of rows #62 + (#65 through #83). *Reference:* Part II, Section 6.2 *Maximum Length:* 22,7
86	6.2 – M20	N	Total quantity of the chemical reported as transferred off site for recycling using the code **M20**: "Solvents/Organics Recovery." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
87	6.2 – M24	N	Total quantity of the chemical reported as transferred off site for recycling using the code **M24**: "Metals Recovery." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
88	6.2 – M26	N	Total quantity of the chemical reported as transferred off site for recycling using the code **M26**: "Other Reuse or Recovery." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7

No.	Field Name	Type	Description
89	6.2 – M28	N	Total quantity of the chemical reported as transferred off site for recycling using the code **M28**: "Acid Regeneration." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
90	6.2 – M93	N	Total quantity of the chemical reported as transferred off site to recycling using the code **M93**: "Transfer to Waste Broker - Recycling." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
91	OFF-SITE RECYCLED TOTAL	N	Total quantity of the toxic chemical reported as transferred to off-site locations for recycling. Sum of rows #85 through #89. *Reference:* Part II, Section 6.2 *Maximum Length:* 22,7
92	6.2 – M56	N	Total quantity of the chemical reported as transferred off site to energy recovery using the code **M56**: "Energy Recovery." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
93	6.2 – M92	N	Total quantity of the chemical reported as transferred off site to energy recovery using the code **M92**: "Transfer to Waste Broker - Energy Recovery." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
94	OFF-SITE ENERGY RECOVERY TOTAL	N	Total quantity of the toxic chemical reported as transferred to off-site locations for energy recovery. Sum of rows #91 and #92. *Reference:* Part II, Section 6.2 *Maximum Length:* 22,7
95	6.2 – M40 NON-METAL	N	Total quantity of the chemical reported as transferred off site for treatment using the code **M40**: "Solidification/Stabilization" where the chemical is a non-metal. A chemical is considered a non-metal when it is NOT a type 1 metal (Row #40, METAL CATEGORY <> 1) and the chemical is NOT Vanadium (Fume or Dust) and NOT Vanadium (Except when contained in an alloy). NOTE: When a non-metal is reported under M40, it's considered to be treated and is included in in the OFF-SITE TREATED TOTAL. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
96	6.2 – M50	N	Total quantity of the chemical reported as transferred off site to treatment using the code **M50**: "Incineration/Thermal Treatment." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
97	6.2 – M54	N	Total quantity of the chemical reported as transferred off site to treatment using the code **M54**: "Incineration/Insignificant Fuel Value." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7

No.	Field Name	Type	Description
98	6.2 – M61 NON-METAL	N	Total quantity of the chemical reported as transferred off site to treatment using the code **M61**: "Wastewater Treatment (Excluding POTWs)." A chemical is considered a non-metal when it is NOT a type 1 metal (Row #40, METAL CATEGORY <> 1) and the chemical is NOT Vanadium (Fume or Dust) and NOT Vanadium (Except when contained in an alloy). NOTE: When a non-metal is reported under M61, it's considered to be treated and is included in in the OFF-SITE TREATED TOTAL. *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
99	6.2 – M69	N	Total quantity of the chemical reported as transferred off site for treatment using the code **M69**: "Other Waste Treatment." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
100	6.2 – M95	N	Total quantity of the chemical reported as transferred off site for treatment using the code **M95**: "Transfer to Waste Broker - Waste Treatment." *Reference:* Part II, Section 6.2A *Maximum Length:* 22,7
101	OFF-SITE TREATED TOTAL	N	Total quantity of the chemical reported as transferred off site for treatment. The sum of rows #63 + (#94 through #99). *Maximum Length:* 22,7
102	6.2 – UNCLASSIFIED	N	Total quantity of the chemical reported as transfer off-site as unclassified. This includes chemicals reported using code M91: "Transfers to Waste Broker" and other transfers that did not contain a specific transfer code. *Maximum Length:* 22,7
103	6.2 – TOTAL TRANSFER	N	Total quantity of the chemical reported as transferred off site. Sum of rows #84, #90, #93 #100 and #101. *Maximum Length:* 22,7
104	TOTAL RELEASES	N	The total on and off-site releases from sections 5 and 6 of the Form R. This field equals On-site Release Total (row #61) + Off-site Release Total (row #84). *Maximum Length:* 22,7
105	8.1 - RELEASES	N	Amount of Total On- and Off-site Releases as reported in Section 8, Source Reduction and Recycling Activities / Pollution Prevention. Reported from RY 1987 through 2002. *Maximum Length:* 22,7
106	8.1A – ON-SITE CONTAINED RELEASES	N	Beginning in RY 2003, the total releases in Section 8 of the Form R were broken up into four subcategories. For this data element, facilities reported Total On-Site Disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills and other landfills. *Reference*: Part II, Section 8.1A *Maximum Length:* 22,7

