

DOE TRI Additional Information and Definitions

Please note that values reported in Form R Sections 5 and 6 may be reported as actual values (to the nearest whole number) or as one of three ranges defined on the reporting form. In the event that a range is reported, DOE and EPA's Envirofacts database use a mid-point value for data analysis purposes. For example, if a fugitive air release of 1-10 pounds of an EPCRA Section 313 chemical is reported, a value of 5 pounds is used in compiling the data. In Section 8 of the Form R report, however, a site is not permitted to report ranges. It is important to understand the data reported in Sections 5 and 6 of the Form R will not necessarily correlate directly with the data reported in Section 8 for two reasons: (1) the difference in reporting ranges versus actual values; and (2) definitional differences in the section elements.

TRI FORM R SECTION 5

Releases of the EPCRA Section 313 chemical to the Environment On-Site

In Section 5, the site must account for the total aggregate releases of the EPCRA Section 313 chemical to the environment each year.

5.1 Fugitive or Non-Point Air Emissions. In this section, the site reports the total of all releases of the EPCRA Section 313 chemical to the air, including equipment leaks from valves, pump seals, flanges, compressors, sampling connections, and open-ended lines. This does not include releases through stacks, vents, ducts, pipes, or any other confined air stream.

5.2 Stack or Point-Air Emissions. In this section, all releases of the total EPCRA Section 313 chemical to the air that occur through stacks, vents, ducts, pipes, or other confined air streams, including storage tank emissions, must be reported by the site.

5.3 Discharge to Receiving Streams or Water Bodies. In this section, the site reports the total annual amount of the EPCRA Section 313 chemical released from all discharge points at the facility to each receiving stream or water body. This includes process outfalls such as pipes and open trenches, releases from on-site wastewater treatment systems, and the contribution from stormwater runoff, if applicable. This does not include discharges to a POTW or other off-site wastewater treatment facilities.

5.4 Underground Injection On-Site. In this section, the site reports the total amount of the EPCRA Section 313 chemical that was injected into Class I wells and Class II-V wells at the facility.

5.5 Releases to Land On-Site. In this section, the site reports the total amount of the EPCRA Section 313 chemical that was disposed to land on-site, which includes reported quantities for RCRA Subtitle C Landfills, other landfills, land treatment/application farming, surface impoundment, and other disposal. The other disposal includes any spills or leaks of the EPCRA Section 313 chemical to land. This section does not include land disposal at off-site locations.

TRI FORM R SECTION 6

Transfers of the EPCRA Section 313 chemical in Wastes to Off-Site Locations

In Section 6, the site must report the total annual quantity of the EPCRA Section 313 chemical in wastes sent to any *off-site* facility for the purposes of waste treatment, disposal, recycling, or energy recovery. Note that beginning with reporting year 1991, off-site transfers for the purpose of recycling and energy recovery are required to be reported.

6.1 Discharges to Publicly Owned Treatment Works (POTW). In this section, the site estimates the quantity of the EPCRA Section 313 chemical that was discharged to POTWs in wastewater.

6.2 Transfers to Other Off-Site Locations. In this section, the site reports the total transfers to other off-site locations which includes the amount of the EPCRA Section 313 chemical that was transferred to each off-site location for the purposes of waste treatment, disposal, recycling, or energy recovery.

TRI FORM R SECTION 8

Source Reduction and Recycling Activities

Section 8 of the Form R report includes the data elements required by the Pollution Prevention Act of 1990. These elements overlap with the data reported in Sections 5 and 6 of the Form R report and are therefore not additive. Additionally, a site cannot report a range for the elements in Section 8. All amounts must be reported in whole numbers, however, the site is permitted to round to two significant figures.

8.1 Quantity Released. In this section, the site reports the amount of the EPCRA Section 313 chemical directly discharged to air, water, land and injected underground at the site. It also includes the amount sent off-site for disposal. It does not include quantities reported in Sections 5 and 6 due to remedial actions, catastrophic events, or non-production related events.

8.2 Quantity Used for Energy Recovery On-Site. In this section, the site reports that amount of the EPCRA Section 313 chemical that is actually combusted (e.g., destroyed in the combustion process) for the purposes of energy recovery. The combustion unit must be integrated into an energy recovery system and the EPCRA Section 313 chemical must be combustible and have a heating value high enough to sustain combustion. The difference between the amount entering the combustion unit and the amount destroyed is the amount released to the air. This value should be reported as a release under Section 8.1.

8.3 Quantity Used for Energy Recovery Off-Site. In this section, the site reports the amount the EPCRA Section 313 chemical sent off-site for the purposes of energy recovery, not the amount destroyed by combustion. The EPCRA Section 313 chemical must have significant heating value and off-site combustion unit must be integrated into an energy recovery system.

8.4 Quantity Recycled On-Site. In this section, the site reports the amount of the EPCRA Section 313 chemical recovered and available for reuse. It is not the quantity that entered recycling operations. An EPCRA Section 313 chemical that is recycled multiple times during the reporting year is counted as being recycled each time it was recovered. This quantity reflects the amount of the EPCRA Section 313 chemical in waste that would have been managed, which can be much greater than the amount of the EPCRA Section 313 chemical actually used at the site.

8.5 Quantity Recycled Off-Site. In this section, the site reports the amount of the EPCRA Section 313 chemical which is sent off-site to be recycled, not the amount that was recovered and made available for reuse. This amount should also be reported in Section 6 as an off-site transfer.

8.6 Quantity Treated On-Site. In this section, the site reports the amount of the EPCRA Section 313 chemical that was destroyed in on-site waste treatment operations. It is not the amount that entered those treatment operations. The difference between what enters and what is destroyed should be reported as a release under Section 8.1. For purposes of TRI reporting, destroyed means that the chemical no longer exists in its reportable form. For example, conversion for hexavalent chromium to trivalent chromium followed by precipitation would not be considered destroyed, because it would still be in a reportable form.

8.7 Quantity Treated Off-Site. In this section, the site reports the amount of the EPCRA Section 313 chemical that is sent off-site to be treated, including quantities sent to publicly owned treatment works and other off-site treatment locations. Amounts reported as treated off-site should also be reported under Section 6.

8.8 Quantity Release Due to One-Time Events. In this section, the site reports the amount of the EPCRA Section 313 chemical that is either released, disposed of on-site, or sent off-site for recycling, energy recovery, treatment, or disposal as a result of one-time events, such as a spill or remedial action. These amounts are not associated with routine production practices, and are accounted for separately because they are difficult to predict and are not amenable to source reduction.

Source: *EPA EPCRA Section 313 chemical Release Inventory Reporting Form R and Instructions for 1998.*