



State of Utah
Department of Environmental Quality

Utah Toxic Release Inventory
Reporting Year 2008
Executive Summary Report

Division of Environmental Response and Remediation
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EXECUTIVE SUMMARY

Introduction

Under Section 313 of the federal Emergency Planning and Community Right-to-Know Act (ECPRA) the Toxic Release Inventory (TRI) is a compilation of data submitted by certain facilities subject to the reporting requirements of EPCRA. TRI data provides select information of a finite list of chemicals defined by the statute concerning releases and transfers into the environment and of transfers of chemicals to other off-site facilities for final disposition. Section 313 requires a facility to submit TRI data to the U.S. Environmental Protection Agency and the State Hazardous Chemical Emergency Response Commission (SERC). This report is a summary of the data submitted to the Utah Department of Environmental Quality (DEQ) for calendar year 2008. TRI information includes only selected industrial sectors using larger volumes of certain listed chemicals. Therefore, TRI data may only include a relatively small portion of all chemical releases of environmental significance. TRI data can be used to provide basic information on the types and volumes of waste and emissions at a facility, but the data must be used with other concentration, migration, environmental target, and exposure information to assess the relative level of human health or environmental risk.

Beginning in 2002, EPA made preliminary TRI data available via the internet. Persons interested may query data using a variety of query tools to retrieve multiple facility data across multiple years of reporting. In 2002 EPA began publishing state fact sheets which provide a summary of TRI data for each state.

Beginning with Reporting Year 2006 Utah started participating in the State Data Exchange Network-National Environment Information Exchange Network (SDX). This partnership provides DEQ the mechanism to receive TRI data directly from EPA and beginning with RY2006 data it is now the exclusive source of TRI data to the State of Utah where it is retained in the Utah Data Management System (Utah DMS).

It is traditionally the practice of EPA to “freeze” TRI data several months after the data are received on or before the annual July 1 submission deadline. TRI data including revision data may be submitted by a facility at any time during the calendar year. These data are processed dynamically at the EPA Data Processing Center which is transmitted virtually in real-time to the Utah data-server. Utah does not currently “freeze” the data received. Information offered in this report reflects the presentation of all data and the statistical analyses reflects a compilation of all data resident in the Utah DMS received at the time the statistical tables and charts are produced.

Beginning with the RY2008 report, the EPA Public Data Release (PDR) will be released under a new title of TRI National Analysis.

Duplicate Amounts Reduction Calculation

EPA incorporates a correction calculation for data that has been “double-counted.” Double counting is the term applied by EPA to amounts of waste that have effectively been reported two

times.¹ The Utah system does not currently perform a similar correction calculation and for this reason totals related to select categories (e.g. total offsite transfers) have higher values in the Utah data in comparison to the EPA data.

Historically the multi-year data trend presented in past Utah TRI reports have shown amounts up to 14% higher than EPA totals for the chosen year of comparison. UDEQ anticipates that the Utah 2008 reporting year data will be similar with this variation in certain categorical totals reported.

The Utah Data Management System (DMS) is currently in transition. Several disruptions in the data and reporting by the DMS were anticipated while several unanticipated issues were also discovered while compiling the data for this report.

EPA makes TRI data available on the internet for past report years with exception to the current dataset reported. These datasets serve as an independent source to cross-check past years. The current report year data set is made available to the public after it is announced by EPA via the TRI National Analysis.

2008 TRI Summary

For reporting year 2008, 187 facilities filed a total of 840 chemical forms under the federal TRI program. A total of 134 unique chemicals or chemical categories were reported.

Total Releases

Total onsite and offsite release amounts reported by all facilities reporting TRI in Utah for reporting year 2008 increased 31.1%. The amount of total releases reported in RY2008 was 234.4million pounds. Total releases reported in RY2007 were 178.8 million pounds showing a net increase of 55.5 million pounds.

Releases to Air (onsite)

The total TRI release to air reported by Utah facilities in 2008 decreased by 1.5%. The total release amount to air reported is 9.2 million pounds. The total release to air amount reported in 2007 was 9.3 million pounds showing a reduction of approximately 140 thousand pounds.

Releases to Land (onsite)

In RY2008 total chemical releases to land increased by 35.8%. Total releases to land in RY2008 were 213.7 million pounds. Releases for the prior report year totaled 157.3 million pounds resulting in a increase of 56.4 million pounds.

Kennecott facilities in Utah comprise the largest single quantity of amount reported for releases to land. The combined releases reported by Kennecott facilities for releases to land in 2008 totaled 187.4 million pounds. Combined releases reported by Kennecott facilities for releases to

¹ 2006 State Fact Sheet (see end notes).

land in 2007 totaled 144.2 million pounds showing an overall increase of 43.0 million pounds representing an increase by 29.8%.

Releases to Surface Water (onsite)

In RY2008 releases to surface water decreased by 2.9%. Total releases reported were 92,184 pounds in 2008. Releases in 2007 were reported at 94,405 pounds.

Chevron Products Company reported a release of approximately 81,000 pounds (97.5% is attributable to nitrate compounds), while Kennecott facilities reported approximately 9,700 pounds for various TRI chemicals. The combined amounts reported from these two facilities comprise 92.5% of the total quantities released to surface waters statewide.

Transfers to POTWs

Publicly Owned Treatment Works (POTWs) are wastewater treatment plants. Transfers reported to POTWs in RY2008 increased by 8.1%. Transfers to POTWs totaled 1.27 million pounds in 2008. The amount reported in 2007 was 1.19 million pounds. 2008 shows an increase by slightly less than 97,000 pounds. Nitrates constitute about 73.7 % of the total chemicals transferred to POTWs. The remaining percentage is comprised of a variety of other chemicals in small percentages.

TRI-reported releases to POTWs do not include information concerning the rate of release or concentrations of chemicals in the release. However, state and federal law requires industrial facilities with wastewater flows exceeding federally established chemical concentrations to operate industrial pretreatment equipment to reduce such concentrations below harmful levels before discharging to the POTWs.

Other Offsite Transfers

Transfers of TRI chemicals to “other offsite” locations are transfers to facilities other than POTWs. Often these facilities include chemical recyclers and waste disposal sites. The amount of chemicals reported transferred in 2008 remained constant with a slight increase of 0.4%. The amount of other offsite transfers reported in 2008 is 10.93 million pounds; while other offsite transfers reported in 2007 was 10.89 million pounds.

Persistent Bioaccumulative Toxic (PBT) Chemicals – Dioxin & Dioxin-Like Compounds

For 2008, the amount of PBT Dioxin & dioxin-like compounds released increased slightly by 0.5%. Dioxin and dioxin-like compounds were reported less than 4,405 grams, while the amount reported in 2007 was 4,383 grams for an increase of 22 grams. The total amount release reported to land comprises 99.28% of the total release amount. Total releases to air remained near constant while releases to land increased by 20 grams.

In 2008 U.S. Magnesium reported approximately 4,336 grams of dioxin and dioxin-like chemicals; this amount constitutes 98.4% of the total quantity reported.