No.	Field Name	Type	Description
107	8.1B – ON-SITE OTHER RELEASES	N	Beginning in RY 2003, the total releases in Section 8 of the Form R were broken up into four subcategories. For this data element, facilities reported their other on-site disposal or releases not covered in 8.1a. *Reference*: Part II, Section 8.1B *Maximum Length:* 22,7
108	8.1C – OFF-SITE CONTAINED RELEASES	N	Beginning in RY 2003, the total releases in Section 8 of the Form R were broken up into four subcategories. For this data element, facilities reported Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills and other landfills. *Reference*: Part II, Section 8.1C *Maximum Length:* 22,7
109	8.1D – OFF-SITE OTHER RELEASES	N	Beginning in RY 2003, the total releases in Section 8 of the Form R were broken up into four subcategories. For this data element, facilities reported their other off-site disposal or releases not covered in 8.1c. *Reference*: Part II, Section 8.1D *Maximum Length:* 22,7
110	8.2 – ENERGY RECOVERY ON SITE	N	The total quantity of the toxic chemical used on site for energy recovery. *Reference*: Part II, Section 8.2 *Maximum Length:* 22,7
111	8.3 – ENERGY RECOVERY OFF SITE	N	The total quantity of the toxic chemical sent off site for energy recovery. *Reference*: Part II, Section 8.3 *Maximum Length:* 22,7
112	8.4 – RECYCLING ON SITE	N	The total quantity of the toxic chemical recycled o site at the facility. *Reference*: Part II, Section 8.4 *Maximum Length:* 22,7
113	8.5 – RECYCLING OFF SITE	N	The total quantity of the toxic chemical sent off site for recycling. *Reference*: Part II, Section 8.5 *Maximum Length:* 22,7
114	8.6 – TREATMENT ON SITE	N	The total quantity of the toxic chemical treated on site at the facility. *Reference*: Part II, Section 8.6 *Maximum Length:* 22,7
115	8.7 – TREATMENT OFF SITE	N	The total quantity of the toxic chemical sent off site for treatment (including transfers to POTWs). *Reference*: Part II, Section 8.7 *Maximum Length:* 22,7
116	PRODUCTION WASTE (8.1 – 8.7)	N	The total quantity of production-related waste. This is the sum of the quantities in Section 8.1 through 8.7 of the Form R (or rows #105 through #115). Maximum Length: 22,7

No.	Field Name	Type	Description
117	8.8 – ONE-TIME RELEASE	N	The total quantity of the toxic chemical released to the environment or transferred off site due to events not associated with routine production processes. *Reference*: Part II, Section 8.8 *Maximum Length:* 22,7
189	PROD_RATIO_OR_ ACTIVITY	C	Indicates whether the value reported in Section 8.9 (see row #115) is a production ratio value or an activity index value. *Reference:* Part II, Section 8.9 *Maximum Length:* 10
119	8.9 – PRODUCTION RATIO	N	The ratio of production or activity in the reporting year divided by production or activity in the previous year. Activity index is based on a variable other than production that is the primary influence on the quantity of the reported TRI chemical. Field length is in the format of +nnnn.nn.*Reference:* Part II, Section 8.9 *Maximum Length:* 9,2

APPENDIX A – 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 A – 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 B - Persistent Bio-accumulative Toxics (PBTs)

Chemical Name	CAS Number
ALDRIN	309-00-2
BENZO(G H I)PERYLENE	191-24-2
CHLORDANE	57-74-9
DIOXIN AND DIOXIN-LIKE COMPOUNDS	N150
HEPTACHLOR	76-44-8
HEXABROMOCYCLODODECANE	N270
HEXACHLOROBENZENE	118-74-1
ISODRIN	465-73-6
LEAD	7439-92-1
LEAD COMPOUNDS	N420
MERCURY	7439-97-6
MERCURY COMPOUNDS	N458
METHOXYCHLOR	72-43-5
OCTACHLOROSTYRENE	29082-74-4
PENDIMETHALIN	40487-42-1
PENTACHLOROBENZENE	608-93-5
POLYCHLORINATED BIPHENYLS	1336-36-3
POLYCYCLIC AROMATIC COMPOUNDS	N590
TETRABROMOBISPHENOL A	79-94-7
TOXAPHENE	8001-35-2
TRIFLURALIN	1582-09-8

APPENDIX C - Dioxin and Dioxin-like Compound Data

In reporting year (RY) 2000, the Toxics Release Inventory Program began collecting congener data for dioxin and dioxin-like compounds to better convey the relative toxicity of these chemicals being released ormanaged at facilities. From RY 2000 through 2007, Part II, Section 1.4 of the Reporting Form R asked facilities to specify the percentages of the 17 individual chemicals that make up a dioxin or dioxin-like compound for all media (air, water and land).

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

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

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

APPENDIX D – NAICS Code Assignments

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

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

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

Reported Data Used – In this method, the primary NAICS code reported by each facility in RY 2006 wasused to make an assignment to chemical submissions (Form Rs and Form As) for years 1987 to 2005. This method was only used under the following conditions:

1. The RY 2006 chemical submitted had only one primary NAICS code reported
2. The prior year submission(s) for the same chemical had only one primary SIC code consistently reported
3. The SIC to NAICS Crosswalk (obtained for the U.S. Census Bureau) showed a one-to-one match between the reported SIC and NAICS codes

This method was used to assign 50% of all NAICS codes.

SIC to NAICS Crosswalk – In this method, the TRI Program used a crosswalk or lookup table that translated SIC codes into NAICS codes to assign a primary NAICS code to a pre-2006 TRI chemical submission. The primary SIC code reported on the TRI form was used to lookup the corresponding NAICS code. Not all SIC codes translated into only one NAICS code, so it was not possible to use this method to assign a NAICS code to each chemical submission. However, it was used to make 29% of all the assignments.

EPA Facility Registry System (FRS) – In this method, the TRI Program used NAICS codes found in EPA's Facility Registry System (FRS) to assign a primary NAICS code to each TRI chemical submission. This method was only used if FRS listed only one primary NAICS code for a facility. 11% of all assignments were made using this method.

Commercial Sources - This method involved using various commercial services to verify NAICS code assignments. 7% of all assignments were made using this method.

Statistics – For 3% of NAICS code assignments, the TRI Program used various statistical methods based on past and present data.

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

APPENDIX E – POTW Release and Treatment Calculations

The calculation of POTW Releases and POTW Treatment is divided into two categories, those prior to and including reporting year (RY) 2013 and those in RY 2014 and after.

For RY 2013 and before, to calculate the amount released at a POTW (POTW Release), simply 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 chemicals that are metals. Prior to and including RY 2013, all POTW transfers for chemicals that were metals are considered 100% released. To calculate the POTW Treatment, subtract the POTW Release from the total POTW transfer.

In RY 2014, the Toxics Release Inventory (TRI) program required all facilities to submit their data to EPA electronically (accept for trade secret submissions) using the TRI-MEweb software. Along with this change, 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 three percentages regarding how their POTW transfers are managed. They correspond to the "Source Reduction and Recycling Activities" in Section 8 of the Form R and are as follows:

Item	Description	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 A.	8.1d
C	Percentage not released, but treated in some manner.	8.7

If a facility does provide these percentages, then the POTW Release amount 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 provided the following percentages below, the POTW Release would be 90 lbs 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 calculatedusing 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" below.

The first step in this procedure is to calculate the Section 8.1c, 8.1d and 8.7 amounts on the Form R. Theseare 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 otherreleases, 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 thetable 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. Then, to calculate the POTW Treatment amount, subtract the POTW Release from the total POTW transfer.

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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

CAS#/Chemical Category	Chemical	Default % to 8.1C	Default % to 8.1D	Default % to 8.7
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
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

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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